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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2043

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CONTENTS

INTERNATIONAL AFFAIRS

Briefs
Polish-Soviet Aviation Cooperation 1
Soviet-Polish Aviation Developments 1

ALBANIA

Need To Improve Effectiveness of Agricultural Expenditures
(Gjon Gorishti; ZERI I POPULLIT, 24 Jul 80) 2

Overspending by Enterprises Criticized by Bank Director
(Kostaq Postoli; ZERI I POPULLIT, 28 Jun 80) 6

Present, Long-Range Prospects for Electronics Industry
(Hasan Mucostepa; ZERI I POPULLIT, 5 Jul 80) 10

Current, Future Use of Photogrammetry in Service of Economy
(BASHKIMI, 4 Aug 80) 13

CZECHOSLOVAKIA

Ler Comments on Qualitative Changes in Planned Economy
(Leopold Ler; FINANCE A UVER, No 6, 1980) 14

Agricultural Mechanization Trends for Seventh Five-Year Plan
(Frantisek Kral; TECHNICKY TYDENIK, 15 Jul 80) 26

CSR Minister Calls for Lower Grain Losses During Harvest
(Miroslav Petrik; HOSPODARSKE NOVINY, 15 Jul 80) 31

May 1980 Economic Results Published
(HOSPODARSKE NOVINY, 27 Jun 80) 38

[III - EE - 64]

GERMAN DEMOCRATIC REPUBLIC

Petrochemical Combine Expansion, Rationalization Discussed
(Horst Martens; EINHEIT, Jul-Aug 80) 43

Combine System, New Management Practices Spur Growth
(Dag Halvorsen; ARBEIDERBLADET, 25 Aug 80) 51

HUNGARY

Economic Relations With Iraq Described
(Janos Menyhart; FIGYELO, 30 Jul 80) 54

VII National Conference on Pig Iron, Steel Production Opened
(Sandor Csepanyi; KOHASZAT, Mar-Apr 80) 59

Specialist Evaluates Steel Production
(Janos Sziklavari; KOHASZAT, Mar-Apr 80) 66

Development Possibilities at Danube Iron Works Explored
(Gellert Repasi; KOHASZAT, Mar-Apr 80)..... 67

Development Possibilities at Ozd Viewed
(Emil Furjes; KOHASZAT, Mar-Apr 80) 87

Development at Lenin Metallurgical Works Discussed
(Rezso Herendi; KOHASZAT, Mar-Apr 80) 96

Development Plans at Csepel Discussed
(Ervin Proszt; KOHASZAT, Mar-Apr 80) 110

Enterprises To Collaborate in Production of Costly Chemical Intermediaries
(Tibor Flanek; NEPSZAVA, 16 Aug 80) 117

Broader, Stricter Grading of Wheat Adopted
(Jozsef Bagi; FIGYELO, 30 Jul 80) 121

POLAND

Gierek-Brezhnev Meeting Vis-A-Vis Polish Malaise Viewed
(Denis Legras; LE FIGARO, 31 Jul 80) 124

Demands of Strikers Noted
(LE MONDE, 1 Aug 80) 126

Grumbling Among Writers Reported
(Bernard Marguerite; LE FIGARO, 4 Aug 80) 127

Politicization of Strikes Noted
(Bernard Marguerite ; LE FIGARO, 11 Aug 80) 129

Gdansk Region Strike, Premier Babiuch Appeal Noted
(LE MONDE, 17-18 Aug 80) 131

Agitation Becomes Political, by Bernard Guetta
'We Will Hang On!', by Marian Kafarski

'LE MONDE' Commentary on Polish Strike, Geopolitics Noted
(LE MONDE, 17-18 Aug 80) 137

Leadership's Attempts To Solve Economic Problems Analyzed
(Jozef Wroblon; DZIENNIK POLSKI, 9 Aug 80) 139

Briefs
Electric Power Requirements, Plans 146

ROMANIA

Amended Law on Animal Raising Published
(BULETINUL OFICIAL, 9 Jul 80) 147

YUGOSLAVIA

Construction Work in Foreign Countries, 1974-1979
(EKONOMSKA POLITIKA, 14 Jul 80) 165

BRIEFS

POLISH-SOVIET AVIATION COOPERATION—In a period of three years, the joint Polish-Soviet design office developed and designed the world's first M-15 agricultural jet aircraft which has already undergone government testing in the USSR. In regard to cooperation between Polish and Soviet aviation industries, the Transportation Equipment Plants in Mielec, Swidnik and Kalisz are participating in the construction of the IL-86 aerobus which is a third-generation transport aircraft and is being produced by the Soviet aviation industry. In accordance with the agreement, Poland is to provide complete tail assemblies, engine-suspension strut assemblies, aerodynamic lift assemblies and other elements. A total of 15 tail assemblies for the IL-86 aerobus have been completed in 1980 at the Transportation Equipment Plants of the Polish Aviation Enterprises - Mielec. Another very important agreement, in which Poland is to initiate production of the light AN-28 passenger aircraft having short take-off and landing capability, was recently signed. Polish production of this aircraft will begin in 1984, and 1,200 of these aircraft will have been built for the USSR by the end of 1990. [Excerpt] [Warsaw RYNKI ZAGRANICZNE in Polish No 97, 12 Aug 80 p 8]

SOVIET-POLISH AVIATION DEVELOPMENTS—Many Polish passengers and much cargo are transported by foreign airlines which use, on long flights, only the wide-fuselage aircraft having more capacity and using half as much fuel as other aircraft. Similar aircraft may be expected on the Soviet market in 1985-1990. Up to this period, Polish domestic flights will be conducted with the currently used AN-24 aircraft, the IL-18 and TU-134 aircraft which are being gradually withdrawn from the foreign routes and the new JAK-42 aircraft whenever they are acquired. IL-62 aircraft will be used for long-range transport service, whereas the delivery of four IL-62M and five IL-86 aircraft is envisaged in 1981-1985. Therefore, the matter of equipment is one of the important airline requirements that is equal to other matters, such as the construction of the international airport at Okecie and the reconstruction and modernization of many Polish domestic airports or the expansion of technical facilities which are the worst in Europe. [Excerpt] [Warsaw TYGODNIK KULTURALNY in Polish 17 Aug 80 pp 5, 15]

CSO: 2600

NEED TO IMPROVE EFFECTIVENESS OF AGRICULTURAL EXPENDITUPES

Tirana ZERI I POPULLIT in Albania 24 Jul 80 p 2

[Article by Gjon Gorishti, deputy chairman of the State Planning Commission: "Improvement of the Effectiveness of Expenditures in Agriculture"]

[Text] In the framework of the tasks assigned today for the present development of the economy and for the future, the improvement of the effectiveness of production in agriculture, as in all the other branches of material production, constitutes one of the important directions where the struggle, work and efforts of the government and economic organs must be concentrated, solving, correctly and on scientific bases, the problems that emerge in this field. In the coming five-year plan, according to preliminary calculations, the overall agricultural production is foreseen to be increased by about 41 percent, compared to that of the Sixth Five-Year Plan. With this increase and on the basis of the fact that the increase in agricultural production is expected to be provided mainly from the increase in the production of agricultural and livestock crops, the main requirement for the working collectives of the enterprises and agricultural cooperatives is to concentrate their attention and mobilization on the most complete activization possible of all the material, technical and socio-political factors that guarantee the fulfillment, one by one, of the tasks of the production plan.

Practice has shown that those agricultural units, which have fulfilled the tasks of the production plan in quantity and quality, have, at the same time, obtained great effectiveness in the use of the material base. In these conditions, the essential issue in improving effectiveness is to assure high yields, thus, rapidly progressing toward their transformation into modern units of socialist production, where the work and management will be achieved on more healthy scientific bases.

To fulfill the targets of the coming five-year plan in agriculture, as was stressed at the Eight Plenum of the Party Central Committee, it is required that science and scientific research works be expanded and executed broadly in all agricultural units. This, first of all, sets forth the necessity to rigorously execute the agro-zootechnical code and the generalization, dissemination and execution of progressive experience obtained in practice

by many agricultural enterprises and cooperatives, as well as to struggle for continually reducing production costs per unit of production. These and other measures for perfecting the management and organization of work are the more important guidelines to guarantee the increase of agricultural production at high rates, on the one hand, and to use, with calculation and great effectiveness, the vigorous work and material values that constitute expenditures for production, on the other hand.

There are great reserves in agriculture for increasing its production and improving its effectiveness. There are many work brigades, agricultural units and districts which are waging a comprehensive and continuous struggle for obtaining the maximum production possible from the land on the basis of the rational utilization with high effectiveness of the technical-material base. In 1979 in Lushnje and Fier districts, for every kilogram of active substance chemical fertilizer 7 and 8.5 kilograms of wheat were produced respectively. However, this result was not obtained in Durres and Kruje districts although they have comparable conditions. The produced 5 and 6.4 kilograms respectively. Similarly, Librazhd District produced 7.2 kilograms of wheat for one kilogram of active substance fertilizer, while Skraper District produced only 4.7 kilograms of wheat.

There are many districts and agricultural units which, because of the failure to use chemical fertilizers with correct and scientific criteria, because of the failure to rely on the agro-pedological studies of the lands and because of the failure to accompany them with the activization, at the required level, of all the other factors that increase production and output, did not manage to provide correct relationships between the increase of expenditures for chemical fertilizers and the overall agricultural production. Thus, in Vlore District, expenditures for chemical fertilizers in 1979, compared to 1975, were increased by about 75 percent, while overall agricultural production was increased by only 4 percent; or, in Durres District where expenditures for chemical fertilizers were increased by 97 percent and where there was an increase of agricultural production of only 15 percent.

The analysis of the factors and roads that lead to the improvement of expenditures of agricultural production and the measures which will be taken in this field must aim at increasing the revenues for every 100 leks of production expenditures. In this regard, it is necessary to keep in mind that the improvement of the effectiveness of expenditures does not mean that the expenditures needed for fulfilling production must be limited. The problem is that, with the planned expenditures, the continual increase of agricultural and livestock production, of yields and of revenues must be made possible. In this regard, the good organization of work for the systematic monitoring of production expenditures in relation to production and revenues is of special importance.

The practice of recent years shows that, in this direction, violations have been permitted and, sometimes even important violations have been committed

with consequences for the enterprises and agricultural cooperatives. In some districts and specific agricultural units there also are trends showing that, while material expenditures are increased from one year to the other, above the stipulated tasks, they are not always accompanied by an increase of agricultural production and, in certain cases, they are even accompanied by a decrease of agricultural production. Thus, while in 1975 the agricultural cooperatives in Tirana District had 37 leks of material expenditures for 100 leks of agricultural production, in 1979 they had 45 leks, and, in Shkoder District expenditures went from 28 leks in 1975 to 34 leks, and in Vlore District expenditures increased from 25 leks to 40 leks and so forth. In 1979 the agricultural cooperatives in Kruje and Fier districts did not achieve the increase of agricultural production in accordance with the plan tasks; they fulfilled production expenditures by 101 percent and 108 percent respectively and so forth.

The great possibilities of agricultural cooperatives for improving the effectiveness of production are also evident in the fact that, between the districts with comparable conditions, there are different levels of revenues compared to the material expenditures that are made. Thus, while Korce and Berat districts obtained 227 and 267 leks of revenues respectively for 100 leks of expenditures, Kruje and Lushnje districts obtained 205 and 216 leks respectively.

The continual analysis of the progress made in these fields by agricultural units and districts and the determining and execution of the technical and organizational measures for fulfilling the production tasks with the expenditures that are earmarked, for carrying out a bitter struggle for applying regulations, for the proper handling of yields and for the elimination of damages, especially during the grain harvesting and threshing campaigns and for improving the quality of agricultural and livestock products and so forth are tasks that require a greater concern on the part of all agricultural units. An important role in this field must be played by the planning and finance organs in the districts and agricultural units.

The high rates that must be achieved in the development of agriculture and the effectiveness of production are linked with the use of live labor in accordance with the correct rules of work and with the rational use of chemical and organic fertilizers and of the other material expenditures, harmonizing them with all the requirements of the agro-zootechnical Code that guarantee the obtaining of the planned yields. The task is assigned on the basis of deep analyses to discover not only the shortcomings and weaknesses in the practice of the organization and management of production, but also to determine the most effective measures for eliminating them, in order that production expenditures will give the results required for increasing production and yields.

In this field, it is required that, in every production unit and area, the needs for expenditures, live labor and materialized work, must be calculated and planned as correctly as possible and on the basis of established

norms, taking into consideration the tasks stipulated for increasing production. Also, it is necessary that, both in the process of the drafting of the plan and in the process of its fulfillment, correct relationships be maintained between the factors that determine the effectiveness of production expenditures, especially the relationships between production and the working people, between norms for accumulation and consumption, between net revenues and production expenditures and between the investments used in the production sphere and those used in the non-productive sphere and so forth. These matters and others that emerge are objects of thorough studies and discussions in which technical and economic ideas must steep in agricultural units, making them the problems of the working collectives; the concrete ways and measures for achieving the best results possible must be determined.

For this, it is necessary that specialists and cadres in agricultural units must increase their attention and care not only during the process of the drafting of the plan, but also and especially during the fulfillment of stipulated tasks, since, often, in this field, the most accentuated weaknesses and shortcomings are observed. Specific tasks are assigned to the economists in the planning and finance sectors so that they will further delve into and better connect themselves with these problems, in order to respond to the tasks set forth by the Eight Plenum of the Party Central Committee. They must face these matters with more expanded studies and analyses and, time after time, they must make them the problems of the working collectives, expressing themselves more loudly not only in regard to the situation, but also in regard to the roads which they must take, because, this is the way to further improve their role in the planned management of the economy.

The most recent plenums of the party Central Committee assigned important tasks for improving the effectiveness of social production in the various branches of the economy. The assurance of high profitability, as the main road to increase socialist accumulation and to maintain high rates in the development of the economy in our country makes it necessary for all the links of the economy to thoroughly understand the party recommendation that the plan is not production alone, but also yields, cost, quality and all the other factors that make it possible to fulfill the production tasks with as few expenditures as possible, in order to further improve their economic effectiveness.

9150
CSO: 2100

OVERSPENDING BY ENTERPRISES CRITICIZED BY BANK DIRECTOR

Tirana ZERI I POPULLIT in Albanian 28 Jun 80 p 3

[Article by Kostaq Postoli, director general of the State Bank: "Strengthening Monetary Circulation Requires Rythmic Fulfillment of Planned Tasks"]

[Text] In 1979 and in the first four months of this year, several improvements were accomplished in the field of monetary circulation. A good rapport was maintained among various indicators related to the demands of the economic law of monetary circulation. The circulation of goods by cash in 1979 increased 3.6 percent. The domestic trade enterprises fulfilled the plan for goods circulation nearly 100 percent in the four month period as well.

The work of financial and bank organs has its own influence on these fine results. However, analyzing this work under the light of the materials of the Seventh Plenum of the Party Central Committee and the recommendations of Comrade Enver Hoxha, these achievements stimulate us to move on ahead, to improve our work further and to make the bank a strong organ of control by means of the lek over the economic and financial activity of agricultural enterprises and cooperatives. The goal is to increase production and accumulation, to strengthen the savings system and to improve the effectiveness of spending.

The annual deficit last year in the circulation of goods at commercial enterprises in such districts as Berat, Tepelene, etc., represents only a one- to two-day turnover. At Tropoje, however, the plan was underfulfilled by only 77,000 leks, or by three to four hours work in the trade network. This indicates a lack of specific knowledge of the situation, no operational following of tasks, poor discipline and lack of responsibility in fulfillment of the plan's indicators. The district branches of the State Bank daily follow the dianamic of the fulfillment of goods circulation by cash, they often inspect the condition of goods in warehouses and in circulation, they uncover shortcomings and deficiencies in the organization of the work for the distribution of goods, etc. However, these phenomena are but noted and are not used properly to have an effective influence on the fulfillment of planned tasks.

It is a fact that a good part of the deficits in the implementation of contracts has been created by intradistrict trade between producing enterprises and agricultural cooperatives. This indicates that the influence and assistance of financial sections and bank branches have been inadequate. Moreover, when an accounting is demanded on the fulfillment of contracts, deficits are immediately pointed out by other districts, while the deficits created by agricultural enterprises or cooperatives within the same district are passed over superficially, tacitly and with justification. This is wrong. The financiers should not remain indifferent when they spot shortcomings and weaknesses but should study and analyze them, bring out the causes, specify the steps and ways to correct them and point them out in time to the district party and government organs.

In cooperation with sections of the executive committee of the district people's council and the commercial enterprises, the State Bank should make better and more effective use of the confrontation method between producing enterprises within and without the district, in conjunction with the government organs and bank branches of other districts, to follow production fulfillment (in terms of quantity, assortment and quality) and its distribution to consumer enterprises. This cooperation will become stronger especially in conjunction with the study of the people's purchasing power for each region and for the distribution and redistribution of stocks of goods consistent with it. The district branches of the State Bank have made analyses of regional purchasing power, however these should be put to better use by the commercial enterprises, taking measures for a more accurate distribution and redistribution of stocks of goods, which will also have an effect on the accomplishment of the goods circulation plan. We say this because the stocks of goods planned by a number of commercial enterprises are not detailed for each unit and as a result their distribution is not carried out with rigid discipline and surplus goods exist in some areas at a time when they are lacking in others. Likewise, to achieve good results in fulfilling the goods circulation plan, steps need to be taken to accomplish the production plan tasks and to carry out contracts. Otherwise, the goods circulation plan will not be fulfilled, the needs of the people will not be met properly and, as a consequence, irregularities are created in monetary circulation.

Problems also exist in fulfilling the goods circulation plan at agricultural cooperatives. Such districts as Tirana, Berat, Gjirokaster, Lushnja, etc. had the same level of goods circulation at agricultural cooperatives in 1979 as in 1978, even though the wage fund increased. The plan was fulfilled 92.4 percent in the first four months of this year. With the exception of Korca and Mirdita districts, other districts had considerable deficits, especially Mat, Elbasan, Shkoder, Gjirokaster, Tepelene, Vlore, Lezhe, etc. In this direction, the financial and banking organs are not sufficiently concerned or involved, and the necessary attention is not being paid to the accomplishment of tasks involving agricultural and animal products which are destined for sale to members, as well as to the implementation of government resolutions that members be supplied in keeping with production plan fulfillment. Here are a few facts. The districts of

Tirana, Kukes and Kruja last year produced the following percentages of vegetables, potatoes and milk, respectively: 105, 107 and 85 percent, while members of agricultural cooperatives were furnished by these districts 28, 4 and 24 percent, respectively. This shows that among certain leaders of agricultural cooperatives there is a lack of proper appreciation for these matters, neglect, lack of responsibility and a breach of the plan's discipline. The financial and banking organs have not concentrated on this problem as they should, following it cooperative by cooperative to correct and adjust the implementation of the tasks of the plan and those of the 1967 Declaration of the Party Central Committee and Council of Mininsters. The executive committees of people's councils and districts and the Ministry of Agriculture need to handle these problems better.

Failure to obtain the planned revenues from commerce, services and savings affects the growth of money in circulation. It is therefore necessary for the financial and banking organs to follow step by step the fulfillment of the plan's tasks by the various sectors of the economy and to struggle to preserve and improve the proportions specified in the plan. A greater effort can be made especially in the districts of Fier, Kruja, Lushnja, Permet, Puke, etc. Possibilities have existed in these districts to accomplish the plan's tasks for covering the buying power of the population better through the circulation of goods, services and increased savings.

This continues to be a problem in 1980. Buying power exists so, therefore, all possibilities exist for accomplishing the plan. However, the results for the first four months of this year in some respects indicate that things are not going well. At several commercial enterprises and at the agricultural cooperatives, deficits have been created and have led, in several districts, to an increase in the amount of money in circulation over the plan. This indicates that the state organs, the district economic organs and the financial and banking organs have not done a good job in tracking production accomplishments, contract implementation and work organization at the commercial enterprises and agricultural cooperatives.

During this four-month period several districts performed well, followed the accomplishment of production tasks and the implementation of contracts more closely, organized the distribution and redistribution of merchandise in the commercial network better and, as a result, achieved fine results. In April the majority of districts, such as Elbasan, Gramsh, Korce, Kruja, Lezhe, Lushnja, Pogradec, Puke, Tepelena and Tirana, achieved and surpassed the plan for goods circulation by cash, reducing part of the first quarter deficits, while such districts as Vlore, fier, Mirdita, Diber, etc., did not fulfill the goods circulation plan.

Overspending on wages and maintenance of a larger work force than planned and unjustified by production continue to be problems. In 1979 several enterprises in such districts as Tirana, Fier, Elbasan, Tepelena, Kukes, etc., ended up overspending. Regarding the maintenance of a larger work force than planned, improvements were made as a result of the proper understanding and reinforcement of bank control. However, at the end of the

year there were quite a few workers over the plan and 268 of them were not justified by output. This means that the demand to implement the plan must be further strengthened. Any concession in this direction carries dangerous consequences because buying power not covered by production is created.

Enterprises in such districts as Tirana, Durres, Elbasan, Vlore, Lushnje and Mat have had overspending on wages this year as well. Some of them likewise maintained a larger work force than planned which was justified by output. However, these enterprises and especially the executive committees of the district people's councils of Berat, Durres, Korce, Shkoder, Tirana, etc. should pay greater attention to this problem, with the goal that the enterprise accomplish the tasks of the production plan with the planned work force and wage fund.

The problems of monetary circulation constitute significant aspects of the implementation of the party's economic and financial policy. They have a profound political, ideological and economic content. Therefore, treating these problems as such, we will struggle and take measures to increase our influence further for the optimum accomplishment of production plan tasks, this being closely connected with the circulation of goods, to strengthen our socialist economy further.

5658
CSO: 2100

PRESENT, LONG-RANGE PROSPECTS FOR ELECTRONICS INDUSTRY

Tirana ZERI I POPULLIT in Albanian 5 Jul 80 p 3

[Article by Hasan Mucostepe, technical sciences candidate: "Present and Long-Range Problems of Electronics Development"]

[Text] Electronics in our country has achieved a number of successes under the party's continuous attention. Two years following the full electrification of the country on 23 October 1973, the extension of telephone service to all villages was completed. The majority of communications lines has been switched over from wooden to concrete poles and quite a few of them are crowded with high-frequency equipment. In addition to landlines and cables, communications has been established via radio, radio relay and Telex. A complete communications system has been established in the highway, railroad, sea and air transportation networks. The railroad communications lines alone are longer than all the lines which the entire country had in 1950.

Radio and television broadcasting have undergone tremendous development. Radiated power has increased several million times over and a very large number of transmitting stations exists. Suffice it to mention that the electrical energy required to supply radiostations today is greater than all electricity produced in our country in 1950.

Along with communications and radio and television broadcasting, electronics has found application in almost all branches of our economy. The establishment of production sectors for spare parts and electronic devices played an important role in its development. Thus, the radio and television plants, the post and telegraph plant and the communications and electromedical plants built after the 1960's, which grew and expanded very quickly, increased the quantity and improved the quality of their products and have now become a powerful base for the rapid development of electronics.

The electronics industry, although young, has successfully accomplished its assigned tasks, producing communications spare parts and equipment, widely used electronic appliances and various electronic devices for industry and health. The radio and television plant, from the simple

assembly of radios, television sets, amplifiers, recorders, stabilizers, etc., has proceeded to the production of many components, thus reducing the range of imported elements. The post and telegraph plant currently produces about 60 percent of the spare parts requirements for communications equipment and is working to produce 95 percent of these parts in the future. The communications and electromedical plants in Tirana have also achieved successes.

However, despite the accomplishments in this field, problems still exist which demand solutions. The party has requested that electronics be extended more widely and inserted more deeply into quite a few branches of the economy because automation and the application of electronics to production processes leads to an easing of manual labor, reduction in the consumption of raw and secondary materials, growth in productivity and conservation of electrical energy. Therefore, as Comrade Enver Hoxha stressed at the Eighth Plenum of the Albanian Workers' Party Central Committee, specialists, innovators and other workers must constantly ask themselves the question: Is what we are doing the best, the most effective and suited to the economic and social needs and capabilities of our country?

To implement this request, the specialists and workers who work in the various fields of study, production and application of electronics, among other things, are faced with several problems in need of solution, such as: determination of the array of electronic devices, instruments, appliances and systems which can be produced domestically; specification of the production line and the way to produce these devices and appliances.

Organized consultations reached the conclusion to give precedence to the domestic production of electronic equipment for industry. The possibilities exist to produce electronic equipment for automatic weighing, siganling, remote control and protection, measurement and regulation of various parameters in industry, equipment for geophysical research, for the diagnosis and treatment of diseases, for the automation of transportation, command of production-line machinery, instruments for product quality control, etc. Possibilities also exist for the further expansion of the production of equipment for radio and multichannel communications, computer technology, electronic consumer appliances such as radios and television sets, antennas, tuners, amplifiers, recorders, etc.

In specifying the line of production of this equipment, we should keep in mind the party's recommendation that the simpler and more widely used equipment should be produced initially, and then gradually the more complex ones.

Success has been achieved in the production of such auxiliary elements as casettes, tapes, printed circuits, various metal and plastic parts, keys, buttons, contacts, etc., but, keeping in mind the possibilities and significance which these elements have in reducing imports, much remains to be done.

Satisfactory results have also been attained in the partial production of passive elements. The production of transformers, throttles and various inductive coils has begun at the radio and television plant, the electromedical plant has experimented with the production of resistors and is continuing with the production of paper condensors, while the post, telegraph and communications plant has produced and experimented with quite a few other elements. Since the passive and auxiliary elements in every electronic unit comprise over 90 percent of all component elements, the complete production of these elements locally requires the devotion of greater attention to it.

Within this framework, it is necessary to strengthen cooperation between plants of an electronic profile and those of a mechanical and electromechanical profile, to increase attention to fine and detailed mechanics, to intensify study, research and experimental work and to form a cross-section within the group of electronics plants.

TheThe method of producing electronic equipment in support of the active element also holds special significance. Two groups of active elements currently exist: vacuum and semiconductor. Included in the first group are electron tubes, while in the second are transistors and integrated circuits. Integrated circuitry marked the beginning of a new evolution in electronics because it moved from the production of specific active elements to the production of complex electronic diagrams which are formed by the uniting of active and passive elements.

Since electron tubes, transistors and integrated circuits have coexisted for a relatively long time, a discussion of their level of usage and, consequently, the manner of producing electronic equipment is a current problem.

Following current trends in electronics development, we think that we should avoid producing and importing electronic equipment with vacuum tubes, with the exception of instances when their use is still essential. This is for several reasons. The production of widely used electron tubes is on the decline and at present many are no longer produced. At the same time, their price has been increasing. Currently there are electron tubes with are priced 2- to 4-times higher than transistors and 1.5- to 2.5-times higher than frequently used integrated circuits. Besides this, the electronic equipment and devices using tubes have greater energy consumption than do similar units built with transistors or integrated circuits.

It is also necessary to discuss ways to produce electronic equipment based on the degree of use of transistors and integrated circuits. The use of schemes based on integrated circuits has a number of advantages: lower cost, smaller dimensions, greater stability on the job, less energy consumption and lower cost for planning, production and maintenance.

All possibilities exist for us to develop electronics at a faster pace. The party encourages and supports the introduction of innovation in production in this field as well, and our specialists and workers have now acquired a rich experience to carry the work further along.

5658
CSO: 2100

CURRENT, FUTURE USE OF PHOTOGRAMMETRY IN SERVICE OF ECONOMY

Tirana BASHKIMI in Albanian 4 Aug 80 p 1

[Article: "Stereophotogrammetry in the Service of the Economy"]

[Excerpts] Two readers from Vlore district have asked us what stereophotogrammetry is and how this method helps to solve a number of complicated problems in various sciences. Engineer Agim Kaba from the geology and geodesy enterprise in Tirana gave the editor of our newspaper, Pali Koxhioni, a reply to these questions.

Before the liberation of our country, there was no talk about the science of photogrammetry and geodesy. After the liberation, with the concern of the party, the science of photogrammetry and geodesy, just like all other branches, was raised to higher levels and it confronted and resolved problems which were very important for the economy and for the defense of the country.

Land stereophotogrammetry was used for the first time in our country in the geology and geodesy enterprise in 1974. With the aid of land stereophotogrammetry, topographic maps of various scales (1:500 to 1:25,000) were drawn up. This method has high accuracy and is widely used, especially in mountain areas and in difficult and very difficult terrains, and has great economic efficiency compared to other methods.

Prospects for the development of land stereophotogrammetry are great. All the photographic material dealing with the terrain is processed in laboratories equipped with modern apparatus. In addition to the contribution which this method makes to the study and design of hydroelectric power plants, railroads and other construction projects and geological projects, it opens broad prospects for use in other areas.

In 1976, experiments were made on the use of this method in studies on the protection of cultural monuments. The results were satisfactory. Work should be continued and further expanded in this sector. From 1978 to the present, experiments have been going on in regard to the use of this method for the accurate measurement and detection of defects in various engineering constructions.

Land stereophotogrammetry is a rather new branch of our science and, therefore, our cadres have the obligation to promote it in the service of our socialist economy and of the defense of the country.

CSO: 2100

LER COMMENTS ON QUALITATIVE CHANGES IN PLANNED ECONOMY

Prague FINANCE A UVER in Czech No 6, 1980 pp 361-369

[Article by Engr Leopold Ler, CSc, CSSR Minister of Finance and chairman of the Government Committee on Planned Management of the National Economy]

[Text] The second half of the 1970's marked the beginning of a new phase of our national economy. We discovered new phenomena and factors greatly affecting the conditions of economic growth which qualitatively differ from previous conditions. We are also dealing with the entire complex of changes affecting the entire international economy from which we are not and cannot remain isolated. I have in mind not only the ever increasing prices of raw materials, fuel and energy as well as other items of our exports, but also the overall changes in the system of the international division of labor, the development of the integration processes, the key position of scientific and technical progress, etc.

The new economic situation requires a change in the existing approach to the problems of our development and an immediate transition to utilizing intensive factors of growth. The new economic situation requires that we carry out the strategic economic policy of our party. Keeping in mind the results of the Fifth Five-Year Plan and the tasks of the Sixth Five-Year Plan, our economic situation was described in the main report delivered at the 15th CPCZ Congress by Comrade Husak, secretary general of the Central Committee, in the following words: "With the Sixth Five-Year Plan, we are entering a new phase in which our economy will develop under more demanding internal and external economic conditions. The extensive sources of growth have for all practical purposes been used up and the increased tasks must be met with the same number—and in certain instances even with a lower number—of workers and with a slower increase in the use of energy and raw materials. The order of the day is to produce effectively and work well. This is the main prerequisite for the fulfillment of the Sixth Five-Year Plan and the growth in the standard of living."

Securing economic development during the present stage of building a developed socialist society will be the result of our ability to formulate our system of planned management ex ante, i. e., to foresee the requirements

of the future and not to be satisfied with the use of those features that stem from the need to solve the already existing situation. Our effort is closely linked to the basic content of the party's strategic line, to the effort to achieve the highest effectiveness and quality of social labor, and to our ability to strengthen the role of intensive factors in the growth of our national economy.

In respect to the questions related to the differences between intensive and extensive factors, there can exist different theoretical and practical approaches. However, as far as the overall approach to the problem of economic growth is concerned, we can see total agreement concerning the differentiation between the quantitative and qualitative method of expanded production. The differentiation between the two basic sources of economic development can be found in Karl Marx: "Production appears at shorter or longer intervals. If we look at the problem from a social point of view, we see production in an expanded scope. If the area of production is enlarged we speak about expanded extensive production; when more effective use of production means are used, we speak about expanded intensive production." We can also find in Marx the determination of the basic factor of intensive growth: scientific and technical progress. Science and technology gave functioning capital the ability to grow independently of capital's impact. It is the scientific and technical progress introduced in production which is a prerequisite and indispensable condition for the extensive growth of the economy. Marx even theroretically anticipated that in the process of expanded production (at his time based primarily on extensive and quantitative growth) there would be a reversal when further economic development became independent of capital accumulation and was primarily based on scientific and technical progress and other sources of intensive growth. Economic theory concludes that growth in its inception is primarily the result of the operation of extensive factors and only afterward do extensive and intensive factors become interrelated while intensive factors become more and more important.

The economic policy of the CPCZ since 1945 has been based on these basic scientific notions of the Marxist-Leninist economy. And the CPCZ has been applying these notions in practice. This scientific thesis was translated by K. Gottwald into an absolutely clear directive of economic policy in the determination of the basic principles of socialist construction in the CSR: K. Gottwald emphasized that we had to fulfill the First Five-Year Plan in all branches of our economy not only quantitatively but also qualitatively, that it was necessary to discover and mobilize hidden resources of our economy in order for our nationalized industry to produce more, better and cheaper than had been the case under the capitalist system. This thrust of our economic policy has lost none of its validity, rather the contrary.

Our party gradually analyzed the economic results achieved and the direction of our future steps. A significant role was played by the February 1957 plenum of the CPCZ Central Committee which for the first time openly

tackled the question of effectiveness. Even under a favorable dynamic development of the national economy, we encountered disruptions in certain basic economic proportions which functioned as a barrier against the influence of intensive factors. Material costs, labor productivity and its relationship to wages, etc., developed in a very favorable way. We encountered strong tension between resources and needs. The above-mentioned plenum of the CPCZ Central Committee decided on the following tasks: to overcome the difficulties by adopting complex measures in all branches of production and in planned management, to secure in a planned way the growth and structure of industrial production with special emphasis on the accelerated development of the fuel, energy, metallurgical and chemical base, to strengthen the role of long-range planning, to evaluate the effectiveness of the creation of large economic units operating on the basis of enterprise khozraschot, and to use value categories in the management of the national economy.

The breakdown of these ideas into specifics was done correctly. The Third Five-Year Plan was, however, incorrect in its overall structure. Added to this difficulty were certain external circumstances affecting the economic development of our country. Hence, it was necessary to manage our national economy by completely different means in order to quickly deal with the economic problems we faced.

After mastering this task, the Czechoslovak Community Party once again dealt with the question of economic management at the plenum in January 1965. This resulted in the adoption of directives whose aim was to improve the system of planned management. However, these directives were spelled out at a time when rightwing forces were in the ascendancy and when correct ideas were misused.

For this reason, the May plenum in 1969 charged in the Realization Directive the new party leadership with the task of repairing the disrupted system of planned management and to bring the economic policy of our party back to Leninist principles. The resolutions of the 14th and 15th CPCZ congresses set the directions for further policy. On their bases we achieved, during the 1970's, good results and realized the basic goal of the strategic line of socioeconomic development and building of the material-technical base of a socialist society, i. e., the securing of dynamic development of the national economy and strengthening and developing the standard of living. Between 1971 and 1975, the national income grew at an annual rate of 5.6 percent and social productivity of labor, 4.6 percent. Between 1976 and 1979 we further strengthened, under relatively slower rates of growth of our national economic aggregates, an economic potential and continued in our economic development: the average annual growth of the national income was approximately 3.8 percent.

Certain structural changes showed positive impact in the first 4 years of the Sixth Five-Year Plan: we have further strengthened the role of the engineering and chemical industries and of those productions which depend

on domestic raw materials, and we have paid greater attention to long-range developmental programs in these areas. The integration of our national economic complex in the international division of labor has improved; this applies primarily to the process of socialist economic integration. We are succeeding in realizing the resolutions of the 15th CPCZ Congress in the areas of material and cultural level of our citizens.

The positive results so far achieved must be really appreciated because they were materialized under demanding economic conditions. The communist party, however, not only analyzes the development of the national economy from the point of view of positive aspects--which are undoubtedly here--but also systematically examines the factors of economic growth. The overall economic development of the Sixth Five-Year Plan, especially the creation of material resources, is slowing down and the securing of this development is accompanied by tension within certain important sectors of our economy. A report submitted by the presidium of the CPCZ Central Committee to the 14th plenum stated: "The basic cause for a lower national income is the insufficient level of the overall effectiveness of the production process..our economic activity in both the area of the formation of the national economic plan and in its realization has not been able to adjust itself to new and more demanding conditions."

Czechoslovakia's position in the international division of labor and the development of external economic conditions, which experienced a basic change during the 1970's, significantly affect the economic development of our country. When the world energy crisis started, we spent annually 4.5 percent of our hard currency to purchase crude oil and natural gas. However, in 1980 this item represents 15 percent of our balance of payment and we estimate that this will increase to 25 percent during the next Five-Year Plan. We have not yet been able to deal with the problem of changes between export and import prices. Thus while during the Fifth Five-Year Plan we could use the entire gain realized from the final product for meeting domestic needs--and half of that for the growth of consumption--during the Sixth Five-Year Plan we must set aside 30 to 40 percent of this gain to meet the accelerated rise in import prices; and now the figure is already 50 percent.

The possibilities of further economic growth of the CSSR now only rest in a consistent utilization of intensive factors and the application of such means as the development of scientific and technical revolution, the introduction of modern methods of management, and stronger participation in international socialist integration. Especially, the full utilization of the possibilities of scientific-technical progress and its accelerated and broad application in production is the only possible alternative for further development of our socialist economy.

On the basis of a decision made by the party leadership, a complex experiment in the management of effectiveness and quality, which has already

been carried out in 17 VHJ's, was introduced on 1 January 1978. At the same time, work started on a uniform system of measures which would qualitatively move the system of planned management into a new direction in order to better meet the demanding economic conditions of the 1980's.

It is necessary to consider that during the 1980's, we will achieve lower rates of growth than was the case in the past. At the same time, we must greatly improve the level of utilization of energy, raw materials and other materials. It will be necessary to reevaluate a number of values and their priorities in order to secure the functioning of our economy. In this connection, there could appear voices of economic pessimism or ideas of so-called zero growth. However, it is not the shortage of energy, raw materials or manpower which act as a barrier to our economic development. Rather, the barrier is insufficient effectiveness in the evaluation of these factors. The overcoming of this obstacle is a prerequisite for a guarantee of the successful and steady economic growth of our country.

It is necessary to change economic thinking in order to replace the existing parameters and criteria, which played a positive role for the past 30 years, by more demanding ones. We must create an economic climate which will permit all economic levels of management, which will decide on and approve future measures, exposing them to real pressure, forcing them to greatly improve effectiveness.

The new system of measures aimed at improving planned management in the period after 1980, adopted by the presidium of the CPCZ Central Committee and the CSSR Government, is a long-term document whose provisions will be carried out during the next Five-Year Plan and possibly during the one that will follow. It consists of a series of measures deeply affecting the existing management system which will gradually be introduced on the basis of new situations. Viewed from this angle, it is necessary to emphasize that the adopted system of measures is not a "closed" one, but that it is an appeal addressed to all involved members of our society possessing knowledge and experience to step forward with new ideas.

The uniform planned management of the national economy includes planning the national economy in the form of creating or directing the national economic proportions ex ante, management of economic subjects from a center and, last but not least, organization of the production structure of the national economy.

The plan of development of the national economy occupies a key position in the economic mechanism of a socialist society. The increased demands put on the plan and the entire economic mechanism are related to the growth of volume of production, the complexity and interdependence of economic relations and the progress of the scientific and technical revolution. All management and planning work must, under existing conditions, aim more and more at increased production efficiency and quality, at higher final national economic results and at better satisfaction of growing social and personal needs.

At the same time, it is primarily up to the plan to orient our system toward rational utilization of the resources of the national economy, utilization of intensive factors of growth and broad application of scientific and technical ideas in production. In this respect, the plan's improved quality and its growing role in the economic mechanism are increasing. Another result is the strengthening of the plan's long-term prospects, proper balancing procedure and a well-thought out approach during the plan's drafting stage, and the strengthening of the plan's norm-setting base.

The adopted system of measures, while permitting a uniform system of plans, is based on the fact that the plan functions as the main instrument for realizing the economic and social policy of the CPCZ. All measures toward improving the plan aim at more effective use of intensive growth factors by effecting the most important qualitative and structural factors of changes based on applying the results of scientific and technical development. The main task in regard to the development of the national economy--structural changes, participation in the international division of labor, scientific and technical development--can be evaluated and realized only in the long run and in a planned way.

The new system eliminates the shortsighted approach to planning and management and the existing practice of determining tasks with the help of intra-annual indices of development of individual indicators on the basis of results of the previous economic year. The five-year plan becomes a really basic form of planning and a basis for organizing economic activity at all management levels. Within the framework of the five-year plan are determined the main tasks, limits and economic conditions for specific years which must be consistently assigned to the appropriate levels of management, namely, to the VHJ's or enterprises.

At the present stage we are working on the final state programs which incorporate the basic structural changes of the economy and which will be oriented toward the most important tasks of scientific and technical development and toward measures and actions for integration within the CEMA.

The main role of annual plans is to secure the goals and tasks of the five-year plan. The point of departure for the drafting of the plans will be the tasks, limits, instruments of the material incentive and other economic conditions determined by the five-year plan.

Annual plans must react operationally to changing domestic and external conditions, to new phenomena and needs during the course of the five-year plan. Also, the method of control and evaluation of the plan is being changed. We are primarily interested in fulfilling the five-year plan right from its inception and in control and evaluation of the fulfillment of individual annual plans. The primary criterion of control and evaluation will be fulfillment of the specified tasks, especially in regard to the growth of effectiveness, quality and export efficiency and in regard to achieving results from the scientific and technical revolution.

In a certain sense, it is a fact that the five-year plan is decided upon at the top, at a center, and that the annual plans are put together by lower-level organizations. In order to strengthen this trend, we must increase the interdependence of tasks and instruments of material incentive in such a way as to make advantageous the adoption of more challenging tasks, especially those relating to higher quality, in the annual plan and punish failure to meet these tasks. On the interdependence of tasks and the material incentive will depend the stimulation of operational plans which are seen as a decisive form for the participation of the working people in the drafting of the plan. In connection with these measures, directives concerning the drafting of annual plans in the old form are being discarded.

The improvement of the plan depends on improved planning, management and organization of the material relations in the national economy. This is, for all practical purposes, the basic prerequisite for improving internal relations and for the harmony of the plan. In order to achieve that, we have adopted measures aimed at creating a finished system of material and price balance sheets, in the first place of structural and marketing balances, and improving the system of balances at all levels of management. Some measures also have as their goal the strengthening of supplier-customer relations during the drafting and realization of the plan and the stipulation of these relations in written contracts.

The number of material balance sheets for the Seventh Five-Year Plan is being increased in the state plan to 343. At the level of intermediate organs, the balance sheets will have 120 items and at the level of the VHJ's, 230 items. The highest number of balance sheets will be in the engineering industry where we even anticipate balance sheets for complete plant equipment, including important complete products. In all, the balance sheets to be used in the state plan will be used for more than half of industrial production.

The plan will be clearly oriented toward the qualitative aspects of the reproduction process. The system of indicators also expresses the tasks in increased effectiveness, technical level and quality of products and meeting the needs of customers. The fulfillment of the plan and achieved results can no longer be evaluated merely on the basis of gross production. To regulate the basic wage and to calculate labor productivity, we will use an indicator of net production, namely, actual output. The fact that this indicator does not include material costs is in line with today's needs for maximum savings in the use of raw materials and materials, higher effectiveness of production funds, etc. Savings on materials will be significantly reflected in the fulfillment of the indicator of output (via profit growth). For example, in industry 1 percent saved on material will result in a 3-percent increase in output. In a similar way, we also will see increased value of technically progressive products and products listed in the first quality group.

Another indicator aimed at the qualitative aspect of production, namely, the returnability on funds spent on machinery, equipment, reserves and buildings, is the rentability of production funds. This means that individual economic units must make sure that the growth in labor productivity will be accompanied by the reduction in materials and funds needed for production.

The system of measures also makes more precise qualitative parameters for the realization of tasks in research and development, price limits of new products, growth of per kilogram prices of imported products, etc. The establishment of the indices of effectiveness, such as labor productivity, cost development, the use of basic means, etc., must be preceded by a thorough analysis of factors influencing development. At the same time, it is necessary to keep in mind that this is not a case of exchanging one indicator for another but a change in the approach toward decisionmaking, a change in economic thinking where effectiveness and quality must be the point of departure.

Khozraschot relations are a demonstration of a relative economic independence of enterprises or VHJ's, stemming from the achieved level of production forces reflected in a given stage of development of social division of labor.

Khozraschot is a basic method of economic management securing planned incorporation of production units into the entire complex of the national economy and creating prerequisites for multifaceted development of initiative and relative economic independence of these units. It is a well-rounded system of economic relations between society and economic subjects and among the latter, based on planned utilization of commodity-money relations with the goal of stimulating economic effectiveness of production in accordance with the tasks set in the national economic plan. Recently, in most of the CEMA member countries the system of khozraschot relations is being extended and improved in connection with the improved system of planned management and the transition toward the utilization of intensive growth factors.

The system of measures includes principles, regulations and instruments aimed at increased effectiveness of khozraschot as a whole and its individual elements in order to ensure the growth of effectiveness and quality. Responsibility of individual VHJ's and enterprises for economic results is being increased. Favorable and unfavorable results of activity will more than before affect their evaluation, material incentive and financial economy.

Other economic methods of planned management, namely, credit and financial policy, pricing mechanism, and the wage system will work in a similar way.

The basis for improved effectiveness of khozraschot is long-range planning where the basic scope and instruments for the functioning of khozraschot

are determined within the framework of a five-year plan. This will be manifested in increased dependence of personal and collective incentive not only on results achieved in the production sphere, but also in relation to results in the sphere of investments and reproduction of basic funds as well as in the spheres of supplies and financial resources.

The share of financial resources of the VHJ's, especially of profit, in financing the VHJ's needs and in the formation of incentive funds, is being increased. In order to secure a change in financing investments (subsidies from the state budget for investments will be used only in exceptional cases), the share of profit used for this purpose in the khozraschot sphere will be increased. While during the Sixth Five-Year Plan the profit, after the payments in the khozraschot sphere, was approximately 20 percent, we anticipate to gradually increase this share to 30 percent and in the long run to 40 percent.

The effectiveness of the formation and utilization of incentive funds is being greatly increased. These funds will be created on the basis of norms and their formation will depend on the fulfillment of specific indices and on the formation of usable profit. These funds will be greatly affected by nonfulfillment of the planned profit or by deductions from profit as a result of fines, penalties for inferior production, etc.

Certain incentive funds will, in comparison with the existing situation, be reapplied (the development fund); in the case of others, their influence on the incentive (export-stimulating fund and fund for cultural and social needs) will be increased.

Material incentive in the growth of effective imports, especially from the point of view of prices paid on foreign markets, will be strengthened in regard to the significance of external economic relations.

The tasks of the foreign trade plan and the criteria of its effectiveness will play a decisive role in the selection and orientation of complex developmental programs, in the allocation of investments, in the directions of production and in the management of technical development and quality. The system of measures enlarges the scope of relations of the five-year plan and the operation of financial and economic instruments for material incentive in adopting and fulfilling progressive export tasks. We anticipate the realization of the tasks of the five-year plan in the export sphere with the help of annual plans, especially in accordance with the development of foreign prices.

We will also gradually create prerequisites in foreign-exchange rates and in the management of wholesale prices in order to establish higher criteria for an effective relationship between khozraschot and the international division of labor, especially as far as the process of international socialist economic integration and for a realistic view of the situation at foreign markets are concerned. Gradually, we will spell out a price

mechanism in such a way as to set the prices of raw materials, fuel, materials and imported machinery and equipment in accordance with the development of the purchasing cost, i. e., import prices.

The application of the principles of closer dependence on the effectiveness and quality in the activity of khozraschot units will bring forward differences in the formation of resources among individual VHJ's and enterprises. There will be a difference between well-managed and badly managed enterprises and the intensity of economic pressure on the effectiveness of production will increase.

The development of khozraschot at the level of VHJ's is linked to its improvement at the level of enterprises and to the improvement of the intraenterprise khozraschot. We will work out rules for improved management within the VHJ's and the development of effective forms of intraenterprise management. Centrally determined principles for the development of khozraschot will serve as a basis for the solution of the above questions.

The tasks of the present stage require that the social division of labor in the management sphere be adjusted to the new economic conditions. These tasks require a new division in regard to jurisdiction and responsibility in the management of social production. The most important characteristic of this process, related to the ever increasing level of social production, is the transformation of the VHJ's into basic units of management in the khozraschot sphere and the increase in the standard of central national economic management.

The system of measures includes tasks for improving the most important areas of the management system assigned to organs of the state administration and economic organs. The mastering of the demanding economic tasks during the next period anticipates great improvement in the work of central managing organs of individual sectors and branches. The improvement in the work of central management must be demonstrated especially in its conceptual, coordinating and controlling roles, and in broadened responsibility for the solution of decisive national economic tasks, scientific-technical development and structural changes, and for the superior drafting and realization of national economic plans.

The transformation of the VHJ's into basic units of management is based on the resolutions of the 15th CPCZ Congress. The VHJ's will be given all necessary means, jurisdiction and responsibility. To this also are related changes in the organization of the production-technical base aimed at the creation of uniform production economic units able to secure the conceptual development of production and of individual branches, the drafting and realization of a uniform technical and investment policy, the needs of the national economy, and the development of external economic relations.

The enterprise still remains an important element of management in the newly outlined jurisdiction of the VHJ's. It is fully responsible for

effective and quality production based on the needs of customers and for multifaceted care and social development of the working peoples' collectives.

However, improving the plan, khozraschot, and organizational structure of the economy will not by itself secure the achievement of specific tasks. The process of improving the entire economic mechanism sharply increases the demands on management workers. To understand the meaning and tasks of the economic policy, to adopt a genuine party approach toward the realization of approved measures, to show high organizational ability and tenacious effort to achieve the stated goals, to be able to offer leadership to workers and work with them, to develop their initiative, to fight for everything new and progressive--these are the demands which we are asking today from all managers.

The most decisive element for successful realization of the system of measures will be the way in which the subjective factor, namely, the people and especially managers, identify themselves with the scope and goal of the system and in which they carry out the necessary measures in practice. The success of the party's economic policy depends primarily on the cadres, namely, on their preparedness, responsibility and achievements.

The complexity of the economic development and progress of our society requires higher demands on the political and technical maturity and moral quality of managers, their ability to manage workers, creatively develop and consistently carry out the policy of the party within their jurisdiction. Leading workers must be subject to regular and rigorous evaluation which takes into consideration the results achieved and good care must be taken for their development.

To achieve the full application of the improved system of planned management requires the utilization of all existing resources, improvement of our participation in international socialist economic integration, the solution of new problems stemming from changes affecting the world economy, and the ability to better apply the results of science and technology as the decisive factor of the growth of labor productivity. As stated in the report submitted by the presidium of the CPCZ Central Committee at the 15th plenum of the Central Committee: "Those managers at any level of management who do not understand that will not be able to master the assigned tasks. The improved system of management and planning of the national economy puts qualitatively higher demands on education, people's consciousness, on the level of management and requires the maximum creative efforts of all workers' collectives."

At the same time, it is also necessary to pay systematic attention to sufficient room for the initiative and creative approach of the working people in order that their activity not be stifled by red tape and shortcomings in the organization of labor and management. The participation of the working people in management is a means for cementing the working

collectives, it is a vehicle for unifying individual, collective and social interests, and especially it is a means for relating the communist party to the everyday activity of workers, technicians and managers.

The present level of management, including certain elements of the existing system of management planning, is outdated and does not correspond to the changed circumstances and possibilities of our national economy. I have in mind especially those elements of management who orient production to the utilization of extensive favtors and who more and more have problems with increased effectiveness. Similarly, the level of managing work in many sectors runs counter to the needs of present and future development.

The communist party and the top state economic organs react to the changing situation: the recently adopted system of measures for improving the planned management of the national economy in the period following 1980 insists on changes in the planned management which singularly aim to support the qualitative aspect of the reproduction process.

The effectivaness of the adopted measures depends on the way in which these steps are consistently specified and applied at all levels of management in the processes of decisionmaking, control and evaluation of results of the activity of organizations, collectives and individuals. This was also emphasized by Comrade Husak, secretary general of the CPCZ Central Committee: "The most important task we are facing now is to breakdown the adopted system into specifics. All organs must approach the implementation of the new system together and responsibly. They must give maximum care to the preparation for the gradual introduction of the new system in practice in order to make it a really effective instrument for the solution of the tasks of our national economy."

1277
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AGRICULTURAL MECHANIZATION TRENDS FOR SEVENTH FIVE-YEAR PLAN

Prague TECHNICKY TYDENIK in Czech 15 Jul 80 p 6

[Article by Frantisek Kral: "Agriculture in the Seventh Five-Year Plan"]

> [Text] Preparatory work for the Seventh Five-Year Plan is climaxing at this time in all the national economic branches. This is also true in agriculture which faces demanding tasks of implementing the resolution of the Thirteenth Session of the CPCZ Central Committee. The principal goal in the coming period will be increasing self-sufficiency in food production. Suffice it to recall that, for example, the production of grain in the Seventh Five-Year Plan is to reach 56 to 58 million tons which, compared with the expected results in the Sixth Five-Year Plan, represents an increase of 3 to 5 million tons. The annual consumption of dairy products is to rise by the end of the next five-year plan to 250 kilograms, and the consumption of meat to at least 90 kilograms per person. Consumption of vegetables by 1985 is to grow to 91 kilograms, and fruit to 65 kilograms per person.

In this coming phase which is characterized by a substantial increase in agricultural production, along with a further decrease in the agricultural labor force, implementation of all these plans depends on an overall increase in labor productivity which will require a corresponding advance in agricultural technology.

Therefore, we must reach a qualitatively higher plateau in the technological base which will be expressed primarily by a substantially higher performance rate of individual machines, operating equipment, and machine systems, by higher installation performance of the energy base and changes in its structure, and by completing comprehensive mechanization in all basic production branches, along with transition to mechanization in especially the stationary production processes. In order to better utilize technology, we plan to expand the services for specialized activity (agronomical enterprises for fertilization processes, etc.)

The required trends of agricultural technological development of the period after 1980 are defined in the Czechoslovak System for Comprehensive Agricultural Mechanization which was prepared on the basis of results of technological research, testing of modern foreign technology, and the experiences of a broad collective of workers in the agricultural and engineering branches, both theoreticians and practitioners. According to this system, the coming period will be marked, with respect to automotive technological equipment, by an expansion of automobile transport techniques, in addition to increasingly broader use of self-operating machinery.

We plan to set up a unified, mutually-complementary system of automotive equipment, that is, unified basic centers in one category (motor, transmission, drive and steering systems, hydraulic and electrical outfitting, control and cabin) with which it will be possible to complement, together with the work force, mechanized equipment of various types (tractors, self-propelled machinery, trucks). This will enhance the serial nature of production, reduce operational expenditures, and service and maintenance costs in agriculture.

The anticipated development of installed performance of individual types of mechanized equipment, stemming from the reality of 1975 and the delivery plan through 1980, is shown in the following table.

Indicator/Year	1975	1980	1985
Tractors	5.35	7.4	8.2
Trucks	2.26	3.6	5.5
Automotive Machinery	1.77	3.2	4.7
Performance of Mobile Power Euipment Overall (10^6 kW)	9.39	14.2	18.4

A serious problem in the coming period will be agricultural transport and handling of materials. At the present time, transport, loading, unloading, represent 40 to 45 percent of the overall mechanized effort per unit of production, and about the same percentage of human labor needs. Tractor transport is dominant in agriculture, handling about 70 percent of the overall volume of transport. Utilization of tractors, however, no longer satisfies the standards for effective transport operations required under conditions of advanced socialist agricultural mass production.

The volume of agricultural transport represents roughly one quarter of the overall volume of road transport. Yet the share of agriculture in the number of conveyer vehicles in the national economy as a whole is only 12.2 percent, and less than 10 percent of the overall tonnage. Consequently, we

have to make sure, in accordance with the resolution of the Thirteenth Session of the CPCZ Central Committee, that in the Seventh Five-Year Plan the agricultural sector will receive 10,000 specially adapted agricultural freight vehicles with a capacity of over 8 tons, including special equipment attachments, trailers, and 6,500 loaders reflecting agricultural needs.

With respect to vehicles required by the system of mechanization, we anticipate a transition from tractor to automobile techniques with the following parameters:

--capacity of 10 to 12 tons in trucks with a system of tecnological attachments (fertilizer spreaders, industrial fertilizers, liquid manure, lime, dross, etc.);

--capacity of 16 to 20 tons in trailer systems with a set of technologically-specialized equipment (collapsible panels, flatbed conveyer, cisterns, cattle conveyers, etc.);

--utilization of autotractor container systems for combining tractor and automobile techniques in basic 10-ton capacity, with special-purpose containers usable as transport crating, temporary storage, or technological equipment;

--self-propelled transport technology (automotive harvester vehicles of 4-to 7-ton capacity, automotive application technology, special vehicles for mountainous regions).

Exploitation of highly-productive transport equipment would be impossible without simultaneous introduction of a broad series of standard loaders, especially of the self-propelled type.

In transport of fertilizers to the fields and in spreading, we anticipate a gradual transition to a proportionate process based on supplying the ground spreaders with self-emptying conveyers. There will be further application of spraying from the air, especially as a result of proportionate nitrogen content applied during the growing period. In the application of liquid fertilizers we will, for the sake of plant protection, gradually introduce self-propelled machinery with an effective range of 20 meters, instead of the universal tractor sprayers.

Future outlook in soil processing requires that technological development take the road of high-performance mechanized equipment, including wide-angled plows with a capacity of as much as 3 ha. h^{-1}, broad application of new agronomic discoveries (lowering the depth of plowing, replacing plowing with underplanting with disc underplanters or chisel-type soil cultivators, introduction of seeding in unprocessed soil) and utilization of combines. In order to reduce breakdowns of not only soil processing machinery, but especially harvester equipment, we must employ rock-picking machines in rock-filled arable areas.

Grain will be harvested in the coming period by harvest threshers of 8 to 10 $kg.s^{-1}$ penetration, instead of equipment used presently with a penetration capacity of only 4 to 6 $kg.s^{-1}$. For harvesting on slopes we will use equipment with a capacity of 5 $kg.s^{-1}$ penetration, instead of standard threshers.

In the harvesting of fodder, which will continue to be a subject of special attention, we will stabilize two basic methods, namely, harvesting with self-propelled cutters and harvesting with pick-up vehicles. Harvesting cutters with appropriate adapters for both mowing and pick-up of thin-stemmed fodder and silage corn, will become a significant factor in universal application, including on slopes up to 10 to 12 degrees. Along with these machines, we will use pickup vehicles, the need for which is especially vital due to the size of slope areas (over 500,00 hectares), and we do not exclude their use even in flat areas (fodder vehicles, stacking of hay, etc.).

Much attention will also be devoted to mechanization in growing and harvesting potatoes, which remains at an unsatisfactory level. In harvesting late potatoes, we will gradually introduce three-row trailer harvesters and, in the near future, four-row automobile harvesters with 0.6 $ha.h^{-1}$ capacity, which will be servied by four workers. Also needed are special adapters for harvesters of consumer potatoes and the cultivation of crops, as well as on slopes up to 8 degrees.

In sugar beet harvesting, the two-phase technology will be fully applied, even though it is not inconceivable that the phases will be split differently for partial drying of the beet-tops in the rows.

Further technological steps will include lowering of the trend toward wastefulness in the present wide variety of machinery. Seeding and cultivation machines will be replaced by a 12-row self-propelled machine which will handle the following operations: sowing and application of herbicides and pesticides, rotary hoeing and plow-blade hoeing, and automatic sorting.

Mechanization of growing and harvesting vegetables and fruit is still at a low level. We envisage a substantial improvement in the coming period, we have high expectations regarding new types of machinery which will be developed and produced by the international enterprise AGROMAS.

Mechanization of labor in the animal production industry will be handled in accordance with the construction of new installations and extensive modernization of existing ones. Further development will be governed primarily by the requirement of achieving a point of minimum manual labor, maximum quality products, and a high level of hygienic safeguards.

In cattle breeding we expect a more intensive transition to vertical storage areas and stationary feed-lines equipped with elements of self-operated regulation and automation. In the future, we can expect computerized control.

Increasingly, we encounter efforts toward more effective utilization of all types of fodder by means of homogenization, processing, and optimum fodder composition. With gradual concentration, we use centralized fodder preparation and mixing installations, especially for bulk fodder.

In milking equipment, technological development focuses on automation of individual work phases and, in the future, we envisage installation of an automated milking process with the use of computer technology.

In hog breeding, we plan stationary mechanized feed lines, programmed automated operations, and minimum requirement for servicing. There will be significant growth in the use of multisectional stalls in one-level or multiple-floor construction.

In poultry breeding, we are leaning exclusively toward pen technology which will continue to be improved and applied in multisectional construction. We envisage that, starting with 1985, this method will be fully operational in the production of eggs and fowl breeding, and especially in poultry production.

In sheep breeding, which will be expanded, we plan gradual mechanization of labor, including milking. In this area also we can expect application of the multisectional stalls method in lamb feeding.

The implementation of the above-mentioned principal trends of techological development in agriculture, designed to meet the tasks of the Seventh Five-Year Plan, will increasingly depend on how other branches meet their material and technological needs, and with what degree of effectiveness agriculture is able to put these means to productive use.

9496
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CSR MINISTER CALLS FOR LOWER GRAIN LOSSES DURING HARVEST

Prague HOSPODARSKE NOVINY in Czech 15 Jul 80 pp 1, 6

[Article by Miroslav Petrik, CSR minister of agriculture and food]

[Text] Production of grain is becoming increasingly important and represents the basic prerequisite for successful future development of socialist agriculture. Harvest activities which climax the year-long effort in this sector are therefore a highly significant task, the preparation and successful fulfillment of which must be given constant attention at all levels of agricultural management, as well as by interested ministry organizations which contribute to a smooth accomplishment of this task.

The results of this year's harvest will have a decisive impact on the fulfillment of the Sixth Five-Year Plan in grain production, and on the creation of a launching platform for the development of agricultural production in the Seventh Five-Year Plan. Consequently, in accordance with the resolutions of the Thirteenth and Fourteenth Sessions of the CPCZ Central Committee and with the goals set forth by the Fifteenth CPCZ Congress, we approach this year's harvest with a high degree of exactingness in further increasing self-sufficiency in the production of those foodstuffs which can be grown in our temperate climate.

Edible Plant Development

The state plan decrees that the CSR will produce this year 7.150 million tons of grain, i.e., 11.1 percent more than the annual average in the 4 years of the Sixth Five-Year Plan. Expressed in fiscal terms, such production volume represents more than 50 percent of gross plant production on arable land. Purchases of legumes for the state inventory are to amount to 110,000 tons, i.e., 3,000 tons more than the plan for 1979. In winter rape, where seeding areas were expanded last year, market production has risen to 130,000 tons, which is 10,400 more than the plan for 1979.

Based on detailed evaluation of the results and causes of varying hectare yield in grain production in past years, ever since the completion of last year's harvest the whole system of agronomical measures has been oriented not only toward fulfillment of high production volume, but primarily toward good quality winter wheat for bakery needs and spring barley for malt production.

In order to meet the demanding task in grain production, a good launching platform was created in the fall of 1979 when sowing of winter crops was accomplished in most agricultural enterprises without serious problems and within optimum agronomical deadlines. Winter crops in the CSR were seeded on an area of 1,042,464 hectares, of which winter wheat on 765,102 hectares, winter rye on 136,988 hectares, winter barley on 74,844 hectares, and winter rape on 65,530 hectares. Significant movement occurred in the structural composition of winter crops in favor of rye by about 34,000 hectares, and winter rape by 24,000 hectares, as compared with 1979.

There was no serious damage to plants last winter and seeded winter crops survived the season very well. Losses through plowing were minimal (below the average of past years).

Due to rainy and cool weather, seeding of spring crops was delayed by more than 2 weeks, compared with the average of past years.

The prolonged period of cool weather in April and May also had a negative effect on the development of all field crops. Development of grain to date is highly uneven, both with respect to individual types and individual areas.

As a result of this, there is considerable variance in the development of winter and spring crops. The state of winter grain and rape can, on the average, be considered good to very good. The state of spring barley is generally weaker.

Agronomical measures in cultivation are designed to eliminate disease, weeds, and insect damage, and to apply the method of differentiated extra-racine nourishment.

We anticipate that harvest activity will be initiated 10 to 14 days later than in normal years and will be contracted into a shorter time period. Judging by present development, excepting winter rape and barley, harvesting of the principal grain crops will not begin until late July and will extend, in greater measure than in previous years, into September.

Technological Preparation

Consequently, technological and organizational measures will be directed at thorough preparation of people, machines, transportation, and storage, so that the harvesting of winter rape and all types of grain can be executed with high quality and in the shortest possible time period--thus avoiding great operational congestion in September--and so that a smooth passage into autumn activities is ensured. For cereal and winter rape harvesting, we will have this year in the CSR at our disposal a total of 12,529 harvester threshers, of which 7573 E-512 type, 563 E-516s, 3155 SK-5s and SK-6s, and 971 of the older SK-4 type. In preparing for emergency situations, we have established within the VHJ [economic production units] Machine and Tractor Stations [STS] and Agricultural Machinery Repari Shops [OZS], an operational reserve of 300 threshers.

In the interest of economy in propellants, there is more emphasis on intensification and expansion of a cooperative process of harvesting technology involving shorter distances, such as within okreses and krajs. According to contracts concluded to date, an overall number of 8,548 threshers will be included in this project. By applying this system, we can reduce the average load on each harvester thresher from the former 128.6 hectares to 99.7 hectares.

The overall process of preparation and maintenance of harvesting technology is under regular scrutiny in the Czech Ministry of Agriculture and Food by a commission of experts which, with the participation of interested branches, deals with the problem of machinery spare parts. The ministry is in permanent consultation with supplier organizations and foreign trade enterprises on ways to secure adequate spare parts inventory for needed technological repairs. Nevertheless, results in this area are still unsatisfactory. As late as mid-June, a number of items in the spare part inventory for harvester combines were still unavailable. There are shortages especially in flat transmission belts, conveyers, and spare parts for cutting mechanisms. As a result of the fact that the cutting mechanism of the grain combine E-512 is of a similar type as that in imported cutters and presses, shortly before the hay gathering season we encountered an anomalous situation in which the needed parts of the cutting mechanism in already repaired grain combines were dismantled for use in hay gathering operations.

In an effort to at least partially improve this highly negative state of affairs in the spare parts inventory, we have spotted bottleneck items suitable for renovation which is performed in STS and OZS VHJs, as well as in agricultural enterprises and sponsoring plants. In the course of the harvest, we will set up an emergency reserve of selected spare parts. We will also establish emergency services in the STS and OZS VHJs and the sales network of the Central Enterprise for Agricultural Technology, which will service breakdowns and issue spare parts. We have already set up within the Central Enterprise for Agricultural Technology a nationwide communication and delivery system to handle necessary transport of needed spare parts.

Adequate fuels and energy deliveries for this year's harvest operations are ensured for agricultural enterprises and procurement organizations in the state plan. There is a precarious balance in light heating oil this year since, compared with real deliveries for agriculture in 1979, the overall ceiling is down by 44,000 tons. Kraj and okres agricultural administrations, directly managed organizations, and agricultural enterprises must, for the duration of harvest operations carefully manage the oil supply and lay away an operational reserve for use in case of inclement weather. An operational reserve necessary for special conditions during the harvest was set up under the jurisdiction of the ČSR Ministry of Agriculture and Food. With the help of the national committees we are securing adequate deliveries of coal and coke from the Coal Storage Enterprises for dry grain products. Deliveries of city gas and natural gas

will, during the peak period, be handled in cooperation with the communication and delivery system of the Czechoslovak Gas Enterprises.

The aim of all these measures is to ensure full use based on need of drying facilities in the course of the harvest, especially in damp weather.

The Best Grain for State Inventory

State purchases of grain in the CSR for this year are set at 2.280 million tons, i.e., 50,000 more than in 1979. In the interest of guaranteeing the best grain for food processing purposes, procurement tasks were included in the enterprise plans for food-producing oats, the volume of which will be stimulated via prices. Our aim is to purchase the best grain for state inventories.

For storage of grain from this year's harvest, procurement organizations and agricultural enterprises will have at their disposal a storage capacity of 7.014 million tons. In comparison with last year, storage capacity has increased by 148,000 tons. For storage of contracted amounts of grain purchased during the harvest, there is a shortage in storage capacity of 144,000 tons. Consequently, certain branches and kraj national committees were asked to help find space for temporary grain storage. In addition, within the branch, measures are planned in the VHJs of the processing industry to accept a maximum amount of grain already in the course of the principal procurement season, and provide temporary storage facilities in appropriate installations. Furthermore, we are readying a 5 percent storage reserve for use in case of inclement weather.

Much attention is devoted to readiness in cleaning and drying installations which are an important factor in rapid harvest operations and full utili-ation of harvest threshers. Their overall capacity has increased this year to 19,800 tons per hour, i.e., 1,600 tons per hour more than last year.

In order to achieve harmony and coordination of post-harvest operations with regard to smooth grain transit and elimination of losses in storage, additional storage facilities in procurement organizations and agricultural enterprises have been equipped with adequate ventilation systems. By the time of the harvest, enough of these will be available for storage of 2.160 million tons of grain, i.e., 214,200 tons more than last year.

More attention will be given again this year to making sure that the best grain is reserved for food and malt production. In the enterprises of the Agricultural Supply and Procurement complex, we have arranged for separate storage of the highest-quality wheat for bakery purposes and barley for malt production.

In order to ensure the maintenance of high quality, stored grain will be subject to close scrutiny conducted by a selected aktiv.

Emphasis on Reducing Losses

Special care will be devoted during the harvest to measures aimed at reducing losses in grain athering. Controls, using unified standard methods, will be conducted daily by specially-designated officials in every agricultural enterprise. In okreses and Krajs, the harvest commissions will assess performance at least once a week. Moreover, the central harvest commission will regularly evaluate the results of loss control and the extent and effectiveness of preventive measures.

Broadly-developed socialist competition will during this year's harvest again be oriented toward high-quality labor, maximum utilization of harvest threshers without exceeding permissible losses, economy in propellants, and a smooth comprehensive course of harvest operations.

In the interest of reducing losses this year, full application and development of competition in eliminating losses in grain transport is considered especially important, and we will fully support the competition sponsored by the Socialist Youth Union under the slogan "Not a Grain Wasted." Full support will also be accorded to competition organized by the Central Committee of the Czechoslovak-Soviet Friendship League and the CSR Ministry of Agriculture and Food for the SK-5 and SK-6 combine crews.

In order to gain objective information, commission protocols on the completion of harvest operations will be drawn up in accordance with the "Methodological Instructions for a Unified Approach to Grain Harvest Control and Preparation of a Balance Sheet of Grain Utilization in the CSSR in 1980." The aim of this measure is to achieve a unified approach to the preparation of harvest reports in all agricultural enterprises.

At all levels of management in agriculture, the fodder industry, and agricultural enterprises processing grain for food production, we will apply principles this year of binding procedures in management, beginning with the earliest days of the harvest when harvested grain figures will be recorded.

Not Only the Harvest Proper

An indivisible component of harvest operations is the gathering and storage of straw in the shortest possible period of time. Quality straw plays a more important role each year in securing the cattle fodder base. This area is the subject of intensified effort and measures, especially with regard to organization of a smooth process of grain and straw gathering, which should be applied to the maximum possible extent. We have a good deal of experience in this area, especially in the application of the Ipatov method, which under our conditions has been found beneficial. Last year we harvested an area of over 450,000 hectares using this method.

Following the good experiences of last year, we are devoting great care to the seeding of stubble-field secondary crops with application of substantially better type composition for which prerequisites were created

in the seeding. Stubble-field mixtures will be seeded in the CSR on at least 260,000 hectares, i.e., 8 percent of arable land. The overall extent of secondary crop cultivation will thus grow this year to 11 percent of arable land.

Labor accumulation in the course of the harvest places great demand on organization and overall operational management toward full utilization of harvesting techniques. In consonance with this requirement, there will be uninterrupted operations during the harvest in services enterprises and purchasing organizations, especially in repair operations, spare parts sales, and receipt of grain at state inventories.

An inseparable component of harvest preparation and implementation must be consideration of and readiness for setting up measures for safety for workers, health protection, caring for them, as well as ensuring fire prevention measures. This whole area will be regularly monitored and assessed at all levels of agricultural management.

During the harvest, in cooperation with the trade sector, we must also ensure smooth supply to the market of early potatoes, the outlook for which is hopeful. By the end of June, domestic production of this crop supplied the market with over 6,000 tons. This demands that all producer regions consistently fulfill all operational tasks in potato purchases and, before the harvest, build up a sufficient reserve which would guarantee that, in case of weather deterioration, the market would still be satisfied.

In hops-producing regions, everything must be done, in terms of organization, materials, and technology, for a successful hops harvest. Preparations are under way for housing, feeding, and providing cultural activities for 38,250 brigade workers who will be helping with the harvest. By the same token, everything is being readied in harvest technology for smooth, effective operation, as well as for post-harvest hops processing. The aim is to gather this export crop in the best possible quality, with maximum economy, and minimum losses.

During the harvest we must also secure timely gathering of early fruits and vegetables for direct market supply and for the canning industry. Based on experiences of past years we ensure, in cooperation with the national committees, sufficient numbers of brigade workers, and timely transport and distribution, so that fruits and vegetables can be made ready for the market in appropriate quality and in a manner ensuring that all regions are supplied evenly.

Even though the attention of managers and technicians is rightly focused on the grain harvest, we must not for a moment disregard animal production. Since the beginning of this year, we have been exceeding the plan in milk purchases by more than 96 million liters, i.e., 5 percent. Compared with the same period last year, we have produced roughly 160 million liters more. Recently, we have been exceeding the plan in the purchases of slaughter beef and pork products. In the first half of this year,

pork purchases were fulfilled roughly by 49 percent of the annual plan. Egg purchases are being successfully met and in the timed plan there was an excess of 60 million.

The good trend in animal production must be ensured even during the harvest and fall operations. We expect a greater effort by all zootechnicians, animal tenders, as well as those whose responsibility it is to provide adequate supplies of fodder. The basic prerequisite still lies in regular daily deliveries of green fodder and maximum utilization of pastures. The services of the STS and OZS must devote more attention in the summer period to milk refrigeration equipment. The first duty during the third quarter will be fulfillment of animal product purchases, especially slaughter beef and pork, which must be regularly monitored and assessed by the management of agricultural enterprises, in addition to their demanding tasks in the organization and conduct of harvest operations.

In closing, I would like to express my appreciation to party bodies and organizations, workers of the national committees of all levels, and organizations of the National Front, for their effective assistance in the gathering of hay, and simultaneously voice my conviction that, in the harvest of grain, vegetables, and fruits, they will again assist the agricultural enterprises in the fulfillment of their responsible task, namely, ensuring the needs of the market and the processing industry, thus contributing to a high standard of living for citizens of the Czechoslovak Socialist Republic.

9496
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MAY 1980 ECONOMIC RESULTS PUBLISHED

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[Article by Federal Statistical Office: "Report on Plan Fulfillment, May 1980"]

[Text] The development of the national economy showed the following basic tendencies in May:

--in industry, the largest increase over the same period last year was in deliveries for export to nonsocialist countries; deliveries for export to socialist countries and for production use and operations increased more slowly; sales for domestic trade remained at roughly the level of last May; the planned production tasks were fulfilled in May;

--in the construction industry, the plan for construction work was not fulfilled in May;

--in agriculture, milk procurement considerably exceeded last May's level;

--public goods transport handled the prescribed transport tasks well in May.

Centrally planned industry exceeded its planned delivery quotas in all sales areas in the period January-May 1980. The greatest overfulfillment of enterprise plans was achieved in deliveries for export to nonsocialist countries, amounting to 11.5 percent at FOC [free of charge] prices (3.5 percent at wholesale prices); deliveries for export to socialist countries overfulfilled the plan by 8.3 percent at FOC prices (5.6 percent at wholesale prices); deliveries for domestic trade exceeded the plan by 2.4 percent at retail prices. Sales quotas for production use and operations were 101.3 percent fulfilled by the industrial enterprises, while delivery quotas for investment were 107.8 percent fulfilled at wholesale prices. Deliveries in all the economic areas of sales were higher in the first 5 months of this year than in January-May 1979.

The indicators designated for current monitoring of plan fulfillment by enterprises were fulfilled during January-April 1980 by 404 organizations (i.e. by 45.9 percent of the total number of enterprises for which these indicators were designated). In the enterprises for which indicators of sales structure were designated, overall the plan was exceeded for all indicators except deliveries for selected construction projects from departments of the federal ministries of Metallurgy and Heavy Engineering, and General Engineering. In addition, the plan was not fulfilled by the organizations which are evaluated in terms of the indicator of expenditures per koruna of adjusted output.

With the exception of a certain worsening in April, the results achieved as regards total and material expenditures per unit of adjusted output in the operation of enterprises in the industrial departments have been better since the beginning of the year than the figures assigned by the annual state plan.

In agriculture, thinning of sugar beets has continued, and as of 12 June it had been done on almost 85 percent of the total acreage. Progress in harvesting perennial forage crops, however, is lagging behind the multi-year average. As of 12 June, 33 percent of the planned area had been harvested. The harvesting of fodder from meadows is just beginning, and faster progress is prevented by slow growth. In livestock production, an increase in the productivity of stock continues, manifesting itself primarily in increases in milk yield and average egg yield. The time plan for procurement over the 5 months was 104.3 percent fulfilled for slaughter poultry, 104.1 percent fulfilled for milk and 102.7 percent fulfilled for eggs. The time plan for procurement of slaughter animals was not fulfilled, and a low fulfillment level was posted in particular for slaughter hogs (97 percent).

Public goods transport dealt with the prescribed tasks well in May. The total amount of commodities transported was 794,000 tons, or 1.5 percent, above the planned level. The planned tasks in railway transport were also fulfilled by Czechoslovak Motor Transport [CSAD]. From the beginning of the year until the end of May, the public goods transport system carried 254.4 million tons of commodities, 0.7 percent more than the assignment for this period in the detailed plan. Railway transport 99.4 percent fulfilled its planned transport tasks for January-May; the shortfall was 736,000 tons of goods. The planned figure for commodities carried by the Czechoslovak Railways overall was 98 percent fulfilled for the 5 months; the plan for average daily tonnage was 98.1 percent fulfilled by the carrier units.

The construction industry failed again in May to fulfill the monthly segment of the enterprise plans for construction work. The quantity of construction work carried out with the organizations' own workers, amounting to Kcs 7.4 billion, represents 98.7 percent of the May plan and is 0.6

percent below the same month last year. Average daily output increased by 9.3 percent. Since the beginning of the year, the amount of work done with internal resources [ZSV] has amounted to Kcs 31.9 billion, 37.4 percent of the annual plan assignment and 98.9 percent of the enterprise plan segment for January-May. The number of construction enterprises not fulfilling their production plans increased compared with the preceding period: during the first 5 months of the year the enterprise plans for work with internal resources were not fulfilled by 147 enterprises, more than 60 percent of the total number. A low level of plan fulfillment was attained in contractor residential construction. Overall, during the 5 months the contracting construction enterprises turned over 14,460 apartments, 15.6 percent of the annual plan figure and 90 percent of the planned number for January-May.

The rate of increase of construction work carried out with the organizations' own workers during January-May was 103.9 percent of the figure for the same period last year; the figure in the annual plan is 104.5 percent. Average daily output increased by 4.9 percent during the 5-month period. Fulfillment of the set of indicators designated for current monitoring of plan fulfillment was variable in January-April. All indicators were fulfilled by about 18 percent of the construction enterprises. Good plan fulfillment was achieved in priority tasks and centrally reviewed projects and in projects in priority areas. There is still latent potential for fulfillment of the plan for decreasing expenditure levels.

In capital construction, during January-April investment work and deliveries (other than project Z and other self-help work) worth Kcs 33.9 billion were performed. According to estimates for May, the total quantity of investment work and deliveries for the 5 months was Kcs 43.9 billion, 4.9 percent higher than the same period last year. Larger increases were posted for deliveries of machinery and equipment (5.2 percent) than for construction work (4.5 percent). By the end of May about 31.4 percent of the capital construction in the annual plan had been completed.

In foreign trade, during January-May 1980, 37.0 percent (at current prices) of the year's plan assignment for export to socialist countries was fulfilled, as were 36.1 percent of the plan for export to socialist countries, 33.7 percent of the plan for import from socialist countries and 36.8 percent of the plan for import from nonsocialist countries. The rate of increase of exports to and imports from nonsocialist countries posted during the 5 months was affected by continuing price increases, which are larger than those planned for the year. In trade with socialist countries, the planned pace for the year was exceeded by export. The ratio of FOC prices to wholesale prices during the first 4 months of the year was more favorable than the planned figure for the year in export to nonsocialist countries, while in export to socialist countries it did not reach the annual-plan value.

Basic Indicators of Development of National Economy in May 1980
Increments Over Comparable 1979 Period (in percent)

	May	Jan- May 1980	Federal Plan[1]
Sales:			
Capital deliveries total in wholesale prices	*	1.1	-4.5
Domestic market deliveries at retail prices	*	4.8	4.8
Exports to socialist countries			
at wholesale prices	*	5.4	3.5
at FOC [free of charge] prices	*	9.3	8.0
Exports to nonsocialist countries			
at wholesale prices	*	8.5	3.9
at FOC prices	*	31.3	14.5
Other sales for production use and operations at wholesale prices	*	40.0	*
Industry:			
Gross production	-2.4	4.2	3.7
Average number of workers	0.8	0.8	0.8
Labor productivity	-3.2	3.4	3.2
Construction:			
Construction work completed with internal resources	-0.6	3.9	4.5
Average number of workers	0.3	0.3	0.4
Labor productivity	-0.9	3.6	4.1
Housing units delivered by contracting enterprises	-7.5	1.6	16.8
Procurement:			
Slaughter animals (including poultry)	-3.7	-1.8	0.4
Milk	8.6	8.0	1.8
Eggs	-2.1	4.1	3.2
Retail Turnover:			
Of the main trade systems	3.2	5.9	2.2[2]
Foreign Trade:[3]			
Exports to socialist countries	3.5	9.3	8.0
Exports to nonsocialist countries	11.9	29.1	16.5
Imports from socialist countries	-6.5	-1.0	8.9
Imports from nonsocialist countries	37.9	28.9	8.0

[table continued]

	Apr	Jan-Apr	
Completed Investment Projects and Deliveries			
(less action Z and other self-help)	6.2	6.8	2.5
including: construction	2.9	6.8	6.3
machinery and equipment	10.4	6.5	-2.0
National Income[5]	5.7	5.8	5.4[4]
of which: wages	4.6	4.8	4.0
Actual Monetary Expenditures[5]	9.8	7.9	3.7[4]

[Key to table]
1. Increments compared to expected actual 1979 results with the exception of work indicators in the industry.
2. All trade systems
3. Data on actual results refer to actual transactions and do not include unplanned actions in the framework of cooperation, unplanned reexport trade operations, barter, tied trade transactions, etc.
4. Including estimated interest for loans
5. Monthly data calculated according to the treasury plan of the Czechoslovak State Bank.

In domestic commerce, this May the pace of retail turnover in current prices was slower than in April, resulting among other things from a smaller number of sales days. The organizations belonging to the main trade systems achieved a retail turnover of Kcs 17.5 billion in May. The rate of growth of retail turnover was 103.2 percent of the figure for May 1979 (103.4 percent in the retail network and 102.3 percent in public dining facilities).

National income increased in January-April 1980 by 5.8 percent over the same period last year, while wage income was up by 4.8 percent. Actual money expenditures during the first 4 months of the year were up 7.9 percent over the same period last year.

Personal savings accounts grew by Kcs 0.6 billion between 15 April and 15 May. Total savings as of 15 May 1980 were Kcs 151.3 billion, Kcs 3.2 billion higher than a year ago.

The money supply was Kcs 42.6 billion as of 31 May 1980.

8480
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PETROCHEMICAL COMBINE EXPANSION, RATIONALIZATION DISCUSSED

East Berlin EINHEIT in German Vol 35 No 7/8, Jul-Aug 80 signed to press 13 Jun 80 pp 729-733

[Article by Dr Horst Martens, director, Friedrich Engels SED Bezirk School, Frankfurt/Oder: "Rationalization in the Interest of the Workers"]

> [Text] Under socialist production conditions, socialist rationalization is being carried out with people for their benefit. Their active participation in the process is a decisive criterion. Examples from the PCK [Petrochemical Combine], Schwedt, demonstrate what tasks there are to accomplish here, how the working people are being persuaded through ideological work to participate actively and which problems are being mastered in the process.

Today there is probably no doubt anywhere that the acceleration of scientific-technical progress -- to a great extent through the introduction of modern technologies into production -- is ensuring dynamic production growth for the economy, a significant rise in the quality and effectiveness of labor. The increasingly more effective use of the results of science and technology by the working people and the growing output of each individual dedicated to this end are proving to be decisive prerequisites for the continued realization of our program of full employment, public welfare, growth and stability.

Thus, by following the path of socialist rationalization in our country, we are taking the most productive and at the same time the only possible route toward attaining the maximum effectiveness and quality of labor. "The most important thing," emphasized Comrade Erich Honecker at the 12th Central Committee Plenum, "is to increase substantially our country's economic productive capacity. We are convinced in this regard that the communists will exert their influence everywhere to accelerate scientific-technical progress, the decisive link in the chain leading to the further stable and dynamic development of the economy of the German Democratic Republic."[1]

According to the social purport of rationalization, it is the complete opposite under capitalist conditions from what it is under socialist conditions, since here the people "become for the first time the actual and conscious masters of nature, because and since they become masters of their own socialization."[2] "Given the certainty of full employment, [rationalization] helps improve working and living conditions for workers and white-collar employees... . It improves production conditions, and, above all, rationalization is carried out jointly with the working people. Supported by this community of interests, the whole force behind rationalization must be utilized, and we must rationalize in at least as grand a style as the capitalists are doing."[3]

It is a rationalization that is being carried out by the working people for the working people, a process in which the creativity of the working masses can find full expression. We cite in this connection some experiences gathered by the main enterprise of the Petrochemical Combine, Schwedt, where rationalization has been going on since 1978 on a scale such as has never been experienced.

New Avenues Pursued

The main enterprise of the Schwedt Petrochemical Combine is a highly modern chemical enterprise with more than 8,500 employees. With the aim of increasing the effectiveness of the economy as a whole, this plant is being expanded through the construction of two new large-scale chemical installations: an installation for the production of protein fodder yeast and a cracking and aromatics complex. They are designed to further refine the petroleum cracking process and make better and more effective use of petroleum. Both installations will begin operating in 1981-1982, thus doubling the enterprise's present capital assets. The enterprise was charged with obtaining the 2,400 workers needed for these new installations through the rationalization of jobs in its own plant.

A rationalization project of this magnitude could not be accomplished on the basis of previous methods and experience (rationalization in segments of years, for example). Rather, the objectives required a qualitative rethinking, a critical examination of past experiences and a search for new solutions; they required the drafting of a rationalization strategy. Used in this process were Soviet experiences gathered from the "Polymir" production association in Novopolotsk, Vitebsk Oblast (Belorussian SSR), with which Frankfurt/Oder Bezirk has maintained a close partnership for years. The Soviet comrades in this same kind of enterprise were faced with similar problems years ago. They had to open up new installations with no manpower reserves. They therefore developed a long-range rationalization strategy known as the Novopolotsk Method. With the aid of this method, they were able to cut back their workforce by 20 percent and assign these workers to the new installations.

On behalf of the Frankfurt/Oder SED Bezirk Management, the Schwedt comrades studied the ideas obtained there and applied them creatively. At the beginning of 1978, the general director and the party management of the main enterprise of the Schwedt PCK presented their rationalization strategy, which has since then become known far beyond the enterprise and the bezirk under the name "Fewer Produce More."

A conception of the task of obtaining 2,400 workers through rationalization within the period from 1978 to 1981-1982 was initially mainly a process of discussion, one of working out a uniform standpoint on the range and magnitude of the requirements and on the resulting demands upon the political leadership work of the party and the state management, upon conduct of the socialist competition. It turned out that an improvement in the quality of political-ideological work was needed if appropriate attitudes and convictions were to be inclucated. On the basis of this recognition, the main enterprise of the Schwedt PCK is and has since 1978 been pursuing mainly the following avenues for rationalization:

Centralization and concentration of management and production sectors, together with a pervasive rationalization and partial reordering of work processes in management, control and production;

Expansion of service sectors in the installations by making further changes in the existing division of labor and work organization;

Establishment of a new regime for starting and stopping processes, together with the drafting of staffing norms for the normal operating mode as well as for the peak operating mode of the installations;

Expansion of the functions of the labor collectives at the installations by transferring certain maintenance and repair responsibilities;

Increase in the effectiveness of planned investment measures, among other ways by minimizing staffing norms.

Using these means, it will be possible to gain 1,763 workers through specific rationalization measures in the existing installations. In addition, interdisciplinary WAO [scientific work organization] collectives working on investment projects are being used to eliminate 637 workers originally called for in the staffing norms. These personnel will make it possible to operate the large new installations safely while observing all safety regulations. Mastery of the complex processes leading to the attainment of this lofty goal will require their proper central integration and strict management by the general director in cooperation with the party management. Indeed, it will require staff methods of leadership at the various levels, methods that are now in use in Schwedt.

Gain the Conscious Participation of the Working People

It is obvious that such a complex process requiring precise scientific management cannot be carried out successfully without active participation by the working people, without their conscious inclusion -- in other words, without a broad realization of socialist democracy. Schwedt's experiences confirm wholly and completely a basic truth in our lives: Socialist democracy is part of the essence of socialist rationalization and its implementation. New dimensions in socialist rationalization are virtually inconceivable without the conscious participation of those who do the producing. It takes comprehensive teamwork to realise such a rationalization strategy, teamwork in which the scientist is in demand just as much as the worker or master workman with long years of practical experience. It requires the participation of all social forces in the enterprise as an essential prerequisite for accomplishing the tasks at hand. The issue is real codetermination, and even more than that, a real sense of shared responsibility based on factual knowledge, on a deep understanding of the need for rationalization in new dimensions, on a greater and greater awareness of social interrelationships.

In this context, let us discuss some experiences from the fertilizer production sector in the main enterprise of the PCK, Schwedt. This part of the enterprise was developed as a model sector, since the scope of the objectives made it impossible in such a highly complex combine enterprise to begin with rationalization at the same time in all sectors, thus making it necessary to proceed gradually.

Complete documentation on rationalization measures in this production sector has been available for some time; scheduled projects for the rationalization of jobs are being developed in five other sectors. The complete enterprise documentation is to be submitted to the 10th SED Party Congress.

Intensive work was done in the fertilizer sector, as in the entire plant, to completely convince all the working people of the need for rationalization and to discuss with them their personal part in it as well as all the problems that are involved. Issues like these came up: the necessity of leaving a labor collective after an association of many years in many cases; of continuing one's education after working hours; of adapting to the rhythm of a different shift; and also, in many instances, an honest concern about dealing with the new requirements. It took close collaboration among party organization, state managers, trade union and youth organization to clear up these kinds of questions, reaching every labor collective and every worker.

To be sure, this process was not without conflict. Between April and June 1978 in the fertilizer sector alone, notes were kept on more than 600 discussions and consultations. These were frequently debates uninterrupted by applause, debates which gradually brought the discussion around from the why's to the how's. Tied in with this was a broad publicity

campaign using the enterprise newspaper and radio system, lecturers' councils, training facilities and leaflets. Every question posed in the debates was recorded. Then it was decided which questions were of general interest and would be answered using public relations means, and which were individual questions to be cleared up in personal interviews. There were as many as seven discussions with some colleagues; their families were often included, since a change of shift or participation in a lengthy night course, for example, are indeed matters that also concern the family.

Regardless of how indispensable these measures were to success, the inclusion of the working people was by no means limited to this. New forms of real cooperation by workers and members of the intelligentsia were developed for the purpose of realizing the rationalization strategy. Especially successful was the establishment of an honorary Council for Scientific Work Organization as well as WAO collectives in the different sectors. Belonging to these collectives are representatives of party organizations and other social forces in addition to specialists, state managers and practical experts. Working in the fertilizer sector is an honorary WAO collective with five work groups. One of these five, for example, deals with public relations and another with matters of personnel development and further training.

In the course of a few months, a comprehensive WAO study produced the following results: With an employee staff numbering somewhat more than 400 in this sector, by 1982 there can be a gradual elimination of 38 jobs that are occupied by 91 workers, or 21 percent of the staff. Since production will continue to increase at the same time, labor productivity in these installations will rise to an average of 138.4 percent. Of the 91 workers, 19 are working in management. Here especially, the aforementioned centralization and concentration of management and production sectors will be having a favorable effect.

Active Role of WAO

A total of 340 workers -- about 85 percent of those employed there -- were actively included in the most varied ways in the drafting of the comprehensive WAO study. Some were assigned special duties by way of innovator agreements. The workers put down in detail in the study those technical, technological, work-organizational and other measures that have to be realized if manpower retrenchment is to be truly assured, while permitting no deterioration of working or living conditions and fully guaranteeing labor and production safety.

These facts constitute a characteristic expression of the realization of socialist democracy in everyday life; they express the fact that socialist rationalization is a creative process which makes great demands upon the individual, which encourages and challenges him completely. It becomes apparent here that socialist democracy does not exhaust itself solely in

real codetermination; rather, it is profoundly linked with the development of socialist individuals also by way of further education and training. Needed here was a qualifying process of a breadth and depth never experienced before, one which the fertilizer workers initiated with the reflection that an increasing level of qualifications makes possible greater flexibility of job assignments, and that job retrenchment requires a greater willingness to accept responsibility, a situation that also demands a background of knowledge. They wrote: "Of course we do not want to and must not expect anyone to take on more than he is actually capable of as regards his knowledge and abilities. On the other hand, we nevertheless consider it absolutely normal to challenge fully all the abilities and performance reserves of the individual, also for the development of his personality."[4]

The 91 workers whose jobs were targets for retrenchment were shown a catalog of job offers from which they could select a job in the new installations that matched their qualifications and productive capacity and their physical and mental endurance. Each position is linked to an appropriate qualifying program which is now being carried out in various forms through enterprise facilities for education and advanced training.

There are also personal training programs for those who will be staying in the existing installations but will have expanded service zones. These plans provide that a colleague qualify as primary installation operator wherever two installations are operating, for example. This would reduce to 20 percent the passive time periods recorded by an operator, periods which previously amounted to about 70 percent of an operator's working hours. Included in the active time periods and added to the expanded service zones are specific maintenance duties to be performed while the installations are operating. This also requires appropriate training. The education and training sessions generally take place outside of working hours.

Results Speak for Themselves

How has the level of qualifications changed in the fertilizer sector? Before the rationalization measures were instituted, a single employee was capable on the average of meeting the demands of between 2.9 and 4.9 jobs; afterwards, this average was between 4.9 and 6 jobs. This therefore signifies an enormous increase in productive capacity as the result of increased qualifications on the part of the workers.

All continuing education measures are aimed at developing a sense of responsibility, reliability, discipline on the job, initiative and creativity and at increasing the willingness to engage in a permanent program of continuing education. They therefore foster personality development among the working people, thus establishing decisive bases for making democracy a reality.

A closer scrutiny of this sector today reveals the following conditions: The sector presently has the lowest down-time levels; the collective as a whole has strengthened itself; an optimistic, healthy, confident working atmosphere prevails.

Precise job analyses that led to altered job structures and improved working conditions also made it possible to increase by 1 percent the proportion of jobs for women.

All this underscores the fact that socialist rationalization is inseparably linked with socialist democracy, is objectively tied to the process of increasing flexibility of assignment and development of the abilities and skills of the working people. No person is or will become superfluous. As a rule, each one is accorded greater responsibility. Socialist rationalization can be implemented only if the creative thoughts of every working person flow into it, only if every important issue is discussed with each one, only if each one participates actively and his ideas are used. It is also in this way that the necessary confidence in the social objective is strengthened.

Friedrich Engels said in his work entitled "The Evolution of Socialism from Utopia to Science": "The process of men's own socialization, which hitherto was as though forced upon them by nature and history, now becomes a free act on their part.... Not until then will men begin to make their history themselves, with total awareness; not until then will the social causes set in motion by them begin to have predominantly and to an ever-increasing degree the effects that are also desired by them. It is mankind's leap out of the realm of necessity into the realm of freedom."[5]

Our practice of real socialism makes clear that this leap into the realm of freedom is a revolutionary process, one which encourages and totally challenges man, a process whose essence is the development and conscious expression of the socialist personality and which makes very great demands upon the political leadership of our party. It demands the most meaningful, the most efficient and the most effective use of that which is most valuable -- the human being -- and it demands of the working people their creativity, ideas and the great and conscious use of their whole personalities.

FOOTNOTES

1. Erich Honecker, "The Best for the 10th Party Congress! All for the Public Weal!" -- 12th SED Central Committee Plenum, Dietz Publishing House, Berlin, 1980, p 15.

2. Friedrich Engels, "The Evolution of Socialism from Utopia to Science," "Works of Marx and Engels," Vol 19, Dietz Publishing House, Berlin, 1962, p 226.

3. Erich Honecker, "The Socialist Revolution in the GDR and Its Prospects for the Future," Dietz Publishing House, Berlin, 1977, p 32.

4. NEUER TAG, 6 June 1978, p 3.

5. Friedrich Engels, op cit, p 226.

7458
CSO: 2300

COMBINE SYSTEM, NEW MANAGEMENT PRACTICES SPUR GROWTH

Oslo ARBEIDERBLADET in Norwegian 25 Aug 80 p 14

[Article by Dag Halvorsen: "Economic Optimism in the GDR"]

[Text] The results from the first half of 1980 are so good that GDR economists now once more look more optimistically on the future. The output of industrial goods rose 5.7 percent against a planned mere 4.5 percent. But progress costs. Investments went up nine percent, more than three times as much as the planned amount. On the other hand, net profit rose only three percent against a planned four percent. This was due to price increases which, however, did not include everday goods.

The optimism cannot cover up the fact that there is comparatively less for consumers, both in the GDR and in the other COMECON countries. In the Eastern economic cooperation organization coordination of the national five-year plans which begin on 1 January 1981 is now being prepared. All are betting on somewhat lower growth and on a slower increase in the standard of living than in the 70's. The world crisis which is throwing its shadow over foreign trade and energy problems has also hit Eastern Europe.

But the East Germans occupy first place in the East. This is shown both by these figures and other statistics which, for one thing, reveal that the GDR has been more than fulfilling its ambitious housing construction program, while the Czechs and especially the Poles are lagging behind.

Housing is still very inexpensive. Housing expenses of under five percent of one's pay are usual. Sixteen billion of the State budget's 140 billion go toward subsidies. Of this amount seven billion are used to hold the price level for everday goods constant and the rest is used mostly for subsidizing housing and transportation. In addition come increasing contributions to families with children. All this contributes to a secure social standard which can only be dreamed of elsewhere in the East, and for that matter in a number of Western countries.

The reverse side of these triumphs is of course the enormous subsidies, which are criticized by more market-oriented economists in other Eastern

countries, too. They think that it is possible to arrive at a more realistic price level. But their colleagues in the GDR say that they know exactly what goes toward social subsidies and that industrial prices have changed since 1976. They have increased considerably, in pace with the development in the world market, so that businesses are operating with relatively realistic prices for materials, goods and services. This has, by the way, been a traditional sore point in Eastern economics.

Moreover, prices on a number of consumer goods have gone up. Suddenly bedclothes disappeared from shops, only to just as suddenly turn up again with almost 100-percent higher prices. A spray can which cost M8 went up to M14.50. But people have money. Japanese color televisions for M5100 were quickly sold out. There continues to be more money than goods in the GDR although the disparities are not so flagrant as in Poland. There have at times been problems with getting meat and there are lines outside shops which sell finer goods, but the supply is largely satisfactory, as seen by Eastern eyes, in any case.

Productivity increased better than planned in 1980. The social standard and better organization in daily life than in the other Eastern countries can influence the promotion of productivity. One does not have to use a half a day to go to the doctor or to go shopping, such as in Poland; there everyone who can shirks as much as he can. But the most important reason, we hear tell, is better organization in industry.

In reality it is a question of a new East German economic reform which has developed gradually since 1976. The key positions in industry and construction are now occupied by, for the time being, 129 so-called combines. They now include all branches and consist in most cases of a number of concerns. The role of ministries in daily operations has been considerably reduced. The way from the combine management and to individual firms is shorter. This has resulted in the fact that capable professionals, who are now found primarily in the management of combines, have gained wider latitude and can operate more effectively. This is an advantage which experts in the East and West agree on.

The West Germans especially, of course, follow closely the development of the GDR's economy. The first results are encouraging; nevertheless the new management teams in the GDR are faced with very difficult tasks. The level of investment must be kept under control. It is necessary to save on energy and, not least, on materials; besides there is a potential here. Combines will also play a more independent role in foreign trade and have their own research apparatus with direct contact with academic institutions.

The combines are also direct partners in the planning commission. In the GDR they continue to believe in a plan, in setting concrete goals for what must be achieved in five years, goals expressed in tons, marks and pfennigs. But we understand that it is rather a question of a detailed

forecast. In our times one cannot be the slave of a plan; also, yearly plans must be corrected if economic development makes this necessary.

There is much to indicate that the GDR is in development toward greater efficiency and a more intelligent management system. But the trade unions continue to have primarily social tasks. The GDR is a managed society; the question of an industrial democracy is not on the agenda. On the other hand, even the most critically inclined admit that the management is quite occupied with protecting the social standard for the average East German family. It is a system which harkens back not only to Marx, but also to Bismarck, who wanted to have order, but also introduced Europe's first modern social legislation.

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ECONOMIC RELATIONS WITH IRAQ DESCRIBED

Budapest FIGYELO in Hungarian No 31, 30 Jul 80 p 7

[Article by Janos Menyhart: "Our Most Important Partner"]

[Text] The economic relations between the Hungarian People's Republic and the Republic of Iraq have grown steadily in the period since the Iraqi Revolution of 17 July 1968. But this growth was especially dynamic in the course of the 1970's. During this period the two states concluded several agreements, which created a favorable atmosphere for cooperation and for expansion of trade. In the course of the past few years the Republic of Iraq has become our leading trading partner among the developing countries.

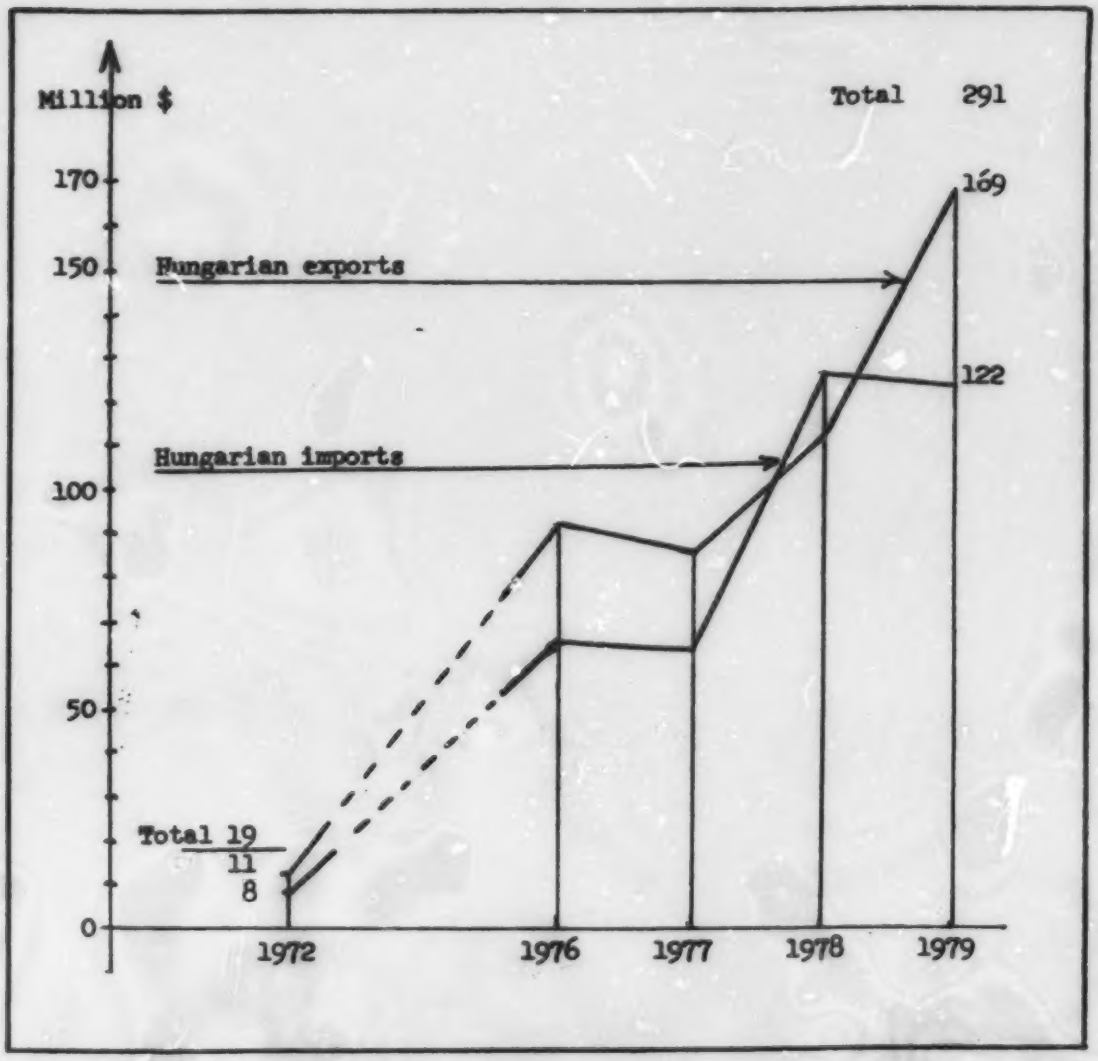
Doubled Since 1977

In addition to several joint commissions on the ministerial level (such as those on agriculture and food industry, irrigation projects, etc.), there is also a Permanent Joint Commission on Economic Cooperation, which was established in 1972 for the purposes of promoting economic cooperation between the two countries.

The complementary nature of the Hungarian and the Iraqi economies, the large-scale Iraqi economic development programs financed by the rapidly growing oil revenues, and the level of development of the various branches of Hungarian industry have all been instrumental in creating favorable bases for the further development of these relations between the two countries.

As evident from the following graph, between 1972 and 1979 the value of the bilateral exchange of goods has multiplied 15 times, and the composition of the goods has also changed significantly. Up to the early 1970's most Hungarian exports consisted of consumer goods. Since 1972, however, 50 to 60 percent of Hungarian exports are made up of machine industry products. Hungarian enterprises have participated and are still participating in several significant Iraqi economic development plans. As an

The Development of Hungarian-Iraqi Foreign Trade



example, the Babolna State Farms have delivered equipment for 10 large poultry farms geared toward the production of eggs and poultry. Up to now Hungarian drillers have put into operation 19 oil wells in the oil fields of Rumayhan and Jambur. Deliveries of Hungarian food industry equipment (e.g. canning lines, cold storage facilities, slaughterhouses, mills, etc) are also significant. Mention should also be made of Hungarian technical involvement and the delivery of Hungarian equipment for the processing of dates.

Investment Goods for Industrialization

In 1974 Hungarians were instrumental in putting a bus assembly plant into operation in al-Iskandariyah. Their contributions included the delivery of bus body parts, as well as the giving of technical advice. Today, this plant satisfies virtually all of Iraq's needs for buses. In addition to the above, up to 1976 the Hungarian auto industry had also delivered to Iraq nearly 700 buses which are now being used not only in Baghdad, but also throughout the various provinces. There is also a lightbulg factory in Taji, that has been manufactured by the Egyesult Izzo-Tungsram. A sizable portion of the electrification programs of Iraqi villages is being carried out with the aid of Hungarian substations. Recently we have also delivered lime works, as well as sulphur processing equipment. Many Iraqi health centers are using Hungarian X-ray machines and other medical equipment.

In addition to deliveries directed toward the cause of industrialization, Hungarian exports are also playing a role in supplying raw materials to the Iraqi economy, and consumer goods to its population. (These include rolled steel, aluminum products, chemicals, tomato pastes, various textile products, etc).

Most of Iraq's exports to Hungary consist of crude oil. But Iraq has also supplied for years the country's needs in edible dates. The products of the developing Iraqi industry—such as date syrup, textile products, etc—are being gradually introduced into the Hungarian markets. In the course of 1980, market weeks are also being planned both in Baghdad and in Budapest. The new Iraqi Five-Year Plan for the years 1981-1985, which is currently in the planning stage, calls for the dynamic further development of the Iraqi economy. The total sum of the planned investment exceeds $50 billion. (The projected investment for the period between 1976-1980, to be completed this year, is approximately $49 billion.) The completion of the investment plans presumes an increase in the imports. As against the earlier annual average of $4 - $5 billion, the Iraqi imports for 1980 will probably exceed $10 billion.

The above sketchily outlined conditions afford favorable opportunities for the further development of Hungarian-Iraqi economic relations, as well as for a vigorous increase in the exchange of goods. It is particularly significant that Iraq pays with cash even for complete equipment.

We must also mention that the special features of the Iraqi markets, with the rise of the 1979 Hungarian export level, place increasing demands upon Hungarian export companies, as well as upon the Hungarian industrial establishment in general. One of the basic principles of Iraqi economic policy that has been enunciated by the Iraqi Government in the course of the past few years is that the country's development must be based on the most advanced technology available. Our industry is able to satisfy this

demand in numerous areas. But in order to insure the required technological level, we must also consider joint deliveries and cooperative ventures with companies from various Third World countries. (There are already numerous successful precedents for such undertakings.) It is very important that we should observe delivery obligations exactly and in line with the deadlines.

Possibilities for Increasing Exports

In assessing the above factors as a whole, our export possibilities appear favorable, especially in the machine industry area. In light of the expected Iraqi development plans and Hungarian delivery potentials, our best chance for participating in these developments exists primarily in such areas of the machine industry as are listed below. This is all the more so since--in accordance with Iraqi needs--while delivering our machines and our equipment, we can also supply Iraq with the essential construction work, as well as with the Hungarian technical know-how needed for the installation, operation and servicing of this equipment.

--equipment and complete machine systems for farms (e.g. farms for raising poultry, cattle, and vegetables and other plants);

--irrigation and water management (e.g. water works, water purifiers);

--food processing (e.g. cold storage facilities for meats and fruits, mills, slaughterhouses, canning lines);

--educational centers (e.g. trade schools, secondary schools, and institutions of higher learning);

--vehicle industry (e.g. bus parts, bus assembly, special trailer trucks, motor trains, diesel engines for railroads);

--telecommunication equipment (e.g. village telephone exchanges, URH equipment and networks, pulse code modulating equipment, etc.);

--electrification (e.g. power station equipment, substations, transformers, cables);

--complete hospitals, medical instruments, rural health centers;

--chemical equipment (e.g. pharmaceutical plants, varnish and paint factories);

--harbor equipment;

--oil well drilling, oil pipelines, automatics and telemechanics;

--aluminum industry;

—other equipment, including lime works, brick factories, foundry equipment, cable factories, garment factories, etc.

Hungarian industry is able to assure the delivery of complete systems in an ever increasing number of areas (e.g. agriculture, medical sciences, communications technology, and education).

It is still possible to increase the export of Hungarian food and other traditional products to Iraq (for example, medicines, rolled steel, aluminum semifinished products, metal mass produced goods, textile products, photographic materials, artificial leather, etc). We can also continue to count on the exportation of poultry products.

Technical Scientific Cooperation

In order to fulfill its large-scale economic development plan, the Republic of Iraq is counting increasingly upon the continued development of technical-scientific cooperation, and within it especially upon the aid of an increasing number of Hungarian experts, as well as upon the training of Iraqi experts in Hungary. Even though the technical-scientific cooperation between our two countries is only of a relatively recent origin, there are still many favorable developments in this relationship.

Under the aegis of this technical-scientific cooperation, today 37 Hungarian experts are employed in Iraq. (We are not counting the many hundreds of technical experts who are continuously on the scene in conjunction with the delivery of Hungarian equipment.) The number of Iraqi experts who are being trained in Hungary averages out to over 100 per year.

Within the confines of a more broad technical-scientific cooperation, Hungarian concerns were responsible also for having prepared the development plans for various agricultural establishments in Iraq. The high quality of Hungarian industrial, agricultural, hydraulogical, etc, planning, and the Iraqi development plans offer favorable conditions for a significant increase in the Hungarian-Iraqi technical-scientific cooperation.

In light of the good political relations between the two countries, and in view of the already existing economic ties and generally favorable relationships on the state level, as well as between individual companies, in the forthcoming period we can count on a rapid expansion of Hungarian-Iraqi economic cooperation.

9271
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VII NATIONAL CONFERENCE ON PIG IRON, STEEL PRODUCTION OPENED

Budapest KOHASZAT in Hungarian Nos 3-4, Mar-Apr 80 pp 100-103

[Opening address by Sandor Csepanyi, deputy minister of metallurgy and engineering]

[Text] In my address at the Conference of Metallurgists I wish to acquaint the esteemed conferees with the timely problems and tasks of Hungarian metallurgy, with special emphasis on our efforts to improve the quality of our products.

The workers of Hungary's ferrous metallurgy are striving at present to successfully complete their Fifth Five-Year Plan. Parallel with this activity, our enterprises and managing organs have begun to cooperate on defining the principal tasks of the Sixth Five-Year Plan. Already now, in 1979, we are encountering specifically the difficulties placed on us by changes in the world economy. Our problems in conjunction with the procurement of coke and alloying materials are growing. In the area of marketing, intensifying world-market competition sets ever-higher quality specifications for our products.

The requirements of economic effectiveness that our planned investments must meet are increasing considerably.

The workers and managers employed in ferrous metallurgy must ensure even in this more complex situation the continuity of metallurgical production and improvement of its economic effectiveness.

Reviewing the problems of the vertical interrelations in ferrous metallurgy, I wish to emphasize first of all the situation with respect to the quality of the charge in pig iron production. Nationwide the burden yield has been around 44 percent in recent years. As we very well know, this rate is among the worst, 15 to 16 percentage points lower than the good international level. One of our most important tasks is to raise our average burden yield as soon as possible, by increasing the Fe content and reducing the SiO_2 content of the charge.

Experiments conducted at the Technical University for Heavy Industry have confirmed that the available hematite can be concentrated successfully for agglomeration, through modern magnetic separation in a strong magnetic field. Relying also on these findings, we have begun negotiations with the competent Soviet organs, on building a jointly financed concentration plant in the Krivoy Rog area. At the same time we must also investigate the economic effectiveness of importing from capitalist countries ore that has an Fe content of 65 percent minimum and a low hydrated silica content.

As a result of the investments in ferrous metallurgy, undertaken or to be completed under the Fifth and the Sixth Five-Year Plan, Hungary's output of steel and rolled steel will increase in harmony with the economy's demand. In comparison with the 3.6 million tons produced in 1975, our steel output will be 4.0 million tons in 1980, between 4.3 and 4.5 million tons in 1985, and foreseeably 4.8 million tons in 1990, which will correspond to an increase of 33.3 percent over 1975. It will be expedient to round out these figures with the annual per capita output of steel. In Hungary this output is 360 kg at present, and we will not exceed the 450-kg figure even by 1990. International comparisons, based on the statistical data for 1978, show that the per capita steel output is 158 kg in Yugoslavia, 291 kg in Bulgaria, 541 kg in Austria, and 992 kg in Czechoslovakia.

Parallel with this the output of rolled steel also will increase but at a faster rate, thanks to continuous casting machines. We can expect a 47 percent increase in output by 1990 if we take the 1975 output volume of rolled steel to equal 100 percent.

As a result of investments, the fixed capital of Hungary's ferrous metallurgy and the investment costs during the individual plan periods will develop as follows: In comparison with 32.5 billion forints in 1975, the fixed capital will increase to 85 billion forints in 1990, which corresponds to an increase of 162 percent. Investment costs under the Fifth Five-Year Plan total 25.3 billion forints, and under the Sixth Five-Year Plan they foreseeably will reach a level of between 26 and 29 billion forints.

Let us examine the productivity of live labor. The steel output per worker in ferrous metallurgy will increase from 45.7 TPY in 1975, to 52.8 forints [sic] in 1980, an increase of 16 percent. This indicator of effectiveness is very unfavorable in the light of international comparisons, because it is only one-third of the present level in Sweden, one-fourth of the level in France, and merely one-seventh of the level in Japan, the recognized world leader.

To improve our economic effectiveness and to become more competitive, we clearly must reduce our consumption of energy and materials, raise the quality of our products, and increase the volume and number of our more profitable products. In its resolution of 20 October 1977, the MSZMP Central Committee strongly emphasized these objectives and urged the economic and more competitive transformation of the production structure.

In comparison with 1975, the value of ferrous metallurgy's gross output will increase 51 percent by 1990.

Among the implemented or proposed changes in the production structure we should single out the rise in the proportion of continuously cast billets in relation to the total output of crude steel. Our continuous casting machines processed 21.4 percent of the total steel output in 1975, and more than 30 percent in 1978. This proportion will rise at a slower rate in the coming years, reaching 36.5 percent in 1985, and foreseeably 55 percent in 1990. The construction of new steel mills generally involves the installation of continuous casting machines that increase rolling-mill capacity and significantly reduce energy consumption, providing a basis for reducing the production cost of steel and rolled steel. Naturally, also the existing steel mills are converting, one after the other, to this method of casting. In Austria, for example, the proportion of continuously cast billets will increase from the present 40 percent to 71 percent by 1981, and at the same time the quantity of alloyed steel produced by continuous casting will also increase.

An important task of Hungary's ferrous metallurgy is to supply manufacturing industry with steel products of suitable quality. Therefore we are treating as a high priority topic the improvement of quality, and development of the parameters that directly or indirectly are characteristic of quality. In general, total rejects at our plants have developed in a satisfactory manner: the proportion of rejects is relatively low and shows a declining trend. In some instances, however, a plant's total rejects conceal how the individual products' proportions of rejects develop, and for this reason we investigated the causes of rejects. Accordingly, 15 percent of the products investigated in 1975-1978 was characterized by a rising proportion of rejects; 52 percent had variable proportions of rejects; and 33 percent had declining proportions of rejects. The rising, high and varying proportions of rejects obviously indicate that a modern system of quality control, one that reduces the proportion of rejects purposefully and dynamically, by reacting immediately upon production, has not been introduced everywhere as yet. In many areas, quality-control methods merely of the recording type are used to attain even the traditional, good level of quality. One of our important tasks is to implement in practice as quickly as possible, with the wider application of computers and of the methods of mathematical statistics, systems of quality control that cover the entire production process and evaluate also the customers' experience. This is the more important because the enterprises that use ferrous metallurgy's products generally do not substantiate their complaints with specific data concerning the nature and extent of the defects. Although not worded precisely in most cases, the quality complaints of the enterprises that use ferrous metallurgy's products can be summed up as follows:

In the case of hot-rolled plate and sheet, the complaints concerned mechanical properties, internal defects--mostly lamination--and mistakes in grading;

In the case of cold-rolled sheet and strip the causes of complaints were mostly off-gage and off-size material, surface defects, and deviations of the mechanical properties;

Among the complaints against spiral-welded, butt-welded and seamless tubing we might mention particularly off-gage material and mistakes in grading;

Most complaints against hot-rolled bars, sections and forgings concerned off-gage and off-size material, internal defects, and mistakes in grading;

The causes of complaints against drawn, stripped and bright-drawn rods and wire were surface and internal defects, and deviations of the mechanical properties and grain structure;

Several users are dissatisfied with the steel and iron castings, mostly because of surface defects and off-size material.

In conjunction with improving the quality of the iron and steel products, however, it should be emphasized that these efforts must be considered also from the viewpoint of economic effectiveness. The costs of maintaining extremely low quality are small, over and above the basic production costs, but the subsequent costs of repairing the rejects and settling claims are substantial. If on the other hand we aim for extremely high quality, the costs of maintaining it will be substantial, at minimal reject costs, but the total production cost will nevertheless be high. Optimal quality, from the viewpoint of cost, can be found somewhere between these two extremes. Taking all this into consideration, on the basis of the realistic quality complaints of manufacturing industry that processes iron and steel products we may say that the quality of many of our products has to be improved.

We will commission two converter steel plants during the first years of the Sixth Five-Year Plan. We expect our metallurgical workers to become well trained at these plants, for the rapid introduction of a technology that is new in our country, and to solve the production of steels of uniform quality that have narrow tolerances with regard to their composition. It will be the task of the managers in iron and steel production to carefully select the installations that can contribute significantly toward improving the quality of our products. At the Danube Iron Works, for example, a modern installation will be commissioned already this year, for ladle finishing. The "Scandinavian lance" process is based on blowing a powdered deoxidizing agent or flux into the melt, by means of an inert gas, to lower the sulfur content below 0.005 percent and to ensure a very low oxygen level. By this method it is possible to produce sheet that has quasi-isotropic strength characteristics, excellent toughness even at low temperatures, inclusions of favorable shape, and a low proportion of inclusions. Sheet of this grade is new in Hungary. It poses a serious task for designers of machinery and other installations, and it could provide a new impetus for designing structures of lighter weights, for the more efficient use of steel.

The ASEA-SKF ladle finishing facility to be installed in the integrated steel mill at the Lenin Metallurgical Works will provide the most modern conditions for making excellent grades of steel and alloys that have a low gas content and are highly inclusion-free.

With this equipment it will be possible to make also low-carbon steels with a carbon content of 0.03 percent maximum. This will provide, among other things, the foundation for supplying the demand for nonstabilized stainless steels used for chemical-industry equipment. The production of cryogenic steels, particularly of the 9 percent Ni grade with a low hydrogen content, could be an important contribution to equipment for the transport and storage of domestic natural gas, and also for the chemical industry.

It would be expedient to carefully weigh already now the cooperational opportunities under which the other domestic ferrous metallurgy enterprises could obtain for their own use, from LKM [Lenin Metallurgical Works], special high-grade steels or alloy components. This could be one way of substituting at least partially the import of high-grade steels from capitalist countries, the volume of which at present is about 25 million dollars. Of course, we must uncover opportunities also in other areas.

To further improve the quality of our iron and steel products, we must devote attention to influencing by modern means the crystallization of continuously cast steels. One such method, for example, is electromagnetic stirring. In our continuous casting machines, therefore, it is necessary to investigate also the feasibility of using electromagnetic stirring. Startup of a pilot plant at the Iron Industry Research Institute will be a significant step toward the domestic introduction of electroslag remelting.

It will be expedient to acquire automatic ultrasonic inspection equipment to detect internal structural defects in our products.

The ferrous metallurgy enterprises' purposeful efforts to upgrade quality will be successful if they significantly improve and develop further their relations with the enterprises that use ferrous metallurgy's products. The experience that the manufacturing plants gain in conjunction with the quality of our products must be valuable indications for technological modifications in ferrous metallurgy, in the interest of reducing the proportion of rejects. In other words, we must strive for cooperation that maximally takes into account the interests and possibilities of both sides and serves to improve the quality of the products of both ferrous metallurgy and manufacturing industry.

Further tasks in conjunction with improving quality are as follows:

The strength of structural steels must be increased, without reduction of their toughness and weldability;

The surface quality of rolled stock must be improved, and its dimensional tolerances must be narrowed;

Internal defects in forgings must be eliminated, and their allowances must be reduced;

The assortment of spheroidal graphite cast iron and of special alloyed iron and steel casting must be broadened.

We are confident that the Hungarian iron and steel workers' century-old traditional social cooperation will help us resolve also the new tasks with which we are confronted. This is cooperation within which the managing central organs, the service institutes and enterprises, and the voluntary scientific and social associations help the production plants.

The research program that serves the technical and technological development of our ferrous metallurgy can be one of the important areas of cooperation. This program dovetails without national economic objectives. Outstanding within it are the research and the license and know-how adaptation tasks that will enhance savings of energy and the improvement of quality.

A significant reduction of the specific energy consumption in the technologies of ferrous metallurgy is warranted also by the fact that ferrous metallurgy accounts for 15.2 percent of the national economy's total energy consumption.

In 1980 ferrous metallurgy's consumption of the more important fuels and electricity is expected to develop as follows:

Natural gas	$900 \cdot 10^6$ m^3 (NTP)
Oil	$200 \cdot 10^3$ tons
Coke	$2 \cdot 10^6$ tons
Electricity	2 GWh

If we include also thermal energy, the energy consumption per ton of rolled steel is of the order of 7.5 Gcal, which is 25 to 30 percent higher than the energy consumption in the countries with the most advanced metallurgical industries. In terms of saving energy, the principal directions of this R & D program are as follows:

Optimal consumption of domestic and imported coal, by modernizing the technology of coking;

In pig iron production, the introduction of technologies that reduce coke consumption;

Improvement of the energy balance in steelmaking;

Modernization of the heating furnaces at metalworking plants; and

Modernization of the annealing furnaces.

In many respects the recently completed investments and the development projects that are in progress will provide the technical conditions for improving the utility characteristics of our products, but this in itself is not enough! On the one hand we must master the expedient utilization of the new installations' technical characteristics. And on the other hand we must modernize also the metallurgical refining technology of the old steelmaking plants.

The present conference, sponsored by the Pig Iron Production Special Group and the Steelmaking Special Group within the Ferrous Metallurgy Section of the Hungarian Mining and Metallurgical Association, is proof of the voluntary technical associations' willingness to cooperate and help. The conference has placed on its agenda very important topics that directly affect the development of Hungary's iron and steel industry. I am certain that at this conference, in the same way as at the preceding conferences, our experts on pig iron production and steelmaking will be able to broaden their knowledge, to our mutual benefit, and that we will hear proposals which will facilitate the work of the central organs that manage our iron and steel industry.

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SPECIALIST EVALUATES STEEL PRODUCTION

Budapest KOHASZAT in Hungarian Nos 3-4, Mar-Apr 80 pp 105-107

[Introductory address by Dr Janos Sziklavari, head of the Steelmaking Special Group, in the proceedings of the Steelmaking Section]

[Excerpt] Hungarian steelmaking can be listed at present among the leading countries only in terms of the proportion of coninuous casting. Finishing of the steel outside the furnace is limited merely to inert-gas mixing and to vacuum degassing of low effectiveness. There are no installations whatsoever for the controlled crystallization of larger ingots.

Investments in steel plants will provide for our steel industry injection equipment at Dunaujvaros, a complete ladle finishing system in Diosgyor, and additional continuous casting machines. We hope that also the steel mills in Ozd and Csepel will soon introduce the effective injection technology, and that Diosgyor will be able to build an installation suitable for the controlled crystallization of large forging ingots. The experts responsible for development will soon be able to convince themselves of the advantages of the injection technology also at home, at the Danube Iron Works; it will be unnecessary to extol this technology on this occasion. However, the same cannot be said about the technology for the controlled crystallization of large ingots! We must emphatically praise this technology also on this occasion. Not because all industrialized countries other than Hungary already have such technology (most of them employ the electroslag process), but because it can dramatically improve the quality of our forged products. Technologically a crystallizing installation can compensate for possible delays in the modernization of the forge shops, because its effect on quality is the greater.

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UDC: 669.16+669.18

DEVELOPMENT POSSIBILITIES AT DANUBE IRON WORKS EXPLORED

Budapest KOHASZAT in Hungarian Nos 3-4, Mar-Apr 80 pp 108-115

[Report by Dr Gellert Repasi, deputy director general of the Danube Iron Works: "Questions of Developing Pig Iron and Steel Production at the Danube Iron Works"]

[Text] Relationship between the production capacity of the sheet mills and the establishment of the new converter steel plant. Raw material and energy base for the increase of production. Supply of pig iron for steelmaking. Utilization of new technological advances in pig iron and steel production. Application of the oxygen lance in open-hearth and converter steelmaking.

Introduction

If we take also the current modernization into account, the capacity of the Danube Iron Works' wide-strip mill is 1.5 to 1.6 million tons, depending on the degree of reduction. Our plate mill is able to roll into plate about 250,000 tons of slabs. In both cases we took slabs 240 mm thick, weighing between 8 and 10 tons for the wide-strip mill. In this stage, then, the capacity of our rolling mills permits the processing of 1.75 to 1.85 million tons of slabs. These figures include also the rolling of between 200,000 and 250,000 TPY of ingots.

The capacity of both mills can be increased significantly, by continuing the modernization of the wide-strip mill, and by reducing the thickness of the slabs, respectively by increasing their weight. The rolling-mill capacities created in this manner (at DV [Danube Iron Works] and LH [Lorinc Rolling Mills] jointly) could exceed even 2.5 million tons. Here we no longer include the rolling of ingots.

The first stage represents the foreseeable future. The marketing or further processing of the products rolled from the 1.75 to 1.85 million tons of stock seems to be ensured even without significant additional investments; moreover, today this can be achieved in far more favorable variations than what we had presented in our investment proposal that was approved in 1978.

Custom processing, the volume of which is increasing even today, will fill the gap between our rolling-mill capacity and own steel output, which is still only 1.2 million tons at present. No particular explanation will be necessary to understand why it is not advantageous to load with custom processing 25 to 30 percent of a given rolling-mill capacity.

To eliminate the 500,000 to 600,000-ton shortage of stock for rolling, a converter plant with an annual capacity of 1.1 to 1.2 million tons will be built. The plant's three converters will be operated on a 2/1 basis [two in operation, one standby]. The heat size of each converter will be 130 t. Simultaneously the output of the open-hearth plant, the present capacity of which is 1.2 million tons, will be cut back to between 0.6 and 0.7 million tons. Plant capacity would permit the production of even more steel, but a prerequisite for this would be a higher increase in the output of pig iron than what has been planned.

It is understandable that the state officials in charge of managing the economy responded to the investment proposal by questioning the effectiveness of this investment. Their questions can be summed up briefly as follows: Is the material and energy base for the 0.5-million-ton increase in steel output adequately ensured, and will the expected production and sales be able to offset the substantial investment costs without any deterioration of the Danube Iron Works' present results? In my report I will attempt to prove that practical application of the recent scientific and technological advances in the production of pig iron and steel will permit the production of rolled stock that will be competitive--even when measured in terms of the world market's value judgment--and will significantly improve the economy's balance of trade. At the same time we will be able to offer domestic users several new grades of steel, and we will also be able to reduce considerably our existing import of sheet and strip.

Material and Energy Base of Increased Production

The state reports and approvals concerning the establishment of the converter steel plant determine the sources of not only the means of production but also of the quantities of materials and energy required for production. In the meantime, however, the prices of materials and fuels have continued to climb rapidly. Responding to price movements on the world market, our system of economic regulation is introducing as of 1980 certain changes in the system of producer prices. According to our computations, materials and energy will account for 85 percent of the production cost at the Danube Iron Works. These are pressing reasons to investigate whether under the altered conditions an increase in the steel output has realistic foundations that ensure economic production. We in turn formulate this question as follows: What scale of material and energy savings can ensure competitive production by the standards of the world market?

The development of energy savings to date at the Danube Iron Works is shown in Fig. 1. As evident from this diagram, the consumption of primary sources

of energy has remained essentially unchanged since 1965, even though the output has more than doubled. The quantity of purchased coking coal will increase after the commissioning of the converter plant and coking plant, but at the same time the quantity of salable energy will increase, and this will drastically reduce the indicators of specific energy consumption. On the basis of these considerations it seems realistic that we will be able to attain our objective of increasing the output of rolled steel while maintaining unchanged the net energy consumption.

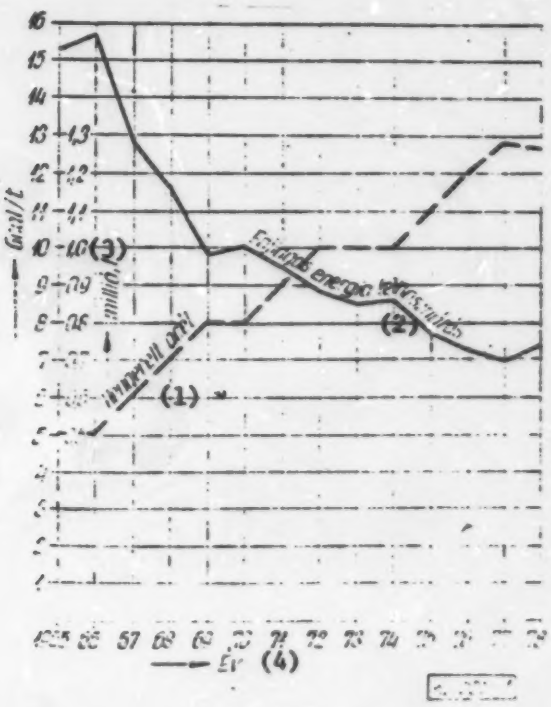

Figure 1. Development of energy consumption in terms of rolled steel.

Key: 1. Rolled steel 3. Million tons
2. Specific energy consumption 4. Year

Realization of this objective is enhanced to a large extent by the fact that increase of the steel output at the Danube Iron Works can be implemented very flexibly from the viewpoint of the consumption of materials and energy. In our open-hearth plant the specific consumption of pig iron at present is 700 kg/t, and the specific consumption of scrap is 420 kg/t. These values have remained nearly constant for years, nor can they be changed significantly--for reasons we need not dwell on at present. After

the commissioning of our converters, the specific consumption of 1120 kg/t will drop below 1100 kg/t. Furthermore, the flexibility of total steel production will change considerably in terms of the composition of the charge. This flexibility is shown in Table 1, within the metallurgically feasible limits. The table confirms that the total steel output's specific scrap consumption may attain a more favorable value than at present, because our open-hearth furnaces will be transformed into scrap-melting units. Simultaneously the conditions can be ensured that will enable us to operate our converter plant at a specific scrap consumption of about 350 kg/t. On the basis of the data in the table it can be estimated that the specific scrap consumption could reach even 490 kg/t, if the national balance of scrap resources and allocations would permit such an increase. This flexibility not only allows faster adjustment to changes in the conditions of supply and demand on the world market, but it also permits the offsetting of the losses arising in conjunction with the repair of capital equipment.

Reduction of the output of open-hearth steel to approximately 600,000 tons will require the continuous operation of only three open-hearth furnaces, even if we use only solid materials in the charge and reduce the heat size to between 150 and 160 tons. One open-hearth furnace would be kept in constant reserve. But if under this mode of operation we use 350 kg of hot metal per ton, the output would increase to 800,000 tons.

If we investigate from the viewpoint of energy consumption our steelmaking system comprised of open-hearth furnaces and converters, we come to a surprising conclusion. This is evident from Table 2.

Table 1. Metallurgically Feasible Limits of Scrap and Pig Iron Consumption in Open-Hearth and Converter Steelmaking

	Open hearth	Converter	Scrap consumption Maximum	Scrap consumption Minimum
Scrap, kg/t	750	350		
Output, 1000 TPY	600	1100	835/1035*	515/1355*
	600	1400	940/1260*	590/1610*

*Consumption of pig iron

From the summary in Table 2 it is evident that the increase of steel production from 1.2 to 1.7 million tons will result in absolute savings of 171 TJ. If we take into account also the energy saved by utilizing the converter plant's flue gas, the annual savings amount to 1550 TJ. As can be seen from the table, we included the energy demand for the production of the oxygen, as well as the fuel needed to preheat the 350 to 370 kg/t of scrap to 500 °C in the converter. Considerably more energy could be saved if we were able to use waste heat for preheating.

And if we are able to achieve also our objective of increasing the output of pig iron by about 200,000 TPY at only a slight increase in the annual

coke consumption, then we may safely say that the Danube Iron Works can produce 500,000 tons more steel while maintaining the present level of its annual net energy demand.

Table 2. Development of Energy Consumption in Steelmaking

For $1176 \cdot 10^3$ tons of open-hearth steel produced in 1978:

	Tar oil	Nat. gas	Jointly	Annual consumption Tcal	(TJ)
	(Gcal/ton)				
Furnace	0.28	0.38	0.66	780	(3260)
Other	-	-	0.03	35	(146)
Jointly	0.28	0.38	0.69	815	(3406)
Fuel for oxygen production (47 m^3/t at NTP)				119*	(497)
Total energy demand of open-hearth steelmaking				934	(3904)
For $600 \cdot 10^3$ TPY of open-hearth steel, using solid charge:					
Furnace	0.30	0.80	1.10	660	(2759)
Other	-	-	0.02	14	(58)
Jointly	0.30	0.80	1.12	674	(2817)
Difference between processes				260	(1087)
For converter steelmaking ($1.1 \cdot 10^6$ TPY):					
Preheating of scrap (10 m^3/t natural gas, NTP, 350-370 kg/t preheated to 500°C)			0.08	83	(388)
Fuel for oxygen production (53 m^3/t at NTP)			0.11	126*	(526)
Other			0.02	-	
Jointly			0.21	219	(914)
Fuel saved by utilizing converters' flue gas				330	(1379)
Summary:					
Open-hearth steelmaking in 1978				934	(3904)
$600 \cdot 10^3$ open-hearth steel + $1.1 \cdot 10^6$ converter steel				893	(3721)
Savings in steelmaking				41	(171)
Savings by using converters' flue gas				330	(1379)
Total savings				371	(1550)

*0.9 kWh/m^3 at NTP; 2400 kcal/kWh

The situation is similar with respect to refractories, the other substantial cost item in steelmaking. Development of the maintenance costs of our open-hearth plant is shown in Table 3. From the data in this table it is evident that the total maintenance cost nearly doubled from 1971 to 1978, and that renovation of the brickwork and structure accounts for the bulk of the total maintenance cost. The costs of mechanical and electrical maintenance are commensurate with the increase in output and with the rise in the prices of spare parts. One of our basic objectives is to ensure that the 0.5-million-ton increase in steel output be not burdened by higher maintenance costs than what we anticipate for our open-hearth plant in 1980. Strict economy in the use of refractories is a prerequisite for achieving this objective. The attainable results are reflected in Table 4. As can be seen from this table, our consumption of every type of refractory material will decline, despite the 0.5-million-ton increase in steel output. Realization of this objective, however, presupposes the following:

The quality of the employed, mostly basic, refractory materials will conform to the modern level, regardless of whether these materials are domestic-made or imported;

The time available for relining will result in a significant improvement in the quality of relining;

The latest results of scientific research into the metallurgical processes, primarily into curbing slag-caused corrosion, will be applied in practice;

Our output of ingots will not increase above the 1979 level.

Table 3. Maintenance Costs of the Open-Hearth Plant (Million Forints)

A SM. üzem fenntartási költségei (mFt)

Év (1)	SM-kemencék felújítása (2)	Gép és vill. fennt. költségei (3)	Összesen (4)
1971	118,0	119,0	237,0
1972	121,0	11,0	238,0
1973	139,0	132,0	271,0
1974	203,0	134,0	337,0
1975	250,0	149,0	399,0
1976	284,0	138,0	422,0
1977	299,0	144,0	443,0
1978	328,0	145,0	473,0

Key:
1. Year
2. Relining of open-hearth furnaces
3. Mechanical and electrical maintenance costs
4. Jointly

Table 4. Changes in the Consumption of Refractory Materials if the Steel Output Increases to 1.7 Million Tons

A tűzállóanyagok szükségleteinek változása az acéltermelés 1,700 ezer tonnára való emelkedése esetén

	Nyers dolom. (1)	Égetett dolom. (2)	Magn. szemcse (3)	Felszóró anyag.k. (4)	Bázikus tégla (5)	Samott kem.t. (6)	Samott üst.t. (7)	Döngölt homok (8)
(9) SM acél								
(10) Össz. 1978. t.	52 000	20 000	11 000	2800	14 900	6300	6800	14 000
kg/t	44,0	17,0	10,0	2,5	12,66	5,35	5,7	12,0
SM acél 600 ezer t/év								
(11) Össz. t.	12 000	6 000	6 000	900	4 800	1800	1800	4 800
kg/t	200	10,0	10,0	1,5	8,0	3,0	3,0	8,0
(12) Konv. acél 1,100 et/év								
Össz. t.	—	—	—	1700	2 700	1100	2200	5 500
k /t	—	—	—	1,5	2,5	1,0	2,0	5,0
(13) Össz. felh. t.	12 000	6 000	6 000	2600	7 500	2900	4000	10 300
(14) Fajl.felh. kg/t	7,0	3,5	3,5	1,5	4,4	1,7	2,35	6,5
(15) Becsült megtakarít. t/év	40 000	14 000	5 000	200	7 400	3400	2800	3 700

Key:
1. Crude dolomite
2. Sintered dolomite
3. Grain magnesite
4. Slurry constituents
5. Basic brick
6. Fireclay brick for furnace
7. Fireclay brick for ladle
8. Rammed sand
9. Open-hearth steel
10. 1978 total tonnage
11. Open-hearth steel, 600,000 TPY, total tonnage
12. Converter steel, 1.1 million TPY, total tonnage
13. Total consumption, tons
14. Specific consumption, kg/t
15. Estimated savings, TPY

Table 5. Consumption of Refractories for Converter Linings

	1	2	3	4	5	6	7	8	9 sz. üzem (1)
(2) Élettartósság (adag)	1709	1034	1073	1474	503	1806	1233	1153	581
(3) Munkabélés felhaszn. kg/t	0,91	1,50	1,5	0,6	3,91	1,11	1,54	1,5	3,1
(4) Dúsgömlőanyag felh. kg/t	0,03	0,04	0,05	—	—	—	—	—	0,5
(5) Biztonsági bélés fh. kg/t	0,13	0,05	0,15	0,02	0,39	0,15	0,11	0,2	0,55
(6) Javító anyag felh. kg/t	1,23	1,41	1,8	1,71	1,27	1,15	1,15	1,1	1,3
(7) Átfalazási idő ó	146,8	137	104	128,9	102	187,8	237,7	286	216
(8) Átlagos adagsúly t	256,8	187,2	175,6	147,4	93,9	245,3	151,3	271	110,5

Key:
1. Converters Nos 1-9
2. Service life of lining (heats)
3. Consumption of working lining, kg/t
4. Consumption of rammed material, kg/t
5. Consumption of safety lining, kg/t
6. Consumption of patching materials, kg/t
7. Relining time, hours
8. Average heat size, tons

To insure the realization of these objectives, in our open-hearth plant the heat size will be reduced by 15 to 20 tons; and the quantity of slab, by 60 to 70 percent; furthermore, no oxygen will be added, and one open-hearth furnace will serve as constant standby capacity. As proof that the consumption of refractories planned for our converter plant is realistic, we offer a comparison of the data for the nine converters that operate at a modern level (see Table 5). This table reflects the changes in the quality of refractories, the spreading use of the slurry-spraying technology, and also the present level in the mechanization of relining. The data in Tables 3 and 4 justify our expectation that the maintenance cost of steelmaking will remain at the present level despite the startup of the converter plant, and also that we need not anticipate any increase in manpower requirement for maintenance, materials handling, storage and stockpiling.

The situation is not so favorable with respect to the consumption of alloying materials. Total consumption of alloying materials in our open-hearth plant in 1978 was 20,150 tons or 17.1 kg/t. This high specific consumption reflects the large proportion of low-alloy products within the output (plate and tubing of high purity), and it also calls attention to the task of finding new ways to reduce the loss of alloying materials due to burning.

The distribution according to types of alloying materials used is as follows: FeMn, 9.5 kg/t; FeSi, 2.5 kg/t; Al, 1.1 kg/t; FeSiMn, 2.5 kg/t; and the balance consists of alloying materials containing V, Nb and rare-earth metals. Even today a proportion of the consumption is supplied through import from capitalist countries, and the FeMn, CaSi, FeSiMn, V, Nb, FeCr and Ni needed for the increase in output can be procured only from capitalist countries. However, the cost impact of this import can be reduced through new metallurgical methods that aim to drastically curtail the slag-induced oxidation losses.

In recent months the outlines have begun to emerge of the feasibility of supplying the increased FeMn demand by reducing our Mn oxide ores. The ladle-finishing processes will increase the consumption of Ca-Si and other complex alloying materials, but at the same time it will be necessary to crush these alloying materials and to produce specified grain fractions.

The production of such fractions is ensured by the fact that we will solve the crushing, grading, storage and conveyor-belt handling of the alloying materials simultaneously with the construction of our converter plant.

Development in the direction of exporting more-valuable products would require that we export also alloyed sheet. But if the alloying materials for this purpose can be obtained only through import from capitalist countries, the economic effectiveness of such export might become questionable. Therefore we must continue to seek possible ways of producing alloying materials based on domestic raw materials or on socialist integration.

Supply of Pig Iron for Steelmaking

Ironmaking experts are fully aware that the technical-economic indicators of pig iron production lag significantly behind the values that are now feasible. The extent of this lag is best illustrated also at the Danube Iron Works by a difference of 200 to 25o kg/t in the specific coke consumption.

In conjunction with supplying pig iron for the converter plants under construction, this question has been emphasized in recent years in studies and reports, before several forums.

It is also true, however, that the processes and methods already elaborated for developing the technology of ore preparation and pig iron production would have to be introduced--after adapting them to our natural conditions--even if, for example, we did not want to increase our output of pig iron. Profound economic analyses are unnecessary to perceive what benefits our economy could derive from such advantages as the significant savings of energy, the rapid rise of labor productivity, the lower costs of protecting the working and natural environments, etc.

To illustrate: We are familiar with the data of the 1000 m^3 blast furnace in Cherepovets, and we know that its annual output is slightly more than the combined annual output of the two 960-m^3 blast furnaces at the Danube Iron Works.

The geographic location of the Danube Iron Works places it in a favorable position to produce pig iron that can be competitive even on the world market. Thanks to the proximity of the Mecsek coal basin, and to the feasibility of transporting by water its substantial coal reserves and the iron ore, the Danube Iron Works would be able to produce pig iron at lower cost than the other iron works in its vicinity, even if the energy costs were identical. We have already taken several steps toward becoming competitive, but even so our lag is still significant. The concluded Hungarian-Soviet intergovernmental agreement for the supply of an agglomerating plant, and the technological investments in conjunction with the construction of the converter plant already represent significant progress. We demonstrate this in terms of the technical-economic indicators in Table 6, projecting also the future possibilities. Aside from the 200,000-ton increase in pig iron production, progress is evident in that the additional coke required for this purpose is barely 30,000 TPY. Technological progress manifests itself essentially in a drastic reduction of the agglomerate's dust content, in the better-grade coke that can be obtained simultaneously with the coking plant's modernization, in the increase of the blast temperature by 100 to 150°C, and in the moderate increase of the top pressure and the blast's oxygen enrichment. Even so we will have to melt 780 kg of slag per ton. This situation will ensure fulfillment of the steelmaking targets set for the Sixth Five-Year Plan.

Table 6. Development of the More Important Technical Indicators of the Blast Furnaces at the Danube Iron Works

Megnevezés (10)	1978 év (11)	Új zsugorítóművel (12)	Javított elegyviszonyok mell. (13)
1. Kohótérfogat m³	1910	1910	1910
2. Ny.vastermelés et/év	825	1030	1400—1500
3. Elegykihozatal (szállópor nélk.)%	47,0	49,0	60,0
4. Fajl. kokszfogy. (nedves) kg/t	668	570	450—560
5. Fúvószél hőmérs. °C	985	1150	1300
6. Fúvószél oxig. tart. %	21	23—24	30—32
7. Szénhidrogén befúvás			
(8) — Olaj, kg/t	42,3	75—80	—
(9) — Földgáz, Nm³/t	—	—	200

Key:

1. Working volume, m^3
2. Pig iron production, 1000 TPY
3. Burden yield (excluding blast-furnace dust), percent
4. Specific (wet) coke consumption, kg/t
5. Blast temperature, °C
6. Oxygen content of blast, percent
7. Hydrocarbon injection
8. Oil, kg/t
9. Natural gas, m^3/t at NTP
10. Designation
11. In 1978
12. With new agglomerating plant
13. At improved burden ratios

Table 7. Development of the Coke Demand at the Danube Iron Works

Megnevezés (4)	1978 évi tény (5)	Új zsugorítóművel (6)	Javított eleggyel (7)
1. Kohókokusz ny. vasgyártáshoz et/év	552	590	675
2. Aprókokusz zsugorításhoz et/év*	64+22=86	96	96
3. Szénpor zsugorításhoz et/év	30+11=41	41	41

* A vásárolt zsugorítmány figyelembevételével.

Key:

1. Metallurgical coke for pig iron production, 1000 TPY
2. Coke breeze for agglomeration, 1000 TPY (taking the purchased agglomerate into account)
3. Pulverized coal for agglomeration, 1000 TPY
4. Designation
5. 1978 report data
6. With new agglomerating plant
7. With improved charge

The coke demand of pig iron production (Table 7) could be covered even from our present coke output. The coking plant to be built with a capacity of 1.0 million tons will add about 300,000 TPY to the supply of domestic demand for coke, primarily for our sister plants. The dry coking technology that will be installed in the new coking plant will further reduce the absolute energy demand by 40 tons of steam per hour.

In the interval between the completion of the new agglomerating plant and the running-in period of the converter plant we intend to insure the burden ratios by increasing the proportion of scrap.

Our ironmaking experts have estimated the improved technical indicators that can be achieved through the further adaptation of the results of developing our pig iron production. These indicators are presented in the third column of Table 6. They represent the economic advantages that can be attained through the successful conclusion of the Hungarian-Soviet negotiations for the procurement of iron-rich ores or enriched ores. The economic advantages will be apparent predominantly in a reduction of the specific coke consumption to between 450 and 460 kg/t, while at the same time the output of pig iron could reach 1.5 million tons. The coking plant to be built will still be able to amply supply the 675,000 to 690,000 tons of coke per year required for this output. In this case, at an increase of barely 100,000 tons in coke consumption, the annual output of pig iron can be increased by 450,000 tons. The supply of coal to produce 1.0 million tons of coke per year will still not require the opening of new mines, provided we can maintain at the present level the import of coal from socialist countries. By introducing the practice of preheating the coke, also the domestic base of coking coal can be expanded, and the coke output can be increased to 1.3 million tons. If sufficient coal is available, one of the shut-down coking batteries could perhaps be reactivated.

However, the third column of Table 6 does not yet reflect the complete adaptation of our development results to date. A burden yield of 58 to 60 percent, a blast temperature of 1300°C, and the injection of 200 m^3 of natural gas per ton (at NTP) represent considerable progress. But still unutilized is the effect of such essential technological changes as ore averaging, screening out before the top the ore particles less than 5 mm in size, increasing the top pressure to between 1.8 and 2.5 atm, computerized process control, and also the results of R & D now underway. One such result, automatic measurement and control of the coke's moisture content, could find practical application in the near future. However, we must reckon also with the fact that the increased output will require simultaneous modernization of the materials handling and charging systems.

Utilizing Scientific and Technological Advances in Developing the Production of Pig Iron and Steel at the Danube Iron Works

In the following I wish to dwell on the utilization of the advances in science and technology, because I am convinced that in this way we are

able to supplement our lacking material and energy resources at the lowest outlays but with the greatest economic effectiveness.

In the area of ore preparation, for example, the quality characteristics of the agglomerate from the agglomerating plant to be built will change as shown in Table 8. The 5 percent maximum proportion of ore particles less than 5 mm in size, and the disappearance of 250-mm ore lumps will represent great progress in comparison with our present situation, and this will be further enhanced by the advantages of charging at ambient temperature. These changes are due to the application of two-layer charging, heat-treatment-like cooling of the agglomerate, double screening and methods of cooling. Further possibilities lie in using larger quantities of quick-lime --this will be made possible by the lime kiln to be built for this purpose-- and in narrowing the variations in the chemical composition of the aggregate by ore averaging. It would be a great advantage if the Hungarian-Soviet negotiations lead not to the production of Krivoy Rog concentrate but to the feasibility of using rich agglomeration ores. Such an agreement would not reduce the production capacity of our agglomerating plants, but our domestic investment costs would be lower. The energy efficiency of these changes will be enhanced by the advantages arising from the quality of the coke (Table 9), and particularly from a favorable reduction of the coke sizes. We regard the 12.5 to 13.5 percent ash content, and the 1.5 percent S content as additional metallurgical costs resulting from our reserves of coking coal. However, this should not hamper utilization of our reserves of coking coal, because the by-products of washing the coal, for the purpose of reducing its ash content, can be used efficiently to generate electricity, and the harmful effects of the approximately 1.5 percent S content can be offset by already known metallurgical methods. And the sulfur extracted from the coke gases provides a way to supply our demand for sulfuric acid.

Table 8. Quality Indicators of the Agglomerate at the Danube Iron Works

A zsugorítvány minőségi mutatói a DV-ben

Megnevezés (7)		1978. évi tény (8)	Új zsugorítóművel tervezett (9)	Javított eleggyel (10)
1. Vegyi összetétel %				
	Fe	47,0	49—50	59—60
	SiO_2	11,7	18,8	6—7
2. Bázicitás $\frac{CaO+MgO}{SiO_2}$		1,30	1,25	1,2—1,3
3. Portartalom (5mm alatti szemnagys. rázzesztés) %				
(3a) átlag		18	max. 5	max. 5
(3b) ingadozás		10—30	—	—
4. Max. szemnagyság, mm.		250	50	50
5. Zsugorítmány hőmérsékl. °C		tüzes (6)	max.100	max.100

Key:

1. Chemical composition
2. Basicity
3. Dust content (proportion of particles less than 5 mm)
3a. Average, percent
3b. Variation, percent
4. Max. particle size, mm
5. Agglomerate temperature, °C
6. Red-hot
7. Designation
8. 1978 report data
9. Planned with new agglomerating plant
10. With improved charge

It is a known fact that the effectiveness of technological changes to increase the production rate of the blast furnaces is closely related to the quantity of slag that has to be melted. Most technological changes are the more effective, the less slag there is to melt. From 1978 through 1981 we will be investing about 650 million forints to develop our technology for the production of pig iron. This includes 350 million forints for investments related to the converter plant. With the commissioning of a new turbo-blower plant we will ensure the conditions for employing a top presssure of 1.5 atm also in our No 1 blast furnace. Reconstruction of the heating stoves will enable us to raise the blast temperature to 1250°C, even though the selected solution--i.e., the use of heating stoves with external shafts--is still not the most modern one. Our unfavorable burden ratios compelled us to make this compromise. A further great step ahead is the oxygen-enrichment of the blast to an oxygen content of 30 to 32 percent. We have already introduced evaporative cooling in one of our blast

Table 9. Quality Indicators of Metallurgical Coke

Időpont (1)	(2) Szemnagyság mm	(3) Dobszilárdság %	(4) Morzsalékonyság %	Hamu (5) %	Nedv (6) %	Kén (7) %
(8) Jelenleg, és 1983-ig	40—80	78—82	5,5—6,5	12,5—13,5	3—4	1,45—1,55
(9) Az új blokk belépése után	30—70	78—80	5,0—6,0	12,5—13,5	3—4	1,45—1,55
(10) Száraz kokszoltás bevezetése után	30—70	80—82	5,0—5,5	12,5—13,5	0	1,45—1,55

The introduction of dry coking will permit the addition of about 10 percent coal of low coking capacity, without any deterioration of coke quality.

Subsequent introduction of coal preheating will permit the addition of about 30 percent coal of low coking capacity.

Key:

1. Period
2. Size, mm
3. Tumbler-test strength, percent
4. Friability, percent
5. Ash content, percent
6. Moisture content, percent
7. Sulfur content, percent
8. At present and until 1983
9. After startup of new coking battery
10. After introduction of dry coking

furnaces, with significant savings of energy. Redesigned tuyeres--with a service life several times longer than that of the present ones-will be installed in the near future, on the basis of a Sovet license. To increase the frequency of tapping and to lengthen the service life of the tapholes and runners, it will be necessary to use new refractory materials. We know of runner-ramming compounds that permit the tapping of even more than 100,000 tons of hot metal. At the same time also the tedious work of chipping the runner lining will be mechanized. We have prepared plans to use the blast-furnace slag for road construction, and to recover the Fe and refractory materials from the slag dumps.

Steelmaking by the converter process stipulates well-known quality requirements regarding the chemical composition of the hot metal and its temperature. Certain computations lead us to the conclusion that we must anticipate the need to increase the temperature of the hot metal, which will be accompanied by a slight increase of its Mn content. Because of energy considerations, only practice can provide the right answer to this question. We believe that construction of a 1300-ton mixer ensures the requirements of steelmaking with regard to uniform chemical composition.

In view of the specific coke consumption's planned reduction--and also because the processes for desulfurizing pig iron are expensive and involve heat losses--we are not planning to introduce a new desulfurization process. This is warranted by the fact that ladle finishing already provides a process for the desulfurization of steel.

Our results to date in developing the technology of steelmaking have been significant. The more-important stages in the development of open-hearth steelmaking are as follows: increase of the bath surface (charge weight); modernization of furnace design, and of the methods of building and repairing them; use of refractory materials of excellent quality; introduction of slurry spraying to repair the furnaces; oxygen injection; lining the ladles by ramming instead of with brickwork; modernization of the preparation and charging of the scrap; and constant improvement of our metallurgical methods. The present, nearly 1.2-million-ton output of our four open-hearth furnaces, originally with a heat size of 125 tons each, and the pertinent assortment of steel grades reflect to some extent the magnitude of these efforts. Most of the workers, technicians and engineers who are helping to raise the level of our steelmaking will be somewhat saddened by our having to outline a less spectacular future for open-hearth steelmaking. This future can be spectacular not in terms of tonnage, rather in the improvement of economic effectiveness and quality. The open-hearth plant will be modified to melt scrap, and it will change over mostly to the production of high-strength plate and of starting materials for the production of tubing.

The new possibilities for rapidly altering the oxygen activity and basicity of the reduced volume of slag have provided already realistic and economic ways to introduce new alloying processes, particularly if we combine them with the methods of ladle finishing.

The most significant, and economically the most successful, technological investment at the Danube Iron Works in years past was the construction of continuous casting units. An intergovernmental agreement ensures the construction of also a third continuous casting unit.

We nevertheless are planning to modernize also our existing casting plant. Built originally for a capacity of 800,000 TPY, the present output of the two-strand continuous casting unit of the vertical type already exceeds 950,000 TPY, and the quality of the sheet rolled from the continuously cast slabs is superior to that of the sheet rolled from ingots. The experts of Gipromez [State All-Union Institute for the Planning of Metallurgical Plants] designed the planned modernization. Its essence is a turntable mounted on the vertical casting machines' steel structure, permitting an increase in the proportion of strands cast from heat to heat. The geometric shape of the tundish has been redesigned. The relatively large tundish offers metallurgical advantages as well, in that it has also provisions for retaining the slag. Application of the new types of refractory materials developed for the brickwork and lining of the ladles, and for lengthening the service life of the tapholes and plugs, has drastically reduced the downtime, increased the output and curtailed the quality defects resulting from the refractory materials. Expedient division of the production program between the open-hearth and L-D plants also makes feasible the series casting of heats of identical quality.

These conditions, we believe, ensure that the increase in the steel output will manifest itself not in ingots but in continuously cast slabs.

Modernization of our continuous casting units does not make superfluous the construction of a third, curved-type continuous casting unit. To the contrary, not only will the construction of this third unit permit the complete discontinuation of ingot teeming and the dismantling of the soaking pits that have been written off long ago, but also reduction of the gage of the slabs to between 180 and 200 mm will increase the output of our reversing slabbing mill and plate mill.

In the meantime the individual elements of the system for controlling continuous casting have already been developed. Such elements are, for example, automatic level control in the crystallizer, control of cooling, automatic cutting of the strands, and control of the process of crystallization through electromagnetic stirring. However, the other elements for complete automation are still lacking. One of the most difficult tasks appears to be control of cooling at such degree of automation that always ensures the same surface temperature along a given cross section. Automatic coordination of the isotopic pool-gage readings with the pouring rate could speed up pouring. Complete automation of continuous casting is within our reach.

The metallurgists and refractory experts at the Danube Iron Works have made no small contribution to the development to date. For cast slabs to be

rolled into sheet, they developed a deoxidizing method that can avoid surface defects due to blisters or to Al_2O_3 nodules. These slabs need not be stripped before they are placed in the pusher-type furnace. Similarly successful was the research into optimizing the deoxidation of high-strength starting materials for tubing. The attained results are relected in the following technical characteristics: Tubing made from cast billets without stripping meet the API specifications with 95 percent certainty, and the specific consumption of steel is 1180 kg of continuously cast billets per ton of tubing. In the course of this research we clarified the metallurgical and technical conditions of the formation of globular oxide inclusions, and of avoiding sulfite II-type inclusions. We likewise clarified the effect that the reactions taking place at the liquid-crystal interface have upon the morphology and arrangement of the inclusions arising during crystallization.

Our refractory experts have made great strides toward the exploitation of our domestic mineral resources and the application of new types of refractory materials. One of the greatest potentials for developing our production of pig iron and steel lies in the fastest possible utilization of the results achieved in improving the quality of the refractories and in the technology of their application. From the literature we know not only of refractory compounds that withstand the teeming of 100,000 tons of hot metal, but also of converter linings that withstand several thousand heats, and of ladles that withstand 40 to 50 heats.

If we solve these tasks with the wider participation of our domestic resources than up to now, we will be able to report further economic results. However, we will not be able to dispense even in the future with the systematic monitoring and application of the results achieved abroad.

Outstanding among the measures now underway or being planned to improve the quality of our sheets are the possibilities of deoxidizing, desulfurizing and alloying steels by the method of ladle finishing. The license and know-how that the KCM [Ministry of Metallurgy and Engineering] purchased with the assistance of OMFB [National Technical Development Commission] will find full-scale application already this year. The process will cause a sharp rise in the quality of our plate and tube steels, because it is able to reduce the S content of the steels even below 0.005 percent; and their oxygen content, below 0.002 percent. Elimination of II-type inclusions, and the formation of globular inclusions as a result of their Ca content, will permit the production of plates and tubing that have spatial isotropy. The impact strength values change within a temperature range of +20°C to -60°C as shown in Fig. 2.

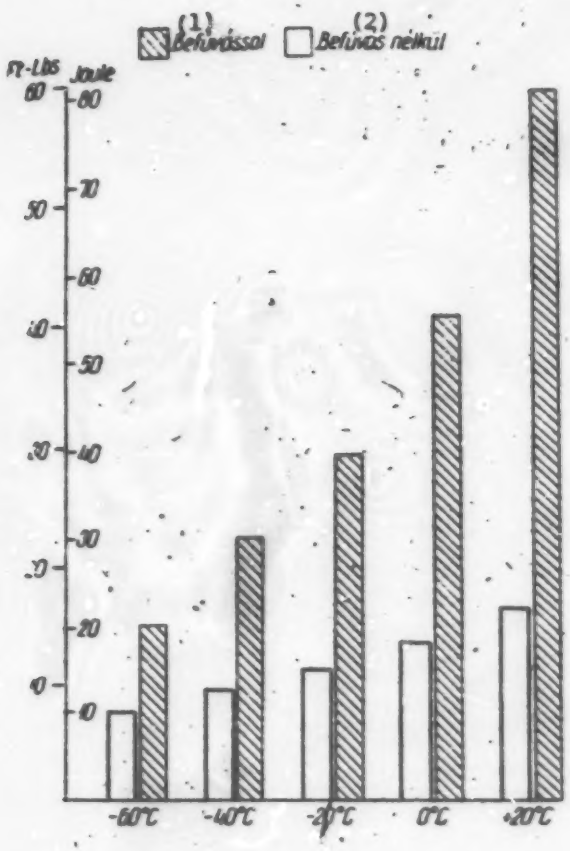

Figure 2. Transverse impact strength.

Key:

1. With injection
2. Without injection

We expect similar results also in the improvement of sheet quality, although we have not yet tested the process for this purpose. We believe that the experiments to be conducted in October and November will confirm our expectation that continuous casting of heats containing less than 0.01 percent S to avoid fissuring of the cast strand, and the reduction of the oxygen content below 0.01 percent will result in an improvement of the surface quality and of the ductility characteristics (Erichsen, $\bar{r}$ and $\bar{n}$). An increase of the steel's Ca content will facilitate the continuous casting of steels containing Al, because there is less danger of shell shrinkage caused by the Al_2O_3 and therefore casting can proceed at a faster rate and more evenly.

In conjunction with the introduction of this process--as one of its preparatory stages--we developed a method for retaining the open-hearth slag in the furnace, and for treating with synthetic slag the small amount of slag remaining on the surface of the molten steel in the ladle. By this method the oxygen activity of the open-hearth slag can be drastically reduced, and its basicity can be modified. The results of one such experiment are presented in Table 10. Reduction of the oxide content to about 6 percent FeO not only provides favorable conditions for desulfurization but also lengthens significantly the service life of the ladle lining and reduces the specific consumption of alloying materials that have a great affinity for oxygen. By this method it is possible to achieve 30 to 40 percent desulfurization during tapping. Therefore we wish to use this method intensively in our open-hearth plant as well as in our converter plant.

Table 10. Treatment of Open-Hearth Slags by Ladle Finishing

Időpont (1)	SiO_2 %	CaO %	FeO %
(2) Csapoláskor	11,12	33,04	23,16
(3) Szintetikus salak adagolása után	22,98	36,68	1,67
(4) Argon öblítés előtt	22,81	33,81	8,36
(5) Argon öblítés után	28,53	31,64	6,30

Key:

1. Time
2. At tapping
3. After the addition of synthetic slag
4. Before argon flushing
5. After argon flushing

Even on the basis of what has been said up to now we may answer with confidence the question raised in the introduction. The answer is that an increase in the output of pig iron and steel at the Danube Iron Works is a worthwhile undertaking even by the standards of the world market. It will contribute toward increasing our national income, as well as toward improving our balance of trade. One of the principal guaranties of achieving these results is that we will employ the latest advances in engineering and technology, adding to them the fruits of our own research and development while also seeking assistance from the brainpower of the domestic institutions and research institutes concerned with research and development.

1014
CSO: 2500

UDC: 669.16+669.18

DEVELOPMENT POSSIBILITIES AT OZD VIEWED

Budapest KOHASZAT in Hungarian Nos 3-4, Mar-Apr 80 pp 115-118

[Report by Dr Emil Furjes, metallurgical engineer and department head at the Ministry of Metallurgy and Engineering: "The Problems of Developing the Production of Pig Iron and Steel at the Ozd Metallurgical Works"]

[Text] Evaluation of the present state of pig iron production. Developmental possibilities: lengthening the service life of the blast furnaces' lining and improving the burden yield, by reducing the dust content of the agglomerate and the basicity of the slag. Increase of the blast temperature. Development of steel production, by improving the supply of scrap and alloying materials. Introduction of ladle finishing in the pouring bay, to produce high-grade s eel.

The blast furnaces at OKU [Ozd Metallurgical Works] were built in the 1950's, and the steel plant assumed the main features of its present aspect in the mid-1960's.

Already in the second and third year after their reconstruction, the modernized metallurgical plants produced substantially more than had been planned, and they also had favorable conditions for the adoption of further organizational and technical measures, and for the expansion of production. Whereas in 1968 we produced 514,000 tons of pig iron and 800,000 tons of steel, our targets in the 1979 plan call for 960,000 tons of pig iron and 1.4 million tons of steel. On average over the ten years, then, our annual growth rate exceeds 8 percent, which is noteworthy in metallurgy.

Pig Iron Production

Pig iron production at the Ozd Metallurgical Works at present is characterized by the following more important technical indicators (see Table 1).

Table 1. Some Technical Characteristics of the Blast Furnaces at the Ozd Metallurgical Works

Approximate service life of blast furnace, years	6
Burden yield, percent	42
Blast temperature, °C	900
Coke consumption, kg/t	690
Natural gas consumption, m^3/t at NTP	70
Production rate, tons of charge/m^3 and day of operation	2.9
Coke rate at tuyere level, kg of coke/m^2 and hour of operation	720
Annual output of pig iron, 1000 tons	900
Working volume, m^3	2300
BEM [Borsod Ore Dressing Plant] Fe content, percent	46
BEM basicity	0.99
BEM dust content, particles less than 0.5 mm, percent	16
Basicity of slag	1.23

Examination of these indicators enables one to draw several essential conclusions. Let us examine one by one the most important indicators from which we can draw conclusions decisive for the future.

The service life of a blast furnace is 6 years! This is in agreement with the domestic average, but we should know that countries more developed than ours have attained a service life as high as 10 to 12 years. Since the relining of a blast furnace takes 100 to 120 days, lengthening the cycle is a significant factor in the better utilization of operating time.

I do not wish to discuss in detail the significance of improving the utilization of operating time, but I would like to emphasize the Hungarian metallurgy also must devote more attention to this question, because this is warranted by numerous technological, economic and technical factors.

Longer service life is influenced, among other things, by a suitable jacket, effective and reliable shaft-cooling systems, fuel of better quality, and more-efficient modes of operation, all of which can be ensured only through purposeful development activity.

According to the experience of the Ozd Metallurgical Works, use of a carbon compound for ramming the bottom has proved suitable, and we believe that at the next relining it will be possible to retain the bottom for another campaign. The situation with regard to the jacket and cooling system, however, is unfavorable.

We used a vertical cooling-plate system for the first time in 1973, when the No IV blast furnace was relined. On the basis of the designer's favorable opinion, we successively installed this cooling system in the other blast furnaces as well. But it turned out that the cooling plates were of unsuitable design, burned out soon, and it was practically impossible to repair them. Leaks ruined the brickwork ahead of time, peeling of

the accretion became more frequent, and the number of tuyeres that had to be replaced nearly doubled.

The burden yield is 42 percent! This value is the lowest even for Hungary. The question arises as to what causes this. The answer can be formulated as follows:

The Fe content of the BEM concentrate that constitutes the bulk of the charge is 2 to 3 percentage points lower than the Fe content of the agglomerate produced at DV [Danube Iron Works]; this is related to the distribution of the concentrate.

The charge contains less of so-called shaving iron than at LKM [Lenin Metallurgical Works].

The basicity of the blast-furnace slag at the Ozd Metallurgical Works is unjustifiably high, 1.23; at an SiO_2 content of 15 percent or more in the agglomerate, this means that nearly 900 kg slag is formed per ton of pig iron.

From the professional literature and foreign experience we know that today many countries operate with a burden yield of 55 percent or more. Experts likewise know that improvement of the burden yield is a worldwide trend. Efforts are being made in this direction also within Hungarian metallurgy, by modifying the international agreements and with the help of development measures. However, these efforts will mature only by the end of the Sixth Five-Year Plan at best, and until then the composition of the charge will not change significantly.

Thus our possibility and task is to achieve improvement under the present burden ratios. In my opinion, the burden yield could be increased by 3 or 4 percentage points with the help of the following measures:

The quality of the agglomerate should vary as little as possible in terms of its basicity, and of its Fe, SiO_2 and dust content, so that the conditions for even operation of the blast furnaces may improve.

To this end the following are necessary:

Better averaging of ores and solid fuels;
Sizing of the agglomerate;
Reasonable reduction of the flux in the charge, in the interest of maintaining the basicity between 1.1 and 1.15.

Of the partial measures our enterprise is perhaps best able to influence this last requirement, whereas the other measures require the coordinated activity of two or three enterprises. I am convinced that we will avail ourselves of these opportunities in the near future, for the interests of both the national economy and the enterprise increasingly point in this

direction. If, for example, the basicity were reduced to 1.15, the burden yield would increase by about 2 to 3 percentage points, as a result of which our output of pig iron would increase by 40,000 to 50,000 TPY, respectively we could save between 25,000 and 30,000 tons of coke a year. However, the sulfur content of the pig iron must be reduced by desulfurization outside the blast furnace.

The blast temperature is 900°C. This indicator does not rate as good even by domestic standards, not to mention the leading foreign countries where blast temperatures of 1300°C are already being used. The effects of increasing the blast temperature, and also the prerequisites for this, are well known. To attain a higher blast temperature we need, among other things, a suitable set of heating stoves, a system of blast mains and connections (from the heating stoves to the tuyeres) that operate reliably even at high temperatures, and a permeable charge that permits larger volumes of gases to move through the column.

None of these conditions can be met at the Ozd Metallurgical Works at present.

The capacity of the set of heating stoves is inadequate, and the rate at which they are being rebuilt is insufficient even to maintain the results already achieved, not to mention further development. Our system of blast mains and connections is unsuitable even for a blast temperature of 1000°C. The high dust content of the BEM agglomerate, in combination with the varying tumbler-test strength of coke, practically excludes the application of the mentioned blast temperature.

An action plan sums up what has to be done and includes, among other things, the following:

Rapid reconstruction of the existing heating stoves, including reconstruction of the base and relining;
Reconstruction of the No 13 stove;
Installation of ceramic burners and modern dampers, and modification of the gas and air mains;
Construction of a new smokestack, and reconstruction of the two existing smokestacks and flues;
Construction of two new heating stoves (Nos 14 and 15);
Relining of the hot-blast mains, using special insulation.
Development of our hot-blast auxiliaries can be effective only if the dust content of the balst-furnace gas used to heat the stoves is reduced to at least 15 mg/m^3 at NTP. This will be ensured by the operation of the proposed two new electric precipitators (Nos 5 and 6), and by improving the efficiency of the existing ones.

The coke consumption is 690 kg per ton of pig iron, which is worse than the specific coke consumption at the Danube Iron Works or Lenin Metallurgical

Works. The international level is around 500 kg/t, but the most advanced blast furnaces attain a coke consumption of less than 400 kg/t.

It follows from even this brief comparison that our tasks from the viewpoint of both technology and economic effectiveness are becoming more and more urgent.

The already mentioned three factors--service life of the blast furnace, burden yield and blast temperature--are correlated with coke consumption. Confirming and supplementing what has been said above, I wish to outline our possibilities as follows:

First and foremost, we must ensure even operation of our blast furnaces. The most important factors that affect even operation are: the charge; the level of maintenance work; and the turnover, materials handling and management of operations.

In our previous discussion of the charge I have not dwelt on one important area, the state of the stockyard.

The charging system of the stockyard is obsolete and unreliable, with regard to both coke and ore, because the scales are off. The coke is now being measured by volume, and its weight is being calculated theoretically.

In recent years we had SZIKKTI [Central Research and Planning Institute of the Silicate Industry] prepare a preliminary plan for modernizing the charging system.

Under the Sixth Five-Year Plan we are planning modernization at two blast furnaces, with outside support.

Among the maintenance tasks I would like to call attention particularly to the following:

Systematic inspection of the blast furnaces' cooling systems, and immediate prevention of breakdowns;
Systematic repair of the heating stoves, air mains and their fittings, in order to reduce air, gas and heat losses;

Closer attention must be devoted than up to now to the planned maintenance of the heating stoves. We must avoid having a stove out of commission for more than a quarter at a time, while it is being relined.

The on-schedule transportation of the raw materials for the charge is generally solved, except under exceptional traffic conditions (for example, during floods, snowstorms, and shortages of coke). The same cannot be said about materials handling at the plant, primarily about the supply of slag cars.

The main cause of this situation is the periodic severe shortage of freight cars, and the overfilling of the slag dump. Therefore the transportation or disposal of the slag is one of our key tasks. The pertinent plans have already been worked out, and the most important provision in them is the establishment of a new slag-dumping area at Center.

To sum up the present evaluation of the blast furnaces at the Ozd Metallurgical Works, I regard the following as a guide to the limitations on, and the indications of, our future tasks:

1. The addition of new blast-furnace capacity cannot come into consideration, but better utilization of existing capacity is and will be necessary, from the viewpoint of both production volume and economic efficiency. The possibilities for this do exist: improvement of the quality of the charge, oxygen enrichment, and increase of the top pressure are the best-known possibilities for intensification.

2. Among our future tasks, emphasis will be primarily on producing pig iron of better quality at low cost, and not on increasing the output. The prerequisites for this are a reduction of the specific coke consumption, and improvement of the conditions that influence this consumption. The factors that affect the specific coke consumption warrant close cooperation among the metallurgical enterprises on adopting technical and operational measures that will serve to improve the quality of the charge. This circle of tasks includes the development of tuyere designs, cooling systems and charge preparation, improvement of the operation of the heating stoves, oxygen enrichment of the blast, and many other measures. To the best of their knowledge, the metallurgical enterprises have started off in the right direction, and I am confident that their cooperation will produce the desired results in the near future.

3. The development of maintenance, more-efficient organization, and the use of credit resources for energy savings may be regarded as reliable ways of attaining better technical indicators. Other resources for investments can hardly be expected, in view of what expenditures the national economy is able to absorb.

Steelmaking

As I have already mentioned, we completely rebuilt our open-hearth plant under the reconstruction program that ended in the mid-1960's. Since then the heat size of our furnaces has increased from 80 tons to 110 tons, and in the autumn of 1977 the construction of a 10,000 m^3/hour (NTP) oxygen plant enabled us to increase the oxygen consumption from the 10 to 11 m^3/t (NTP) earlier, to 40 m^3/t (NTP). Parallel with the construction of the oxygen plant we enlarged the charging auxiliaries of these furnaces, and the auxiliaries of the pouring bay. One of our most significant investments has been a modern, six-strand, curved crystallizer-equipped continuous casting machine built under a Concast licence. We placed this

unit in operation in the autumn of 1973, and its present output is 330,000 to 340,000 tons of 120 by 120 cast billets.

Some technical characteristics of our steel plant are presented in Table 2.

Table 2. Some Technical Characteristics of the Steel Plant at the Ozd Metallurgical Works.

Bath surface of furnace, m^2	40
Steel output, 1000 TPY	1360
Furnace production rate, t/hour	20
Average heat load of furnace, GJ/hour	70
(Gcal/hour	16.6)
Specific heat consumption, GJ/t	3.65
(Gcal/t	0.87)
Specific oxygen consumption, m^3/t	40
Average yield, t/heat	106
Metallic charge, kg/t	1154
Metallic charge and added ore as 100 percent Fe, kg/t	1165
Duration of campaign (number of heats)	355
Blowing-out, percent	8.8
Damping-down, percent	2.2
Utilization of operating time, percent	89
Rejects, percent	0.9
Proportion of pig iron in the metallic charge, percent	60
Total refining material added, kg/t	43

On the basis of the data in the table, we may establish the following:

For the given bath surface, heat load, oxygen enrichment, charge ratios and operating conditions, most of the technical indicators may be judged good, by both domestic and international standards. This applies primarily to the utilization of operating time, to the tons/hour production rate and to the proportion of rejects, but also the other indicators tolerate the test of comparisons. The production rate of the open-hearth furnaces is significantly lower than that of modern steelmaking installations (L-D, QuBOP, UHP Electro); for example, it is about one-fifth of the production rate of a converter of the same size.

In my opinion, the value of the specific metallic charge is acceptable. In the area of charging and the technology of process control, however, the efforts to further reduce the value of this indicator must be continued. Accurate weighing can narrow the variations of yield and reduce the losses of steel during tapping. Further perfection of the technology of process control can reduce losses of metal mixed and removed with the slag. Because losses of metal in the slag are significant, I will dwell on this question in somewhat greater detail.

The Fe content of the slag during meltdown with oxygen injection can be as high as 30 to 40 percent. According to our earlier technology, we tried to remove the slag from the furnace as early as possible, partially for quality considerations and partially to shorten the charge-to-tap time.

Early slag removal, however, had also a negative effect: The specific metallic charge, in terms of Fe, reached a value of 1185 kg/t, and this would have resulted in a loss of about 120 million forints a year had we not taken appropriate action in due time. The essence of our measures can be summed up as follows:

The hot metal must be added to the furnace not later than 35 minutes after the completion of charging, and process control (heating, injection of oxygen) must be directed so that the flushing of the slag from the furnace is delayed, occurring 20 to 30 minutes after the addition of the hot metal. By this method we avoided an increase in the charge-to-tap time and reduced the metallic charge by about 20 kg/t.

Similar possibilities exist for introducing optimal firing, to reduce the specific calorie demand.

As can be established from what has been said above, the main problems of our steel plant concern not the furnaces as the principal production installations, but primarily the pouring bay. Here the present practice of preparing the ladle and molds causes problems. The steel ladles are lined and dried mostly by conventional methods. Applying the refractory mortar with a pneumatic gun could eliminate heavy physical labor, and at the same time the service life and safety of the ladle lining would be improved.

The use of hot tops could simplify the manual operation of preparing the molds, and this would also influence favorably the reduction of frothing losses.

The method of adding alloying materials likewise must be changed urgently, with special attention to the considerations of quality improvement, and savings of manpower and material.

Haphazard supply of scrap and refractory materials for the open-hearth furnaces is causing much confusion and considerable difficulties. Progress is not fast enough in the wider use of domestic refractories, for the substitution of imported brick.

In summing up the most important tasks of steelmaking at the Ozd Metallurgical Works, I wish to emphasize economic effectiveness, quality and the elimination of heavy physical labor. Very likely the Ozd Metallurgical Works will not have to produce more than 1.4 million tons of steel, but the technical parameters and the quality of the produced steel must be improved. The tasks follow from the outlined state of the furnaces and auxiliaries. Improvement of the production conditions and the attainment of new results

must be accelerated not through large-scale investments, but through upgrading and modernizing investments and through maintenance. Among the measures to improve quality we may consider also the extension of new technologies.

Colleague Sziklavari mentioned the advantages and potential applications of ladle finishing. In agreement with him, I would like to call special attention to lance injection. In the future we will have to devote ever-greater attention to improving the working conditions and also to the replacement of manpower, because at the Ozd Metallurgical Works there are perceptible problems also in this area.

I am convinced that the managements of the enterprise and of the factory unit will adopt the most effective measures possible, and that the sister enterprises, the Ministry of Metallurgy and Engineering and the other national organs will render maximum assistance. Within a few years these joint efforts will certainly be reflected also in the results.

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DEVELOPMENT AT LENIN METALLURGICAL WORKS DISCUSSED

Budapest KOHASZAT in Hungarian Nos 3-4, Mar-Apr 80 pp 119-123

[Report by Rezso Herendi, metallurgical engineer and technical director of Lenin Metallurgical Works: "The Questions of Developing Iron and Steel Production at the Lenin Metallurgical Works"]

[Text] Description of the blast-furnace plant and of its production results. Summary of the production installations and achieved results of the present open-hearth steel plant and electric steel plant. Establishment of a new integrated steel plant. The two phases of building the new steel plant: an 80-ton UHP electric furnace and continuous casting machine. Preparations for the start-up of the new plant.

The blast-furnace and steelmaking installations at the Lenin Metallurgical Works cannot be regarded as modern installations.

In terms of age, size, design and auxiliaries, our blast furnaces lag far behind the now customary and technically expected level. The open-hearth process already is regarded as obsolete, and our open-hearth plant is uneconomic, obsolete and hazardous. Among our electric furnaces there are also units that are still charged manually, and only the 50-ton Soviet furnace meets modern requirements.

With such equipment we cannot achieve our objective of modernizing our products and making them more economic. In January 1977, therefore, investment decisions were made at the cabinet level that call for the establishment of a modern steelmaking base.

Our pig iron production, too, must keep pace with the quantitative and qualitative development of steel production, and with the efforts to make it economically effective. At the Lenin Metallurgical Works the output of pig iron is nearly double the output of ten years ago. This development was achieved not by building new blast furnaces or expanding the existing ones, but by improving the level of charge preparation and by introducing various technological methods.

As a result, the specific coke consumption dropped from 840 kg/t in 1968, to well below 700 kg/t at the beginning of 1970. Of course, the injection of natural gas and the increase of the blast temperature were contributing factors in this.

Gradual improvement of the pig iron's quality and of the uniformity of its chemical composition kept pace with this quantitative growth.

Concerning the improvement of quality, special mention must be made of the uniformity of the chemical composition, particularly of the extent of variation in the Si and S contents. According to our data on the frequency distribution of the Si content, the proportion of output whose Si content exceeded the ±0.1 percent range of variation from the average dropped from 75.1 percent in 1968 to 39.7 percent in recent years. The same trend can be observed in the frequency distribution of the S content.

Aside from the worn-out state of the No III blast furnace, our present output of pig iron satisfies the quantitative and qualitative demand of our open-hearth steel plant.

With the startup of the converter steel plant, we must increase the output and significantly improve the quality of the pig iron, because its composition--specifically the actual Si, S and Mn content and their minimal variation--is an important factor in the utilization of converter capacity. Because of financial constraints, only partial measures are feasible, and we are able to ensure merely conservation of the Nos I and II blast furnaces, of their brickwork, stoves and other auxiliaries.

The No I blast furnace was rebuilt in 1978, without a new jacket after five years of operation. In the course of this we also reinforced the steel structure of the skip bridge. In view of the blast furnace's five-year campaign, we did not anticipate significant wear of the hearth's brickwork, and therefore we blew the blast furnace down without tapping the bottom. After blowdown and scraping out the bottom, however, we found so extensive erosion that the hearth lining had to be replaced. Because of this, reconstruction of the blast furnace took 39 days, instead of the 25 days planned.

We rebuilt the No II blast furnace this year, in 45 days instead of the 60 days planned. Blowdown was with bottom tapping, in the course of which we tapped all the hot metal from the hearth.

Here again, reinforcement of the skip bridge was as important as the reconstruction of the blast furnace. Shortening of the reconstruction time was enhanced considerably by scraping out quickly the material remaining in the hearth, by the good work of KGYV [expansion unknown], and by efficient preparations and work organization.

Parallel with the reconstruction of the blast furnaces we have rebuilt so far three of the heating stoves. In view of this it is feasible to plan to maintain continuously a blast temperature of 950°C, and parallel with this we can increase to some extent also the injection of natural gas.

The No III blast furnace, which offers the most possibilities, is the centerpiece of our plans. Even at present this blast furnace accounts for about 55 percent of our total output, and after its expansion this proportion will increase to between 70 and 75 percent. In other words, the converter plant will be supplied predominantly by the No III blast furnace.

Until the commencement of the blast furnace's reconstruction (in July 1980), however, maintaining reliable operation of the furnace built in 1975 will require considerable effort, because in 1977 and 1978 significant deformation and cracks appeared in the jacket, due to the worn-out bosh brickwork and shaft lining.

Having repeatedly reinforced the jacket, in March of 1979 we installed a new top and simultaneously undertook extensive reinforcement of the jacket, in the case of the bosh jacket by so-called pocket patching, where pockets joined to the existing jacket are filled with refractory cement.

To form a more centered blast for the purpose of protecting the jacket, we replaced the earlier 150-mm diameter tuyeres in the blast furnace with 130-millimeter ones, but this necessarily resulted in a reduction of the output and of the production rate, and a worsening of the coke-burning rate.

Work has already begun on the foundation of the fourth heating stove, and its construction will be completed foreseeably by mid-October 1979.

The heating surface of the checkers installed in the new stove will be 27,100 square meters, as compared with 12,800 m^2 in the present stoves. The checkers will be built of honeycomb checker bricks of the F_2 type, and the specific heating surface will be nearly double the heating surface of our present stoves.

After the construction of the new heating stove and the reconstruction of the three present stoves according to the same modernized design, the specific heating surface per cubic meter of working volume will increase from 50 m^2 at present, to about 100 m^2. With four-stove operation we must increase the blast temperature from 950-1000°C at present, to 1110-1150°C, and parallel with this the injection of natural gas also must be increased at the technologically feasible rate, to between 90 and 100 m^3/t at NTP.

The capacity of the purchased Japanese-Lang axial blowing machine that will be installed in the new blast furnace will permit also a certain increase of the production rate.

The converter plant by its very nature demands uniformity of the hot metal's composition, and the present variation in the composition of the blast-furnace product cannot be tolerated in this steelmaking installation. To ensure the required quality, therefore, at the No III blast furnace we will improve the accuracy of weighing the charge and the coke:

By equipping the ore-weighing cars with electronic scales;

By weighing also the coke electronically and using supplementary automatic control equipment to continuously correct variations in the coke's moisture content.

We are assigning an important role also to evaporative cooling. Parallel with the evaporative cooling system we are planning to install a closed cooling system for the tuyeres, and in 1981 we will introduce a new tuyere design built on the basis of a Soviet license. This will reduce the burnout of the tuyeres and will thus increase the reliability of operation.

Startup of the new steel plant and parallel operation of the open-hearth steel plant will create a peculiar situation in handling the hot metal. Seventy-ton ladles can be hoisted only in the Integrated Steel Plant. Because of the differences in the provisions for receiving, temporarily it will be necessary to use both 50- and 70-ton ladles.

With the realization of the measures and investments briefly outlined above, we will be able to supply hot metal for the converter plant at a technologically suitable level. Simultaneously, of course, also the technical level of our pig iron production will improve, optimally under our conditions. This can best be characterized by the specific coke consumption that basically reflects the technology of ironmaking. In comparison with the present level, at the same charge and coke ratios we are planning a reduction of between 40 and 50 kg/t in our specific coke consumption by 1981-1982.

The production of gray pig iron is a serious problem. After startup of the converter plant, the Lenin Metallurgical Works will not have any surplus hot metal, because the entire quantity will be necessary for the converter that will gradually be increasing its output, and for the open-hearth furnaces.

Because the other two metallurgical enterprises also will have shortages of hot metal, in my opinion it is necessary to investigate whether the foundries' entire demand for gray pig iron could be supplied from import.

In addition to the plans for technological development, mention should be made also of the question of replacing skilled manpower. In comparison with the manpower shortages in other areas, this is a more serious problem in the ironmaking trades. As a stop-gap solution we will request the workers of our factory unit to complete training courses for skilled workers in iron-making, offering them time off and leaves of absence for study, so that they may master their trades as thoroughly as possible.

Our enterprise recently commemorated the centennial of the commencement of open-hearth steelmaking. During this period the plant underwent considerable development, and its development has been rapid particularly since 1945 (Fig. 1).

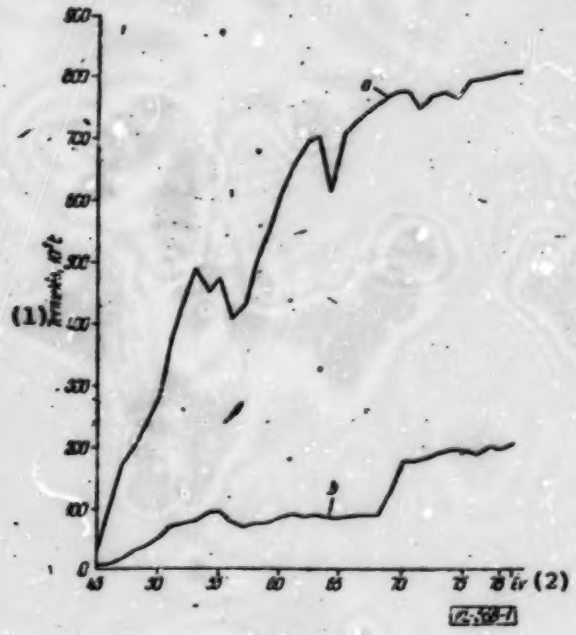

Figure 1. Development of the plant's steel output: a - output of open-hearth steel; b - output of electric steel.

Key:

1. Output, 1000 tons 2. Year

Postwar reconstruction and economic growth required ever more steel. The high quantitative demand necessarily led to the modernization and development of the steelmaking installations. As a result of the necessary measures and of the metallurgical experts' modernizing efforts, we were able to achieve already in 1947 the open-hearth steel output of 1938, the last prewar year. From then on the quantitative increase of our output may be regarded as continuous, except in one or two years.

In the open-hearth steel plant the No 9 furnace, with a rated capacity of 80 tons, has been placed in operation. The Nos 1, 2 and 3 furnaces have been in operation since 1951. The No 4 furnace, a 180-ton tipping unit and Hungary's largest furnace at that time, was commissioned in 1952. In 1954 we switched from generator-gas firing to firing with fuel oil residue,

and we installed dampers that ensure rapid changing of the cycle. In 1959 we developed the conditions for combined firing with natural gas and fuel oil residue, and we modernized the supply of furnace air. We installed modern, dual atomizing burners for the new mode of firing. A significant technical measure in 1960 was that we increased the weight of the charge in a few furnaces, and simultaneously three-ladle tapping became feasible with the help of a tilting runner. The latest development in the open-hearth steel plant was in 1977-1978 when, in addition to investments for conservation of the equipment, we modernized the furnaces' measuring instruments and we also installed new safety equipment.

Development of electric steelmaking was similar to that of open-hearth steelmaking, as the production curve of electric steel unambiguously shows.

To develop our output of high-grade steel we commissioned two 10-ton Tagliaferri electric furnaces in 1951, and one DSZP 50 arc furnace in 1969. This 50-ton furnaces is our most modern steelmaking installation at present.

To satisfy the ever-higher quality requirements parallel with the quantity of production, in 1967 we decided to install vacuum-degassing equipment in the technological process of steelmaking at our electric steel plant.

In addition to increasing the quantity of production, we considered it our task to supply also the ever-higher qualitative demand. This was not an easy task, because our product structure is very diverse (see Fig. 2).

Approximately 1100 grades of steel are produced, including nearly 600 alloy steels.

To improve the quality we introduced modern steelmaking technologies suitable for our conditions. For example:

Special methods of deoxidation,
Treatment with synthetic slag,
Microalloying, and
Vacuum degassing.

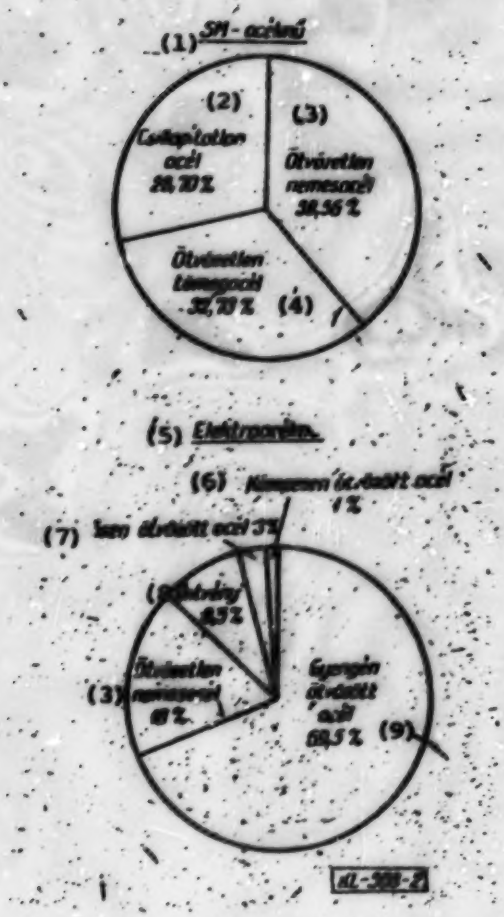

Figure 2. Product structure of the steel plants.

Key:

1. Open-hearth plant
2. Rimmed steel
3. High-grade carbon steel
4. Plain carbon steel
5. Electric steel plant
6. Medium-alloy steel
7. High-alloy steel
8. Castings
9. Low-alloy steel

In the present situation, however, we are unable to fully supply every demand.

Development objectives (investments, licensing agreements, etc.) in manufacturing, and here I have in mind primarily engineering and the automotive industry, do not always take into consideration the possibilities of domestic

ferrous metallurgy. In many instances the steelmaking experts are faced with accomplished facts. Such development projects that are not adequately substantiated from the viewpoint of basic materials place a heavy cost burden on the steelmaking plants, because we are able to supply some orders only by repeated reworking.

The strict quality specifications and the new testing regulations can be met economically only with special processes, for example, with electroslag remelting, and their investment costs are substantial. This circle of problems includes, for example, turbine axles, special chemical-industry and reactor-technology installations, high-speed and tool steels, etc.

Despite our existing problems and relatively obsolete production installations, the quality of our products has nevertheless improved, or we have started the production of new, modern products. One such product is ZF steel that we use to make modern synchronized transmissions. By alloying with boron we improve the core strength and toughness, respectively the dynamic breaking force that characterizes toughness.

For chemical-industry investments, in accordance with the users' needs, we developed experimentally the basic material for forged rings of high yield strength and good weldability.

In our experiments we employed microalloying with niobium and vanadium. Under the influence of microalloying the size of the ferrite grains increased from the customary Nos 5-7, to 10, and the breaking force at 80°C was 2.8 m.kgf.

We conducted experiments with rare-earth metal alloy (mischmetall). The results of these experiments were utilized in making cranckshafts. The impact strength improved considerably, and its anisotropy declined significantly.

To improve the quality and economic effectiveness of our steelmaking we are undertaking our largest investment so far: the construction of an integrated steel plant, in two phases.

An L-D converter and a ladle-finishing facility are being built in the first phase.

The L-D converter operates in a spare-converter system, i.e., one converter is always in operation while the other converter is undergoing repair or serves as standby capacity. The converter's heat size is 80 tons, and its working volume is 68 m^3. The oxygen is blown in at a maximum rate of 300 m^3/min at NTP. The oxygen consumption per ton of steel is 52 m^3 at NTP.

For teeming there are eight transverse teeming stations, each accommodating two ingot cars on which the 6.5-ton ingots are teemed into molds, seven molds per stool. The ingot cars are moved in pairs by a haulage system from one hall to the next, in accordance with the technological sequence.

The molds are stripped with the help of two types of stripper cranes. VALMET [expansion unknown] straddle trucks transport the ingots to the roughing mill.

The requirements with respect to steel quality necessitate that we reduce the steel's sulfur content to a minimum. The effectiveness of desulfurization in the L-D converter is rather limited, about 40 to 60 percent. This is related to the following factors:

Basicity of the slag,
CaO/FeO ratio, and
Initial sulfur content of the hot metal.

We will install a stirring-blade desulfurizer to reduce the sulfur content of the hot metal. We plan to use powdered lime as the desulfurizing agent, and nitrogen as the carrier gas. Approximately 50-percent desulfurization can be achieved in the hot metal. With preliminary desulfurization, then, we expect to reduce the sulfur content of the hot metal to 0.025 percent. If we take into account that 40 percent further desulfurization can be achieved in the converter, the sulfur content of the finished steel will be approximately 0.015 to 0.018 percent. Further desulfurization can be achieved only with ladle finishing.

The main items of equipment for ladle finishing, and the operations that can be performed with them are as follows:

The ladle-finishing vessel has a capacity of 80 tons of steel.

A built-in induction stirrer stirs the steel. The effectiveness of stirring is enhanced by argon injection through the porous brick installed in the bottom.

The heating section has a transformer rated at 8 MVA, and a heating rate of 3 to 5°C/min can be attained with it. Preliminary heating occurs at atmospheric pressure.

The vacuum chamber is equipped with mercury-vapor pumps, charging lock, vacuum lines, and an oxygen lance that is necessary for refining. The lowest attainable vacuum is 0.5 mm Hg.

The ladles are of the gate-valve type, and their approximately 1 m^2 surface is made of austenitic steel.

The ladles are moved in tipping ladle-cars. The tipping angle is 50°, the speed is 12 m/min.

The following operations can be performed in the ASEA-SKF ladle-finishing facility:

Temperature equalization,
Vacuum degassing,
Desulfurization,
Deoxidation,
Alloying,
Slag treatment,
Vacuum refining, and
Casting.

The facility offers great flexibility from the viewpoint of both technology and programming, because it can be combined with any one of the primary smelting installations.

In sum we may say that the feasibility of combining ladle finishing with any of the smelting installations is unambiguously economic, particularly if we take into consideration the quality-improving effect.

In July 1979 we concluded a contract for the construction of the second phase. An arc furnace with a high production rate, and a continuous casting machine will be installed in this phase. The equipment is being supplied by two Japanese companies: Kobe Steel, and Nippon-Kokan. The arc furnace is of the Toschin type, its rated output is 220,000 TPY, the heat size is 80 tons, the transformer is rated at 36 MVA, and the heat time is at most one hour.

The production rate is enhanced by the three gas-oxygen burners installed in the sidewall of the furnace.

The furnace has a jacketed shell and is designed with a special wall-cooling system to reduce wear of the refractory lining to a minimum.

Figure 3 shows the development of a Toschin furnace's annual output and production rate; Fig. 4 shows its power and oxygen consumption, and Fig. 5 shows its refractory and electrode consumption.

The diagrams contain the specific production data of a 70-ton furnace built in Japan.

An important unit of the second phase will be a continuous casting machine.

The continuous casting machine will be a five-strand unit on which we will cast billets 120, 150 and 180 mm in diameter.

The capacity of the continuous casting machine is 350,000 TPY. It is designed with a curved crystallizer of the radial type. The nominal radius is 10 m, and the machine's metallurgical length is 16 m. To avoid oxidation of the casting radius, a protective atmoshphere of argon gas is planned between the pouring ladle and the tundish, and the tundish and the crystallizer. Each strand is equipped with an electromagnetic stirrer in the

secondary cooling zone under the first row of rolls. The casting rate may vary from 1.0 to 2.4 m/min, depending on the quality and the billet size.

The flow of materials between the integrated steel plant's producer and teeming/casting units requires well-coordinated and organized work (Fig. 6). The many variations possible unquestionably necessitate a computerized process control system, which we have already ordered from the mentioned Japanese companies.

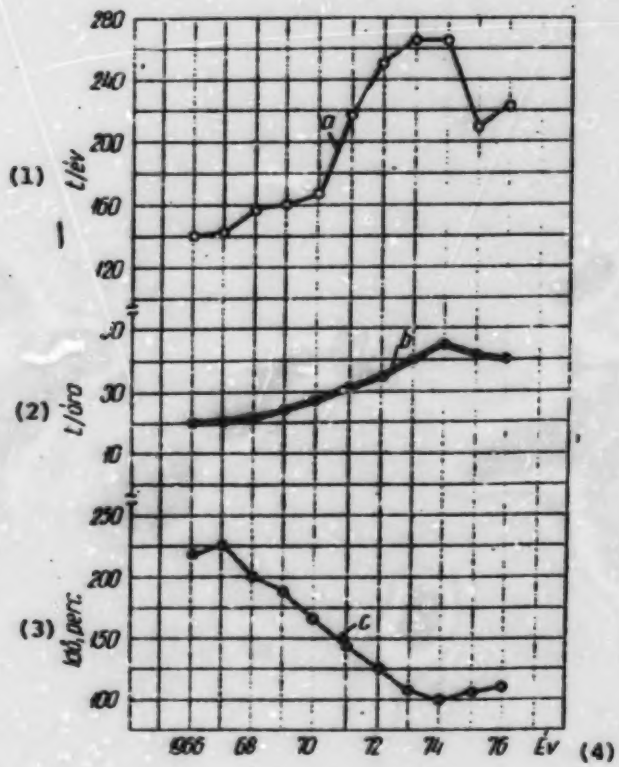

Figure 3. Development of the heat time (tap-to-tap time), production rate and annual output of a 70-ton electric arc furnace in steelmaking: a - annual output per furnace; b - production rate, t/hr; c - tap-to-tap time, minutes.

Key: 1. Tons/year
2. Tons/hour
3. Time, minutes
4. Year

Our experts are preparing systematically for the operation of the integrated steel plant. The most important task at present is to elaborate the technology for the first phase, which will be the basis for further organizational, technical and labor measures.

To this end we are researching, with the participation of outside institutes, the technological processes of converter steelmaking, the solubility of the scrap and lime, and the feasibility of using domestic refractory materials. We regard as a task of outstanding importance the elaboration of teeming technology and the supply of suitable teeming fixtures for the teeming bay. We are conducting extensive studies and experiments to prepare the production of teeming fixtures, stools, molds, refractory materials and hot tops.

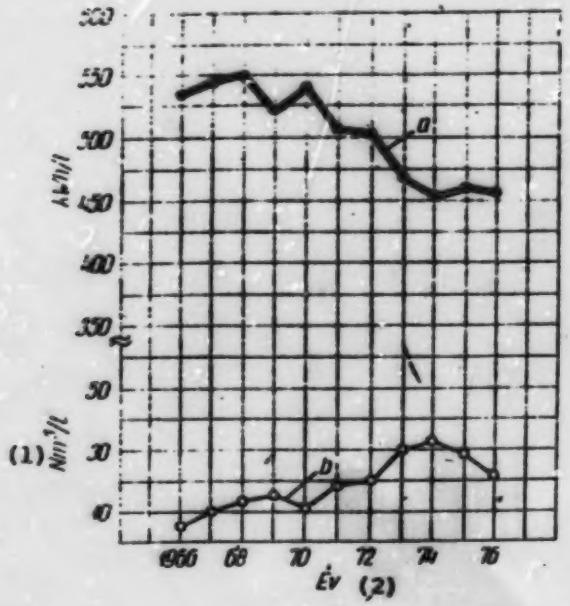

Figure 4. Development of the specific power and oxygen consumption of a 70-ton electric arc furnace: a - electric power, kWh/ton; b - oxygen, m^3/t at NTP.

Key:

1. m^3/t at NTP
2. Year

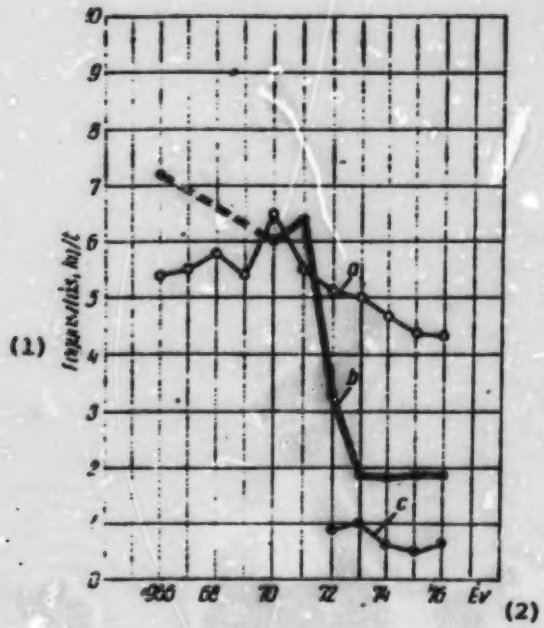

Figure 5. Development of the specific consumption of refractories and electrodes in a 70-ton electric arc furnace: a - electrode; b - basic refractory brick; c - graphite refractory brick.

Key:

1. Consumption, kg/t 2. Year

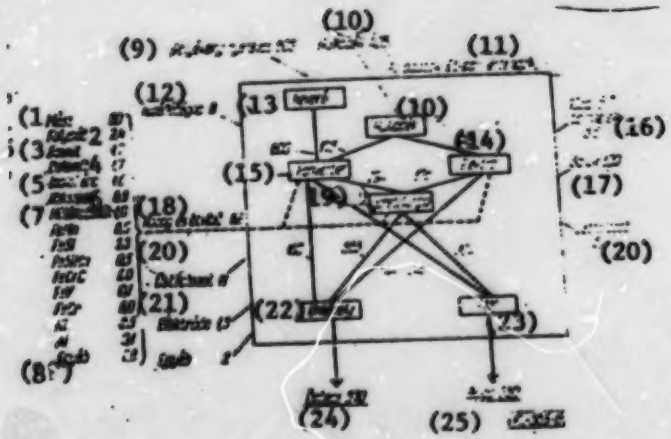

Figure 6. Materials flowchart of the integrated steel plant.

Key:

1. Limestone
2. Fluorite
3. Bauxite
4. Dolomite
5. Indian Ore
6. Coke breeze
7. Scrap added for cooling
8. Other
9. Hot metal
10. Scrap
11. The data are in 1000 tons
12. Refractory brick
13. Mixer
14. Grog
15. Converter
16. Electric furnace
17. Slag
18. Added metal and scrap
19. Ladle-finishing facility
20. Ladle lining
21. Electrodes
22. Teeming station
23. Continuous casting machine
24. Ingots
25. Billets

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DEVELOPMENT PLANS AT CSEPEL DISCUSSED

Budapest KOHASZAT in Hungarian Nos 3-4, Mar-Apr 80 pp 124-126

[Report by Ervin Proszt, technical director of the Csepel Steel Mill: "Problems of Developing Steel Production at the Csepel Steel Mill"]

> [Text] The report strongly emphasizes that the entire demand for starting materials to make seamless tubing must be supplied from steel produced in Csepel. A new electric steel plant, equipped with ladle finishing and continuous casting, must be built to produce 300,000 tons of molten steel a year.

Steelmaking in Csepel has traditions of long standing, and steel is being made here since World War I. In the meantime--similarly as at Hungary's other steel plants--the output of open-hearth steel and electric steel was increased on several occasions. This was achieved by increasing the heat size of the furnaces, expanding the furnace plant, building new steelmaking furnaces, and introducing other measures.

During the past decades our steel mill introduced numerous technological changes. Noteworthy among these was the fact that in 1935-37 we were the first in Central Europe tc introduce oil firing and the basic-brick roof.

We were the first in Hungary to introduce mechanical chilling of rimmed steel with bottom teeming into big-end-down molds.

From the very beginning a principal task of our steelmaking was to supply suitable starting material for the country's only seamless tubing mill. Over the years we were able to easily meet the strict quality specifications for the cast round billets for tubes, and in more than 90 percent of the cases the tube mill was able to use the billets with their surface as cast. Over the years we developed the technology to produce the starting material for boiler tubes of suitable quality.

In addition to supplying billets for the tube mill, our steel mill supplied with starting material also the other ferrous metallurgical plants in

Csepel, including the steel foundry, the roughing mill, small-section mill, sheet mill, the forging plant, the production of high-pressure steel bottles, and welding electrode factory.

Over the years we closed down three rolling mills, but in spite of this the demand for steel starting material increased and the CSM [Csepel Works] Steel Mill, in the absence of suitable expansion, was unable to satisfy the demand. For this reason we procured ever more steel from outside sources. At present we are producing 190,000 TPY in our four 50-ton open-hearth furnaces, and 40,000 TPY in our three electric arc furnaces.

We are using starting material supplied by LKM [Lenin Metallurgical Works], OKU [Ozd Metallurgical Works] and DV [Danube Iron Works] among the Hungarian metallurgical enterprises, and by the Soviet Union, East Germany, Poland, Czechoslovakia, Bulgaria and Yugoslavia among the socialist countries. In terms of steel, the Csepel Works' total demand for starting material is about 530,000 to 540,000 TPY.

Within the total steel consumption of the Csepel Works, the production of seamless tubing requires 260,000 to 270,000 tons of starting material a year, and thus its share of the total demand amounts to 50 percent. Also for this reason the tube mill's demand for starting materials is decisive from the viewpoint of steelmaking technology, the size of the installations, the quality specifications and, last but not least, also from the viewpoint of managing production.

To substantiate the above statement regarding the management of production we wish to note the following:

The tube mill's four pilger mills require 13 grades of rounds in seven sizes ranging from 105 to 160 mm in diameter, an assortment of 55 different products.

The requirement for round ingots must be supplied in ten different grades and eight sizes ranging from 220 to 430 mm in diameter, an assortment of 49 different products.

The two push benches requires 79,000 tons of A 35 grade steel, in four sizes of billets ranging from 90 to 145 mm in diameter.

From these figures it is evident that the supply of the tube mill with starting material is no small task also from the viewpoint of managing and scheduling production, which can be ensured only through close cooperation between the two mills.

In conjunction with supplying the steel requirement of the Csepel Works, the problems of maintaining our open-hearth steelmaking arose already under the Fourth Five-Year Plan.

When KGM [Ministry of Metallurgy and Engineering] set the investment objectives for Hungary's iron and steel industry, it targeted the continuation of open-hearth steelmaking in Csepel until 1983 and agreed that until then production had to be ensured with upgrading investments that did not call for any expansion of production capacity. By its resolution adopted in 1974, the Council of Ministers allotted 311 million forints from the state budget for upgrading investments. The purpose of these investments was to reduce the amount of heavy physical labor, to improve working conditions and to resolve the manpower shortage.

Through the realization of the investments we reduced our manpower demand by 118 workers or 15 percent. With a new scrap-shearing machine we improved scrap preparation, and we mechanized the handling of the auxiliary and added materials. We replaced the two manually charged 5-ton arc furnaces with a modern 10-ton furnace equipped with a dust catcher. In addition, eight charging and travelling cranes were placed in operation, and the worn-out trackways of four cranes were reinforced. To improve the conveniences for the workers, we built a new lounge and cafeteria.

Without these upgrading investments it would not have been possible to maintain the four furnaces in operation to this day, and to avoid a drop in production of about 50,000 to 60,000 tons of steel a year.

However, the investments were unable to remedy the basic drawbacks stemming from the obsolete location and obsolete technological installations of the open-hearth plant that was developed during World War I and gradually expanded.

Overcrowding, heavy physical labor, the danger of accidents, and manpower shortage characterize our open-hearth steelmaking also at present. As an example of overcrowding I wish to note that significantly more ingots are teemed each year in Csepel than at other domestic steel plants with much higher output.

About 245,000 ingots are teemed each year at the Csepel Works, as compared with 200,000 at the Ozd Matallurgical Works, 42,000 at the Danube Iron Works, and 140,000 at the Lenin Metallurgical Works, in teeming bays substantially larger than the one in Csepel.

Despite the upgrading investments and other adopted measures (regrouping of manpower and wage measures), we have not been able to arrest the decline of the labor force. Because the new workers are inexperienced, the danger of accidents has also increased.

Upgrading investments are in progress to ensure also the further operation of our tube mill that has been producing for more than 50 years. At a cost of about 1.5 billion forints, these investments will be realized by 1981. Tied in with these investments is also the modernization of tube production, by building a new tube mill, the development objective for which has been

approved by ATB [State Planning Commission], but with the stipulation that the question of supplying the starting material must be resolved in the course of elaborating the investment proposal.

Our domestic metallurgical plants are unable to supply the starting materials needed for tube production. Therefore the Ministry of Metallurgy and Engineering, in agreement with the decision of the State Planning Commission, entrusted the mangement of the Csepel Works to prepare a target study on the development of steelmaking. The ministry prescribed two alternative sites: one the existing open-hearth steel plant and its vicinity, the other land available in the southern section of the Csepel Works.

The first site variant was not elaborated, because expert opinion held that the buildings of our open-hearth steel plant were unsuitable for 25 to 30 more years of operation, and because the site's small area and layout would have been unsuitable anyhow for the proposed technology.

For these reasons the target study on the development of steel production was elaborated on the basis of the second site variant, and in this study the target was to supply the entire demand of starting materials for the production of seamless tubing.

The target study on developing a new electric steel plant was ready by the end of September 1978. As the site of the 350,000 TPY electric steel plant it considers the land available in the southern portion of the Csepel Works.

The task of the new steel plant will be to supply the entire starting material required for about 250,000 TPY of seamless tubing produced in a new tube mill to be built in the area of the old tube mill. The 6-inch push bench will require 240,000 TPY of continuously cast billets 180, 200 and 240 mm in diameter, and 85,000 TPY round ingots from 200 to 450 mm in diameter. The continuously cast billets must be supplied in the aforementioned three sizes and in 16 grades, an assortment of 40 different products. The round ingots must be produced in five sizes and 13 grades, an assortment of 52 different products.

For steelmaking the study considers two UHP arc furnaces and the oxygen-oil-gas auxiliary burner variant. To the steelmaking technology we will be able to add also ladle-finishing equipment. Today ladle finishing is a practically indispensable phase in the technology of making modern high-quality steels. After development, approximately 40 percent of the tubing produced in the tube mill will have to meet high quality specifications.

The application of ladle finishing is unquestionably warranted to improve, and to narrow the variations of, the longitudinal and transverse mechanical properties of high-strength oil-industry pipes, boiler tubes, and cold-drawn special tubing.

The steel will be cast in a three-strand continuous casting machine, respectively it will be teemed into ingot molds by mechanized teeming. We took into consideration also the casting of three successive heats in the casting machine, so that every fourth heat will be teemed into molds. We plan to computerize process control and the scheduling of melting, ladle finishing and casting. In addition to the principal production installations and auxiliaries of the steel mill, other supplementary investments also will be necessary. These include storage bins for the added materials, terminals for the power supply and natural gas, dust-control equipment, waterworks, sewage plant, conveniences for the workers, etc.

The manpower requirements for the new steel mill will be 480 workers. At current prices, the cost of the investment will be 5.4 billion forints. We hope to realize this investment within 2.5 to 3 years from the commencement of site clearing. Scheduling of the investment in the new steel plant must be coordinated with progress on the construction of the new pipe mill, and the investment will have to be subdivided into phases.

The limiting conditions of subdivision into phases are as follows:

Availability of financial resources,
Uninterrupted vertical production relations,
Economic product structure even if the vertical production relations are expanded in stages,
Even production rates, without production dropouts.

At the end of 1978 the management of the Csepel Works reviewed the complex plan for the development of steel production and tube production, because of changes that occurred in the conditions of development and in order to further reduce the investment costs.

Among the changes that occurred in the conditions of development, the priority of developing the production of cold-drawn tubin, the possible site of the tube mill's captive steel production, and the need of ensuring the economic effectiveness of the vertical production relations raised the question of developing a new site. A new proposal was elaborated that called for locating the 6-inch push bench at a new site, in the immediate vicinity of the steelmaking base. The great advantage of this new site manifests itself in that the hauling of the 240,000 TPY of starting material for the push bench would be eliminated, and production cooperation between steelmaking and the output of tubing could be ensured. The supplementary investments associated with steelmaking (sewers, water supply, installation of electricity and natural gas, etc.) could be shared by the new integrated steel plant and tube mill, resulting in lower investment and operating costs and in a reduction of the manpower requirement.

As a further advantage for the tube mill, the investment would disrupt production of the mill's existing facilities not at all or only to an exceptionally small extent, and in this way the very costly and unforeseeable temporary solutions and shutdowns could be avoided. Another advantage of a

common site is that the conveniences for the workers could be shared, permitting a reduction of the construction costs. Furthermore, control of the entire integrated operation could be computerized, enhancing maximum utilization of capacity and optimal costs.

(The concept outlined above has not yet been approved by the management of the Csepel Works.)

In conjunction with the 311-million-forint upgrading investments in our steel mill, I mentioned that the investments only served to alleviate the manpower shortage but were unable to arrest the decline of the labor force. Our present 18 percent vacancy rate is already jeopardizing the further operation of our open-hearth furnaces. Our steel output will decline considerably in 1980, which will cause a serious problem in supplying starting materials for the tube mill. Maintenance of production will depend on the further development of the work force. Reduction of the steel output in Csepel would further intensify Hungary's steel supply problems.

Seeing the present serious situation of our steelmaking, the management of the open-hearth plant ordered the elaboration of a two-phase variant for developing the production of electric steel.

In the first phase our present output of open-hearth steel would be discontinued, and the new steel plant's output would be 200,000 TPY, which would ensure starting materials for the tube mill at the present level of in-house supply.

The steel plant would include an electric arc furnace, a ladle-finishing facility, and continuous casting.

The first phase would be realized on the site proposed for developing the 350,000 TPY output of electric steel, in such a way that the realization of the second phase would permit operation at full capacity. In this case the second phase of steelmaking would adapt to the realization of the development of tube production, ensuring the technological integration of the two plants.

With the realization of the first phase, then, our open-hearth plant would be shut down in such a way that the Hungarian iron and steel industry would be relieved of supplementary tasks that do not belong in its product mix. In August of this year the Metallurgical Committee of the Iron Workers Trade Union debated the problems of steel supply in Csepel.

Representatives of MVAE [Hungarian Iron and Steel Association], Danube Iron Works, Ozd Metallurgical Works, Lenin Metallurgical Works, and Csepel Works also were present at this session. A consensus developed that Csepel's steel supply could be solved only through investments. The conditions of Hungarian steelmaking do not permit the supply of small round ingots for the production of tubing in Csepel, and if steelmaking in Csepel is discontinued, the supply of the tube mill with starting materials cannot

be ensured. There was also agreement that open-hearth steelmaking in Csepel can be phased out the most expediently and at most favorable outlays--taking also the transportation costs into account--by realizing the first phase of the development of electric steel production in Csepel.

The investment cost of discontinuing open-hearth steelmaking in Csepel--i.e., of realizing the first phase--is 2.992 billion forints at 1978 prices. The manpower requirement is 350 workers, while the manpower requirement of the remaining electric furnaces is 130.

The plan outlined above dovetails with the concepts for developing ferrous metallurgy in Hungary. It economically ensures the Csepel tube mill's supply with starting materials. And last but not least, it realizes also in our steel plant the "technological change" that unquestionably will be necessary in the near future, for reasons of economy and of supplying high-quality materials.

1014
CSO: 2500

ENTERPRISES TO COLLABORATE IN PRODUCTION OF COSTLY CHEMICAL INTERMEDIARIES

Budapest NEPSZAVA in Hungarian 16 Aug 80 p 3

[Article by Tibor Flanek: "Integration in the Large and the Small"]

[Text] One of the critical problems in the development of the Hungarian pharmaceutical industry and the related manufacture of herbicides is undoubtedly where, how, and mainly for how much it will be able to obtain those chemical intermediaries of complex composition and almost unpronounceable names for which individually there is no great need, but which, in their totality, represent one of the most important expenditure entries in the export-import balance of that industrial branch. We spend annually several tens of millions of dollars to acquire these products. Thus the improvement in the economy of our pharmaceutical industry is made difficult not only by a range of products which is wider than that of the international monopolies themselves, but also by the relatively high proportion of preparations manufactured in small numbers and at low profitability, if not loss. The different kinds of starting materials also cause great problems.

In theory, one could do something about this. Modernization of the product structure, termination of production at a loss is nowadays as much a task of the pharmaceutical industry as of any other branch. And we cannot say that we have not seen such efforts. But in addition to the economy requirements, the pharmaceutical industry must take another factor into account. Namely, that besides its obligations to the national economy, it also bears responsibility for the domestic pharmaceutical supply.

The Supply Responsibility

The pharmaceutical industry cannot withdraw this or that product from the market because it is selling at a loss. We are aware that such a step can cause problems even in the case of less vital items—for example, a shaving soap one has become accustomed to, or a shoe polish—but in the case of medicines this is simply not permissible.

Of course, socialist integration and international cooperation are available. In fact, we have already signed specialization agreements with the

Soviet Union and other socialist countries. These are working well, but there is little possibility that they can be expanded at a rapid rate for the time being. And there are capitalist imports, but we must take into account the fact that from the developed capitalist countries we buy pharmaceuticals at a cost two to three times higher than our own.

The Hungarian pharmaceutical industry resigns itself to this situation when, to protect the price level and moderate the country's import expenditures, it continues to manufacture products at the lower level of rentability, or even below it. Besides further investigating the possibilities of integration, they are seeking to improve profitability primarily by reducing costs as well as by introducing new, original Hungarian preparations on the world market.

One path of development, therefore, is more intensive research and an active market policy; and in production, the improvement of technologies and a more modern organization. The other course--where the reserves are greater--is for us to obtain, or manufacture domestically the in-between products, the so-called intermediaries, which serve as the starting materials for pharmaceutical and herbicide production.

It is not without reason that recently the organization of the domestic manufacture of intermediaries has come to the center of attention. Some of them are already made here at home, and thus there is a realistic basis for the development. But the Hungarian chemical industry will never be able to manufacture all of them because it is necessary for the pharmaceutical and herbicide industry, and the paint and plastics industries to have several hundred different kinds of compounds. On this long list there are some for which a whole year's requirement is measured not in tons but in kilos.

But all in all, these kilos also represent a very heavy import burden for the economy. Moreover, the foreign firms do not sell such materials willingly, because when they process them further they can make a much greater profit on the finished product. The security of pharmaceutical manufacture as well requires that--if at all possible--we solve the problem of domestic manufacture.

Successful Export--With Question Marks

The fact that the basic materials are also available to us suggests that we organize the manufacture of the most important intermediary products. These are petrochemical products and it would have been possible to conceive that the also otherwise successful petrochemical central development program would have extended in this direction. But there was not enough for all this, and the domestic plastic manufacture development was at least as important. Today the results that the manufacture and export of ethylene, PVC, and polypropylene have developed on a petrochemical basis should clearly improve the payments balance of the economy.

So-called aromatic products obtained in the process of petroleum refining also are successful export items and marketable at good price. There is, for example, benzol and toluol. But it quickly becomes evident that it is not such a great business to sell these products if we consider that the Hungarian chemical industry buys abroad at terribly high prices the intermediary products that are made from them. As a matter of fact, it is with the use of benzol derivatives that the Hungarians make such medicines as Papaverin, No-Spa, and Dopegyt, and herbicides like Fundazol and Propaklor. Sevenal, Noxiron, Fenilglicin, Halidor and Chlorocid are made from intermediaries with a Toluol base, as well as a series of paint colors and the PVC emollient.

These are only several examples out of many. All of them show that in the final analysis even exports that appear to be good for the economy are not always market bombshells.

Of course, the dimensions of our chemical industry and our pharmaceutical and herbicide industry are dwarfed alongside those of the large international monopolies. What they can do--control the entire production chain from the basic material to the final product--is not possible for Hungary. Or at least not in every area. If we want to narrow the production scale of the pharmaceutical industry, we cannot fall into the opposite extreme in case of the chemical intermediary products.

Without Being Exploited

But there is a rational middle course. The manufacture of the most important intermediaries necessary in the largest volume can be solved. Under the guidance of the Ministry of Heavy Industry we are realizing one-half billion forint investments each at the Borsod Chemical Combine, at the Fuzfo Nitrochemical and the Pet Nitrogen Works, and thus with the beginning of the next plan period more than $10 million in imports will become necessary.

We have not given up on the production of the intermediaries used in lesser volume, since these also represent a burden of many billions of dollars. But this cannot be centrally guided, and there is no material cover for additional and significant investments. But the ideas of various sized collectives, of specialists working in research institutes or cooperatives, or of private persons can make possible the savings of additional millions of dollars. The ministry is giving incentive with competitions to the realization of such ideas as do not require investments.

The essence of the matter is that in the narrow sense of the word it should be possible to moderate the burdens of the economy with social forces as well. It is worthwhile to manufacture certain intermediaries even in laboratories. It is not the volume, but the value that is important.

Of course, economy is the basic requirement. Therefore we cannot strive for complete self-sufficiency. We must exploit our own possibilities better, as well as the advantages in international cooperation. A good example is the cooperation between the Budapest Chemical Works and an Austrian firm: in return for the intermediaries manufactured in Hungary, the Hungarian party receives end-product herbicides.

Similarly, the true, long-term solution must be based on mutual advantages and interdependence. This is the one way in which we can put an end to frequent vulnerability to exploitation and obtain at realistic price, and with certainty of supply, everything which Hungarian industry, agriculture and consumers need.

6691
CSO: 2500

BROADER, STRICTER GRADING OF WHEAT ADOPTED

Budapest FIGYELO in Hungarian 30 Jul 80 p 11

[Article by Dr Jozsef Bagi: "The Quality of Wheat"]

[Text] In the course of the past decade, our grain production has increased significantly, and did so primarily because of an increase in yield, and not because of the extension of the land under cultivation.

During the period of the Fourth Five-Year Plan, the yield of wheat increased at an average annual rate of 4 percent. During the Fifth Five-Year Plan—discounting the past year with its unfavorable yield—this increase in production continued.

In 1979, after several years of preparation, the Council of Ministers passed a resolution ordering the purchase of agricultural products to be done in accordance with their quality. In line with this resolution by the Council of Ministers, this system of purchase based on the product's qualities must be further improved. A resolution by the Ministry of Agriculture and Food Industry for the year 1980 makes it obligatory for all wheat to be purchased purely on the basis of qualitative considerations. These resolutions by the Council of Ministers and by the Ministry of Agriculture and Food Industry place significant goals before all agricultural establishments, as well as before the county purchasing branches of the Grain Trust. The species composition of the winter wheat sowings for 1979 indicates that the area devoted to the growing of better quality improved-wheat has increased considerably.

The system that has been used up to now to classify wheat evolved during the 1950's. Ever since that time the emphasis has been on producing better quality wheat even though this meant a relatively low yield. Moreover, the country's wheat production was dominated only by one or two species. The inner qualities of these species were more stable, and they satisfied all of the qualitative requirements. Thus, at the time of their classification, emphasis was placed only on the examination of their storing and their milling capacities. Their inner quality was examined only through random samplings.

The quantity of current production exceeds the domestic demands, but this quantity is achieved only through advanced agricultural methods, and through the production of about 20 different species of wheat. As such, the quality of wheat production varies from species to species, from region to region, and in many instances also with the agrotechnical methods used.

Consumers' needs have also changed. The rise in the quality of life produced higher qualitative expectations, and the earlier quantitative problems were replaced by qualitative expectations.

The New Classification System

According to the new classification system, the pruchase of the wheat is accompanied by a laboratory examination of the species, its water content, its mixability, its weight per hektoliter, its ability to withstand insects, its wet gluten content, its backing quality, and its enzyme status.

Many years of experimentation have proved conclusively that quality depends basically on the species. Low yield of good quality wheat is usually the result of agrotechnical and harvesting errors. At the same time, low quality wheat will never yield high quality products. The new regulations concerning wheat quality and wheat pricing distinguishes between three types of wheat: Improved food wheat, customary flour wheat, and fodder wheat.

The system of purchase based on the examination of the species and of the wheat's makeup was preceded by 2 years of experimentations. In 1978, this systematic comparative examination was conducted at the country's 25 large purchase depots, while in 1979 it was already being done at 30 places. On the basis of these examinations we have identified those improved species that yield the highest qualities. The GK-Tiszataj, the Martonvasar, and the Partizanka types proved to be the ones with the highest gluten content and with the best baking quality in every region. In good wheat-growing regions and with acceptable agrotechnical methods, the Yubileynaya type was also able to fulfill the quality requirements. Besides species and agrotechnical methods, quality is most influenced by the agricultural region. The gluten content of the GK-Tisztaj type, was between 21 and 43 percent.

The wheat's baking quality is also influenced by the region's climate, as well as by the harvest time. With untimely harvesting and with badly executed artificial drying, one can destroy even the best quality crop to such a degree that it becomes unfit to be used as a food product.

[Purchase and Prices]

This year the wheat is being classified in 102 laboratories. The method of classification is in accordance with the norms and the price regulations. Within 15 days of having received the samples, the results of the tests are

available to the agricultural enterprises. Disagreements are being judged and decided by the County Institute of Food Inspection and Chemical Analyses. Purchase is being conducted at about 1,000 separate places. The purchase capacity is indicated by the fact that, on the basis of 12-hour work day, the Grain Trade and Mill Industry Companies of the individual counties are able to handle 300,000 tons of wheat per day.

The stabilization of the production is underscored by the fact that, in the course of the past 10 years, the size of the wheat-growing area remained basically constant at about 1.3 million hektares. In 1980, the effective purchase price of fodder wheat 15 280 forints per quintal, flour wheat costs 310 forints per quintal, and of improved food wheat costs 325 forints per quintal.

Higher purchase prices are in the interest of all agricultural producers. But they receive this higher price only for the production of high quality wheat. In the course of the past few years, the size of the yields in large-scale production has developed approximately the same for all three of these wheat types. This all seems to prove that our current and long-range "species policy," i.e. the availability of better-quality species of wheat, will continue to ensure higher quality and larger yields in the future.

9271
CSO: 2500

GIEREK-BREZHNEV MEETING VIS-A-VIS POLISH MALAISE VIEWED

Paris LE FIGARO in French 31 Jul 80 p 3

[Article by Denis Legras--passages between slantlines originally published in italics]

[Text] Of all the Eastern Europe party chiefs who, following tradition, have come or will be coming to meet Leonid Brezhnev on the banks of the Black Sea where he is resting, Edward Gierek, who arrived last Sunday, will doubtless get the longest audience.

It may be difficult to discern from the language of a terse communique what is said in secret in the Oreanda villas, but all the same one can speculate that the talks will cover two specific points: the conference on military detente and disarmament in Europe, and the social and economic situation in Poland.

The idea for this forum to bring together the signatories of the Final Act of Helsinki was launched last year in the spring in Budapest, and was taken up by Poland, which volunteered to organize it. Step by step the socialist countries, and above all Poland, are trying to tighten the focus on the main themes, and the means for achieving real military detente in Europe.

The Kremlin gives the impression of leaving all the initiative on this to Warsaw, but from all the evidence it is calling the shots. Leonid Brezhnev, moreover, does not hide this in his "answers to PRAVDA's questions," on the occasion of the 5th anniversary of the Helsinki Accords: /"The immediate objective now,"/ he says, /"is to assure the holding of a European conference on military detente and disarmament .... The important thing is to find the way toward an attenuation of the military threat, now and in the future, to Europe and consequently to the entire world. This goal cannot be achieved if there has not been real progress in the field of limiting the arms race."/

For the Soviets' number one, detente /"can go through ebbs and flows,"/ but the Final Act of Helsinki /"is a good breakwater which resists

anything that undermines the foundations of detente."/ That does not mean, for all that, that the accords signed in the Finnish capital are sufficient by themselves, and therefore we have this proposed conference, which in the Soviet view, while not being a miracle cure, would facilitate limiting the threat of confrontations in Europe. They also thus confirm that in their view detente is divisible.

Ideological Heresy

On the banks of the Black Sea, Leonid Brezhnev and Edward Gierek will try to refine this proposal, which they intend to see presented in Madrid in the fall, and to pin down the areas that could be studied by the experts. Several articles, published by the Polish press have already spelled out the contents: the conference agenda would include, according to the monthly WIDNOKREGI, an extension of the confidence--[building] measures contained in the Helsinki Act, notably with respect to notification and the scale of military maneuvers; but also the elaboration of measures aimed at avoiding [the danger of] surprise attacks, and looking toward a decline in conventional and nuclear armaments.

No doubt when the first secretary gets back to Warsaw, the field of action of this all-European conference will have been sketched out in more detail.

Leonid Brezhnev will change from counselor to inquisitor when the talk turns to purely Polish questions. The Soviet press and the media have maintained a total silence with respect to what is euphemistically called in Warsaw "temporary work stoppages," a silence which in reality is an expression of profound concern. The "Truth in Pricing" program launched by the new Polish prime minister surely met with the approval of his Soviet interlocutors, to the extent that it should permit an economic recovery in Poland. But its social consequences are being watched closely by the Kremlin.

The extremely circumspect way the Polish government is trying to contain the worker protests by "dialog" is certainly appreciated by the Soviet leadership, for it should make it possible to avoid any uprisings like those at Gdansk, Ursus and Radom. But conversely, this form of democracy at the base borders on ideological heresy. In the Soviet scheme of things, the trade union is no more than a relay between government and "the mass of workers;" if it is used in the reverse direction it becomes a disputacious element and loses its role.

Such a situation is unimaginable in the Soviet Union, and is tolerable for Moscow in the countries of Eastern Europe [only] on condition that the movement remains discreet. The example of Hungary should be able to convince Muscovite ideologists that doctrine is basically safe, but will Edward Gierek, who himself must face a demanding Catholic church, be able to walk the same tightrope as Janos Kadar unhindered?

Nothing is less certain. This is what Leonid Brezhnev will doubtless make clear to his guest for a day.

9516
CSO: 3100

DEMANDS OF STRIKERS NOTED

Paris LE MONDE in French 1 Aug 80 p 4

[Article]

[Text] Warsaw (AFP)--Streetcar workers in the urban complex of Gdansk-Gdynia-Sopot, on the coast of the Baltic Sea, the scene of the events of December 1970, observed a warning strike of half-hour duration on Tuesday, 29 July, it was learned Wednesday, 30 July in Warsaw. The strikers, who are demanding wage increases, declared themselves ready to stop working again if their demands were not satisfied without further delay.

Elsewhere, the 3,000 workers in the DOLMEL factory (electric turbines) in Wroclaw (the capital of Lower Silesia) also walked out Tuesday. They are demanding wage increases, improvement of the [consumer] supplies situation, and alinement of their family allowances with those of the police and the army.

In this latter city, the attempts by the official trade unions aimed at channeling the activist labor movement do not appear to have been crowned with success everywhere. The situation remained confused Wednesday in several enterprises downtown, the workers refusing to let the trade unions defend their demands. Discussions are supposed to be continuing with the leaders concerned, while production continues as before.

9516
CSO: 3100

GRUMBLING AMONG WRITERS REPORTED

Paris LE FIGARO in French 4 Aug 80 p 4

[Article by Bernard Marguerite--passages between slantlines originally published in italics]

[Text] Warsaw--More and more urgent appeals are making themselves heard in the Polish press for structural reform and a degree of democratization. Following POLITYKA another weekly, KULTURA, has come out clearly in this vein. Pressure for change is also mounting even within the party. One of the best examples of this is the first bulletin published by the party cell of the writers' association.

This bulletin number 1 opens, in fact, with an article signed /"The Executive"/, wherein one reads, among other things: /"We are not satisfied with the conditions of political and material existence of literature in our country. We have said it before, and we will continue to say it."/ The editorial criticizes censorship and proclaims: /"The limits of censorship are debatable, and we will do all we can to put it as far away from us as possible, in accordance with the letter and the spirit of the constitution."/ It is essential, in fact, to /"eliminate the anachronistic and subjective obstacles of censorship."/

The writer Jerzy Jasionowski also addresses this problem:

/"Literary works,"/ he writes, /"are castrated upon the arbitrary judgment of various censors. The same text may be unacceptable in Lodz, but acceptable in Warsaw. As a result, petty officials in the censorship office can decide what of all the literature will be passed on to posterity and what will be eliminated. The more fearful they are, the worse the situation is."/

As for well-known writer and critic Andrzej Mencwel, he raises his voice against the refusal, for years now, [of the authorities] to publish a book by Andrzejewski. He also deplores the prohibition by the censorship office of mentioning the names of certain writers of which the regime takes a dim view, and the prohibition against presenting critical reviews

of works put out by dissidents. These prohibitions, the author says, don't just affect the banned writers. Rather, /"They hit us too, by putting us in an apparently privileged position which, in fact, limits our freedom of action."/

The party bulletin, on the other hand, complains bitterly about the dissidents whom it accuses of /intellectual stalinism in reverse,/ simultaneously showing a certain [attitude of] ostracism towards writers who do not publish in the /underground/ editions, and also producing a literature of strong political coloration which, seen from here, is almost as simplistic as the work published in the Stalin era.

The objective of the writers' association, according to the party cell, is to be a partner in the elaboration of cultural policy: it must continue to act in this direction, even though up to now this goal has not been possible to attain. The writers in the party thus intend, evidently, to make themselves the spokesman for the community of intellectuals vis-a-vis the government, and thereby to succeed in a role which the trade unions, for example, have been incapable of fulfilling with respect to the representation of the workers. One eminent writer, a member of the central committee, summarized in these terms this campaign: /"We have no choice if we want to avoid what happened in Czechoslovakia. If we do not want the writers' association to be taken over by irresponsible revisionists, it is up to us to set the example."/

9516
CSO: 3100

POLITICIZATION OF STRIKES NOTED

Paris LE FIGARO in French 11 Aug 80 p 2

[Article by Bernard Margueritte]

[Text] Warsaw--Far from fading away, the wave of worker strikes which has shaken Poland for six weeks is only expanding and above all, which is especially disturbing for the government, becoming more and more politicized.

It is estimated, in fact, that about 50 incidents or work stoppages have occurred since the beginning of July. Lastly, it has been the cleaning workers who have gone on strike. Their demands include not only increased wages, better meat supplies and social benefits, but also the demand that there be free elections for union representatives. Very interestingly, these demands have been addressed not only to the government but also to the workers' committee that continues to function in the tractor factories of Ursus, near Warsaw. A second committee of the same kind has held out in Lublin. It too, taking up for example the demands of the 20,000 striking workers for the second time in a month this week at Swidnik, is demanding free elections in the trade unions.

The authorities are more and more powerless, due to their failure to have acted in time to accept trade unions, as in Hungary, that represent the workers' interests while remaining linked to the government. Now they are threatened by the appearance of an authentic movement representing the workers. The ideological and politican danger is indeed great, but the leaders are hardly, in the present state of events, in a position to effectively fight back.

It would, however, be naive to exaggerate the scope of these demonstrations of worker democracy. In 1956 and 1957 very active "workers' councils" were functioning throughout the country. In December 1970 and in early 1971, worker committees were created in the shipyards of Gdansk, Gdynia and Szczecin. In each case, these groups authentically representing the workers were suppressed as soon as the government regained some stability.

However that may be, the strike movements continue, further aggravating an economic situation which is already difficult. According to one well-known Polish personality, the wage increases already granted are going to cost the state budget 20 billion zlotys. Moreover, the bumbling attitudes of the authorities provoke the workers to go on strike. In some cases, in fact, such as in a plastics factory in Silesia, wage increases are being granted only to those workers who have already gone on strike. In other cases, strikers are getting increases greater than those given to non-strikers. Thus in Warsaw's joint transport enterprise, the employees who had struck obtained a wage increase of 1.50 zlotys per hour, while the non-strikers got only an increase of 1.10 zlotys ....

So it is a completely anarchic situation. All this explains why the malaise is becoming more and more perceptible even within the party. The next plenary session of the central committee, which should meet about 5 September, is thus being awaited with growing impatience. The leadership of the party, in effect, will have to resolve to tell the public what it intends to do to get the country out of the grave crisis in which it is becoming more and more deeply enmeshed.

9516
CSO: 3100

GDANSK REGION STRIKE, PREMIER BABIUCH APPEAL NOTED

Agitation Becomes Political

Paris LE MONDE in French 17-18 Aug 80 pp 1, 2

[Article by Bernard Guetta--passages between slantlines originally published in italics]

[Text] Communications between the city of Gdansk and the outside have been cut since the afternoon of Friday, 15 August. We were able to learn, previously, that the strikers in the Lenin shipyards, whose demands have politicized the present strikes, were followed in a completely peaceful way, by some 30,000 workers from other enterprises on the Baltic port.

The way the prime minister, Mr Babiuch, spoke Friday night on television to the population expressed both the confusion of the authorities and the limits of the possible: without making concessions to the strikers, he only promised to maintain meat prices at their present levels (increased starting 1 July 1980) through 1981. The press and television are stepping up appeals to "self-discipline."

Mr Gierek, the party chief, who had met Mr Brezhnev in the Crimea on 31 July, cut short his vacation in the USSR by 24 hours to return to Warsaw. In Bonn, where developments in Poland are being followed "attentively," it is hoped that there will not be "consequences" for the talks Mr Gierek is supposed to have in Hamburg with Chancellor Schmidt on 19 and 20 August.

Neither in Moscow nor in the other capitals of the socialist community is anyone commenting on the Polish strikes. In Tirana, by contrast, the party organ ZERI I POPULLIT writes that they demonstrate "the hatred and

opposition of the workers to the capitalist, anti-popular, anti-national policy of the Warsaw revisionists."

Warsaw--A month and a half now of repeated and successful strikes. Warsaw without public transport for 4 days this week. And now Gdansk, alarmingly calm, in revolt. All this in a communist country, within the territory of the biggest of the USSR's European allies. Where is Poland headed?

Some shrugging of the shoulders, arms lifted up to the sky, and a poignant murmur /("a catastrophic situation, grave, very grave")/. This is the only response one can pull from official spokesmen. They do not become unstrung; they are not trying in some obscure way to dramatize things. No, they simply do not know; the propaganda department is no longer putting out situation reports on which they can elaborate; and the demoralization of officials is mirrored by the worry of the Poles.

The opposition is no longer garrulous, or sure of itself. It should, however, claim victory. Following the riots of 1976, in efforts to obtain amnesty for the convicted workers, it was down to a handful of intellectuals. It has increased, developed a powerful clandestine press network, and, since 1 July, whenever a new strike has broken out the first action taken by the strikers has been to inform Mr Jacek Kuron, the principal leader of the Committee for Social Self-Defense (KOR). Spontaneously, unanimously, the popular discontent has anointed the main opposition group with political and moral authority.

But these dissidents are not in any danger now from visionary fire-brands, and their entusiasm is strongly mixed with anxiety.

They know that if the authorities do not resolve quickly upon major political concessions, the extraordinary quiet explosion which has shaken Poland for 7 weeks could turn into tragedy. Everyone wants to believe that Soviet intervention is improbable, because of the fierce resistance it would encounter and because there is also the Afghan front. But everyone also knows that it could become possible, should the leadership, out of failure to take bold action, allow the chaotic wave of strikes to spread.

In Gdansk it is already a fact: the agitation for better social conditions has already taken a political turn. Just before last weekend began, management at the shipyards thinks it prudent to dismiss three agitating workers pre-emptively. Two of them, Mrs Anna Walentynowicz and Mr Nowicki, are old members of the 1970 strike committee. All three are linked to the opposition and participate in the editing of the opposition labor bulletin, ROBOTNIK ["The Worker"], which is widely disseminated in Gdansk. Time for discussing how to respond, to prepare statements, to make the roneos [translation unknown] turn, and the strike breaks out Thursday 14 August in the morning, after a distribution of tracts.

Three hundred people are going to demonstrate outside the management's offices, brandishing pennants: /"Restore the rolls," "Raise our wages!"/ A strike committee--10 people at first, 100 now--is formed. The movement spreads through the whole Lenin shipyard. Mrs Walentynowicz is reinstated by early afternoon. But there are 17,000 strikers, and negotiations must be begun. They will last until 0100, in the presence of the vovoide [translation unknown], and are followed by all the workers, broadcast direct by loud speakers.

A political theme--solidarity--lies at the orig'n of the movement: a political group played a decisive role in organizing it, but this is nothing beside the shock of the demands advanced.

In addition to wage increases (2,000 zlotys)*, retirement pensions and family allowances, the workers are also demanding the erection on the yard of a monument to the memory of the victims of the repression of December 1970 (several dozen deaths): the reinstatement of all persons discharged at that time; recognition of a representative trade union; the dissolution of the national directorate of the official trade union; the liberation of political prisoners; the closing fo the so-called /"commerc al"/ stores, whose prices are higher and which are getting more numerous; an audience with the prime minister; a pledge of impunity for the members of the strike committee, and finally, the publication of these demands in the press.

Friday at 0600 the management lets it be known that it is reconsidering the dismissals, that it agrees to the increase in family allowances to correspond, as demanded, with those for the police, a wage increase of 1,200 zlotys, that there will be no reprisals, and--what is unheard of--that the monument will be built to commemorate the 10th anniversary of December 1970. Activity and work must be resumed.

Not only is there no resumption, but the bus drivers in the city walk off, as well as [workers in] several other yards. The inhabitants are going to bring victuals and the results of their collections to the strikers who are occupying their place of work, and Gdansk (which suddenly cannot be reached by telephone) seemed, that evening, totally paralyzed.

Mr Babiuch's Intervention

Meanwhile, in Warsaw, Mr Gierek had returned in the morning, 24 hours early, from his Soviet vacation. An insistent rumor about an immediate convocation of the Political Bureau, followed by an important announcement, ran through the capital, and already theories are built up on the extent of the leadership shake-up. A shake-up which seemed indispensable and unavoidable to many officials. There was not (officially, at least)

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* 1 zloty is worth about 13 centimes at official rates

a meeting of the Political Bureau, and no announcement. Only, after the televised evening news, a speech by the prime minister, Mr Edward Babiuch.

A strange, unreal sight: this small pudgy man, neuter and unexpressive, a portrait in shades of gray, reading carefully, seated, bent over under the Polish eagle, a long monotonous text whose only surprise was that it contained no surprise. Only mention of the aggravation of tension, /"the larger scale"/ of /"work stoppages"/ in Gdansk, and a moderate paragraph against /"enemies of people's Poland who are trying to profit from the atmosphere of tension and emotion for their [own] political ends."/

The rest of it was just everything is going badly but everything is all right. Everything is going badly in all sectors of the economy and in [availability] of supplies, and there is no miraculous remedy. The /"work stoppages"/, consequently, can only /"harm the interests"/ of the population, and the wage increases can only increase the deficit. We must work /"calmly, properly and with discipline"/ to solve the problems—which is not to impede discussion of the problems outside working hours and in a constructive and /"patriotic"/ spirit.

Everything is all right because /"I believe in the wisdom of the working class, in its class consciousness. I believe the working masses understand the exigencies of the state (...) and"/ (because) /"our common concern is the future of Poland."/ Four points more to raise: the government will present to the next plenary meeting of the Central Committee (at the end of September) /"detailed proposals"/ for resolving the economic crisis. Meat will not go up again between now and the fall of 1981. A very clear criticism of the former prime minister, Mr Jaroszewicz, relieved in February, who neither understand how to effectively head off the problems, nor warned the population. /"For many years,"/ he explained, /"we have spent more than we have produced, our national allocations have been greater than our national product, our national allocations have been greater than our national product, we have developed ourselves on credit."/ Today, /"Poland's level of indebtedness is such that it could not be further increased."/ And finally, one sentence: /"The world is watching us. We have loyal friends who are also concerned about our problems, who believe that we will be able to meet them alone, and who hope with all their hearts that we can."/

The general direction of his speech is clear: we know that you, the people, are sufficiently aware of the geo-political realities of the country to know not to go too far. It is therefore essential to wait for reason to prevail, not to dramatize the strikes, and to maintain the policy, adopted by the congress, of austerity and of very progressive mini-reforms.

It is a risky gamble. Economic recovery, for whatever reasons, will not meet expectations. And we will only be able to see in retrospect, tomorrow, or 6 months from now, whether it was not also playing with fire.

'We Will Hang On!'

Paris LE MONDE in French 17-18 Aug 80 p 2

[Text] Here is a report from AFP special correspondent Marian Kafarski, sent from Gdansk before telephonic communications were interrupted to the Baltic port.

After more than 30 hours of on-site striking, the atmosphere among the 16,000 workers in Gdansk's Lenin shipyards was one of determination.

Despite the discomfort and lack of sleep, the strikers are scarcely inclined to make the least concession. "We are steadfastly determined to continue with our action till our demands are met," we were told by Mrs Anna Walentynowicz, a member of the strike committee.

A heavy silence weighs over this place, usually swarming with life and resounding with the noises of sheet-steel working. The huge arms of the cranes are inert. The access gates to the shipyard are closed. Picketing strikers stand vigilant guard there and systematically empty every bottle of vodka contained in the baskets of provisions people have brought.

Before gate no 2, the same one where, in December 1970, the first strikers fell under fire from the army and the police, several hundred people have come to express their support for the workers. Mothers, wives have brought food for their son or husband. There is joking, smiling and mutual consoling.

The enormous grillwork gate is opened for the AFP representative, who is then amongst the strikers. Their expressions, unexpressive at first, brighten rapidly after introductions. The workers' responses are laconic. They can be summed up in one sentence: /"We will hold on!"/

In the immense conference hall of the shipyard, the strike committee is at full strength: about 100 people, compared with 20 at the beginning. The negotiations with management have been tough. They lasted until 0100 on Friday. The manager promised to resume with them at 0500. He has not yet come to the meeting. One hour later, he has made known his proposals: unacceptable, the strike committee answered, rejecting them out of hand.

The city of Gdansk is calm and quiet. The old city, moreover, has been paralyzed since Friday morning by a walk-out of public transport employees. In the streets, housewives hurry to do their shopping. The lines lengthen in front of the meat and pork shops, where smoked ham can be seen, a rather rare commodity. Immense waiting lines crowd around the bakers' shops overflowing [with people]. The deliveries didn't come? No, answers a cashier, people are stocking up provisions. Why? Instead of an answer, only a smile ....

In the sleeping city, no sign of police power. But the level-headedness of the angry workers and the inhabitants of Gdansk hides a worry that no one dares to express aloud. Everyone realizes that the situation is tense, as the grumbling of the workers at the shipyard has spread out over sister enterprises; the entire naval construction sector is affected by the strike. Work stoppages have hit ELMOR (electric installations), KLIMO (air conditioning), TECHMET (diverse installations) and OPAKOMET (metallic containers), among others. The workers at the North Yard (a new industrial port), for their part, had sent a delegation to their comrades in the Lenin shipyard.

9516
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'LE MONDE' COMMENTARY ON POLISH STRIKE, GEOPOLITICS NOTED

Paris LE MONDE in French 17-18 Aug 80 p 1

[Commentary]

[Text] The televised intervention of the Polish prime minister Friday evening is indicative of the disarray reigning in Warsaw: Mr Babiuch, in effect, has found nothing else to offer, in speaking to the strikers at Gdansk and elsewhere, than an indirect but perfectly clear allusion to an intervention by the Soviets, "our loyal friends, who are also concerned about our problems, who believe we will be able to meet them alone and who hope with all their hearts that we can ...."

History and geopolitics sometimes have implacable laws: thus the Polish authorities today have no other argument to offer the workers, whom in principle they represent, than the risk of intervention by the great protector of the socialist world. The argument, it is true, has carried some weight a few days from the 12th anniversary of the invasion of Czechoslovakia. However, at this point, there are no clear indications that this sinister scenario is going to be repeated. But the threat hovers overhead, even if the USSR, already entangled in Afghanistan, knows perfectly well that the Poles would not remain passive before an attempt at "normalization."

The labor crisis which is agitating Poland could not, however, have taken the leadership by surprise. After all, a similar crisis--though more violent--was what brought Mr Gierek's rise to power. If he is logical with himself, the Polish leader can only resort, once again, to negotiation. Did he not promise, right after the bloody repression of the Gdansk revolt of 1970, that never again would workers be fired on? We must hope that all the members of his team feel themselves equally bound by such a promise.

Other commitments, however, have not been kept. This is especially the case with the reform of the Polish labor apparatus, one of the questions which most stirs up the workers. Despite the revolts in Poznan, Gdansk, Ursus and Radom in 1976, which always started in factories and which

expressed the depth of the worker dissatisfaction with the absence of any forum of appeal, the communist government has not in any way modified the operation and the formal role of the trade unions. As in 1970, the latter are again headed by a veteran bereft of real power, Mr Kruczek, a survivor of the Gomulka era allied with Edward Gierek.

However, following the Baltic riots, voices made themselves heard not only in Poland, but also in the other countries of the East, such as Hungary and Romania, calling for a revision of the role of the trade unions. They were not heard, and as in the past, the trade unions are locked into the role of driving belt between the workers and the party. Which has generated the most explosive demand of the strikers of Gdansk, who demand the dissolution of the Central Council of Trade Unions and the creation of free unions.

This demand, which the strikers have apparently not abandoned, makes it impossible for the Polish leaders to continue to present the movement as purely "economic." This is what gives a new dimension to the crisis and puts Mr Gierek up against the wall. It is in effect practically impossible for him to defuse these "political" demands with "economic" concessions, however grave may be the country's situation on the economic plane: external indebtedness is breaking all records, energy costs—despite the increase in the price of coal—get heavier all the time, and the system of subsidization of food products, ruinous for the Polish state, is shown to be impossible to modify without bringing new protests.

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LEADERSHIP'S ATTEMPTS TO SOLVE ECONOMIC PROBLEMS ANALYZED

London DZIENNIK POLSKI in Polish 9 Aug 80 p 4

[Article by Jozef Wroblon: "Who Will Guide Poland's Fortunes?"]

[Text] E. Babiuch Is in No Position to Undertake Economic Reform

In the wake of Stalin's death, one of the changes instituted in the ruling systems of Warsaw Pact countries was a repeal of the prohibition on obtaining loans from the West. Because Stalin was wary of Westerners even when they were offering dollar loans, he had forbidden Poland, among other countries, to partake of the benefits offered to it under the Marshall Plan. The relaxation of USSR-imposed discipline, continuing to this day, was used to advantage by E. Gierek who by June 1980 drove Poland's debt toward the Western countries to 19.5 billion dollars.

Unforeseen Consequence of Western Loans

Despite their considerable knowledge about Poland's political life, Americans, I believe, had not anticipated the far-reaching results caused by liberal granting of loans to a government incapable of putting them to proper use. Nothing seemed to indicate that an influx of funds, coupled with managerial ineptness, would cause the demotion of P. Jaroszewicz who as prime minister was responsible for the country's economic failure in 1971-80. This development was even more unexpected in view of the fact that P. Jaroszewicz enjoyed the trust of E. Gierek and his superiors, that is to say, he had proper "qualifications" for that post. A lack of trust was the undoing of by far more reasonable men like St. Olszowski and J. Szydlak who had the ambition and potential to correct P. Jaroszewicz's mistakes. They were doomed a long time before the PZPR Congress, whereas Jaroszewicz was only toppled by behind-the-scenes interventions of persons dissatisfied with the course of the congress.

Edward Babiuch's Program

This year's elected Sejm deputies listened in a session to a speech by Edward Gierek who presented an outline of Poland's social problems. It

dictated improvement of remuneration for efficient work and lowering of undeservedly high salaries. Further, it included providing support for families in difficult financial conditions and refinement of the principles permitting access to education, medical care and housing. Finally, Gierek[75] provided guidelines covering cadre-selection policies and employee promotion. It was nearly everything that seminar briefings at the Kremlin or in Crimea allow in the area of social issues. The extent of illusory correctness of these unrealistic directives is indicated, among other things, by the fact that even in 1978 a total of 42 percent of gainfully employed persons had earnings below the minimum of indispensable means of livelihood, and subsequent price increases drove them even lower down the scale of meeting their needs, as all of these people earned less than 4,000 zlotys a month.

Transposing those general directives onto problems that were closer to day-to-day life, Edward Babiuch had to accommodate the economic situation in his speech. It is generally known, however, that a prime minister is subject to no scrutiny in Poland. His only test comes in real life. This happens the sooner the more promising are his programs. Therefore, while E. Babiuch referred to price raises as one among the means leading to economic reform, these proved to be, after a few short months, the only item in his program that did not take long to be implemented.

Babiuch's expose gave top ranking to the problem of Poland's foreign debt, indicating the urgency of its reduction. The foreign trade deficit and substantial debt to hard-currency countries result, above all, from mistakes committed over a long period of time. It could be expected, therefore, that in his first speech Babiuch would give primary exposure to the origins of the economic disaster, rather than its consequences that are common knowledge. Before we deal with the tangibles that have remained of that speech, let us first survey its content in brief.

Next to Poland's foreign debt, the prime minister discussed shortfalls in market deliveries, persisting since 1945, though he recognized them as a novel phenomenon thus demonstrating in this regard a poorer grasp of matters of daily life than an ordinary man in the street. Subsequently, charges were leveled against agriculture because of its low output. Mention was also made of difficulties in the deliveries of crude oil and coal, raw materials and other materials, and of oversights in transport investments. Listed only at the end of this long tally of economic flaws were defects in the functioning of authority or, in common parlance, ineptness of ministers and bodies under their control.

The reasons that forced the prime minister to present a list of difficulties under which the entire economy is breaking down are profound and are certainly more serious than official communiques would seem to indicate. Their message is indeed one of "results in the black" but the truth can be actually described as nothing but a "black hole." Thus, it was officially announced that in 1979 the population purchased 73 billion zlotys' worth

less of needed articles than people sought to buy. It is a known fact, too, that what was purchased contained at least 10 percent of unnecessary or defective merchandise. In all, it was at least 16 percent less than the public's purchasing power. Imports surpassed the value of exports by $600 million. To this deficit, however, one should add repayment of debt and interest. Altogether they amount to more than $5 billion (repaid from successively incurred and increasingly expensive debts). Grain crops dropped down to levels indicated for 1974, that is, only 15.3 million tons were harvested. In effect, national income decreased 2 percent in relation to 1978.

These telling facts and figures forced E. Babiuch to advance a categorical demand that the plan for 1980 be seriously reduced. Although a decision to this effect by E. Gierek and a Sejm resolution are nothing but a mere confirmation of reports from the statistical office, at the same time, for the new prime minister, they are testimony that he "is not to blame" for the failures suffered up to now. It is doubtful if this is indeed the case. Although E. Babiuch did not sit in the government as Edward No 2, he had, approved, together with Gierek, governmental actions. The modifications enacted by the Sejm will decrease the foreign trade deficit. In the area of export and import alone, they represent a $900-million surplus of imports over exports, although additional loans will have to be obtained to repay the debt and interest. The list of disastrous failures should include woeful industrial performance wherein the costs (of materials) rose 79 percent while the value of (total) output increased a mere 57 billion zlotys. Hence revenue also dropped 61 billion zlotys.

A point of emphasis in Babiuch's speech that could be regarded as having some significance was the granting of various economic entitlements to both nonprivate and private agriculture, though verbalizations to that effect have for years lost all meaning to the Polish farmer. There is some validity bringing a measure of order into the convoluted mysteries of planning in Babiuch's statement indicating the need for putting central plans and local budgets in order. This was a hint addressed to T. Pyka, currently a vice premier in the government and former deputy chairman of the planning commission. His basic qualification for these posts was a close affinity with Gierek. During the period of his activity in the planning commission (after 1970), far-reaching disorganization was allowed in the functioning of this important area of control. Actually, E. Babiuch believes that enhancement of the importance of local plans is tantamount to greater democracy, but this is a topic we will leave aside for the time being.

A Step Ahead Or Into An Abyss?

The only item in E. Babiuch's program to see immediate implementation is the rise in prices for food articles designated for public supply.

It is known that in Poland meat or chocolate are in general as difficult to buy as furniture or atuomatic washers. Regardless of acute shortages

of virtually all articles of daily use, however, the prime minister assigned top urgency to regulation of government subsidies for diverse products totaling almost 500 billion annually, and an identical amount of surpluses obtained from other products.

It should be emphasized that those 500 billion zlotys constituted nearly 25 percent of (subdivided) national income per year, and as much as 45 percent in relation to the populations's consumption. It is beyond doubt, therefore, that dealing with a portion of the national income of this magnitude required extensive preparation, preliminary directives and reaching consensus with representatives of the people.

A preliminary analysis of surpluses and shortages in industrial production, farming and other national economic sectors indicates that the bulk of subsidies goes to first-order goods. Despite the institution of commercial prices, annual subsidies are over 67 billion zlotys for meat and meat products, 9.5 billion for fish, 36.4 billion for milk and milk products, 14.3 billion for sugar, and 15.3 billion for grain and grain products. This list should also include subsidies for agricultural supplies. If the latter were not applied, subsidies on first-order foods would have to mount. This group includes 15.7 billion zlotys worth of industrially processed feeds, 5.1 billion worth of artificial fertilizer, 3 billion worth of planting seed, and substantial expenses in assistance to purchase farm machinery.

Living standards of the population are contributorily improved by government-subsidized sales of coal and coke, furniture, and household appliances amounting to 5.8 billion zlotys, along with 79.6 billion zlotys channeled to assistance in communal economy, primarily transport equipment.

At this stage in our calculation, we have accounted for the allocation of 252 billion zlotys, that is, somewhat more than a half of the figure quoted by Babiuch. It can be assumed that approximately 50 billion zlotys are represented by other expenditures related with consumer supply and price supports for export-designated articles. This issue concerns the differences between prices paid for imported goods which were entered at lower cost in domestic industry plans, as well as facilitation of sales of Polish products abroad by way of price reduction.

Despite this, nearly 150 billion zlotys are unaccounted for in our very approximate calculation.

What Is Hiding at the Bottom of the Abyss?

I trust there is nobody in Poland to deny that goods with state subsidized prices include materials designated for military purposes as well. Babiuch's speech completely omits this matter, as has been the practice for 35 years. Yet it is clear that budget allocations for national defense cannot encompass such disbursements because they have to based on price lists that are

in force. It is true that from 1975 to 1978 the costs of national defense increased substantially from 47.6 billion to 59.7 billion zlotys. According to calculations conducted both in Poland and abroad, they amount to at least 20 percent of national income. Since (subdivided) national income for 1978 was over 1,965,000,000,000 zlotys, this means that approximately 390 billion zlotys are allocated to military expenditures. It is precisely this difference, that is 330 billion zlotys, that for many years has burdened the country's economy, and its overwhelming significance results from three causes.

First, it constitutes more than 15 percent of (subdivided) national income, which is why the claim about real expenditures on private consumption and investments are untrue. These are, in fact, 15 percent smaller than reported in official statistics. This is confirmed by examining private consumption and the state of investment in industry, construction, transport and farming.

Second, the national defense item of 390 billion zlotys accommodates 60 billion zlotys listed under budgetary expenditures and approximately 150 billion zlotys obtained from price subsidies, but the figure of 180 billion zlotys remains unexplained. It is (approximately) the amount the government has to extricate from diverse sources. Foremost of these is the placement of a substantial portion under investment expenditures in various economic sectors. This is done, for example, through decisions to grant apartments to persons employed by the army in buildings constructed by housing cooperatives; outlays for purchase of equipment indispensable for domestic completion of military production orders, and a host of ad hoc decisions resulting from varied and frequently unpredictable circumstances. This entire group of expenditures amounting to 330 billion zlotys (in 1978) is composed of a tremendous variety of decisions and, most important, it is funded from a great variety of sources, which is why the government has lost track of its size and, in effect, nobody is fully aware of its indispensability or logical justification. This loss of orientation is more detrimental to the economy than is the magnitude of these costs in itself.

Third, the country is suffering very grave damage because of confusion in production processes, confusion that stems from noneconomic pressures related with military-purpose deliveries. To begin with, an enterprise must fulfill its production plan for military items, for which it is accountable not only via its work force bonuses but through dismissal of its director as well. Furthermore, since such items are deficit, government-subsidized products, overfulfillment of the production plan is equivalent to deterioration of profitability (not in the financial aspect but because such products call for increased technological attention). For example, a steel mill manufactured "ground" fine steel rods for military purposes which are much more labor-intensive than "drawn" rods manufactured by the same steel mill to meet the needs of other clients. This fact, however, is in no way reflected in the price, though subsidized. Moreover,

preferential military orders reduce availability of productive capacities to other clients and diminish flexibility in modification of production processes to meet requests of domestic and foreign customers. When reorganizing the system of economic management, the government must at all times respect the inviolability of military deliveries in terms of their composition, quality, quantity and prompt completion. These circumstances appreciably increase production costs (due to difficulties in securing supplies of raw materials and other materials). This happens especially in cases where hard-currency imports must be substituted for promised domestic deliveries.

In order to remove these obstacles to even the slightest improvement of the economy, prices of military-purpose deliveries should simply be based on levels dictated by manufacturing costs. Further, to secure financial resources for all kinds of military purposes, budgetary expenditure figures for national defense should be raised. It would be demonstrated then, however, that they represent approximately 20 percent, not 3 percent, of (subdivided) national income. It is obvious that this cannot be consented to by an alliance of countries that allocates sums equivalent to what the Red Cross collects in a street fund raiser as their assistance to starving nations.

"De Profundis Clamavi"

What is going on in Poland now can be called a cry from the depth of despair of the rulers who do not want to lose their positions and the people faced with either extreme poverty or the risk of a bloody uprising. In this situation, it is exceedingly difficult to maintain equilibrium for the government, and even more so for those governed.

Consequently, Babiuch's activity began with measures calculated to buttress his own image. First, using resignation from his post as leverage, he obtained E. Gierek's approval, along with a formal act of the Sejm, to trim the recently enacted industrial production growth plan in 1980 from 3-4 percent down to 2-3 percent together with reduction of profit in the entire economy. On the other hand, export figures were raised (and import deliveries were cut down), with a corresponding deterioration of domestic supply. Next, E. Babiuch persuaded the first secretary of the PZPR to be the one, rather than Babiuch himself, to explain the country's economic calamity in front of TV cameras. Yet these two facts demonstrate only good strategy of E. Babiuch as a party activist, not his qualifications as an economic manager. In the course of his TV appearance, E. Gierek informed the public that a salary reduction was inevitable, while the minister of agriculture on his part announced substantially smaller grain crops than in 1979. The minister of domestic trade also participated in this TV appearance in order to take the blame for reduction of deliveries of goods for the population's needs. The fourth participant, a minister of foreign trade, was the only one to state improvement in the results of foreign trade with hard-currency countries during the first 6 months of 1980, amounting to $200 million.

He made no mention, however, of the lack of resources to pay interest on the incurred loans and to repay debt inatallments.

Following these tactical preparatory moves, the prime minister took action. Early on, however, he immediately made two errors. First, price rises were initiated without an evaluation of their consequences for working people and without factual evidence that they would involve increases in earnings. The public showed restraint in their assessment of the situation so long as higher pricing concerned newspapers, cigarettes, sewing machines, automatic washers, refrigerators and apartments. People flew into a passion only when meat disappeared from lower-priced general supply stores and became available in greater quantities in commercial stores (at higher prices). Strikes in industrial facilities and in the transport sector sent a tremor through Ursus, Warsaw, Tczew, Swidnik, Lublin and many other cities, including even the principal armament installation of Stalowa Wola. Under the impact of these self-protective actions social awareness of the economic situation increased along with a will to resist the authorities' inept decisions. In an attempt to escape at least a measure of responsibility, the government announced that delayed notification about changes in the sales system and price increases resulted from the oversight of accountable officials.

Numerous circumstances indicate that:

--the government will not undertake (as it did not for 35 years) any essential economic reforms, limiting itself to certain administrative decisions that may include price changes or reorganization of enterprises, industrial associations or even ministries; at the same time, however, there will be growing indignation and bitterness in the nation, enveloping new areas of the country and reinforcing the belief that PZPR-designated authorities are incapable of improving the economic situation;

--it is not possible to govern a country whose population is deprived of representation even through trade unions, while a bureaucratic apparatus claiming that name has at its disposal neither a substantive and comprehensive analysis of the standard of living of the working people, nor a calculation of their future needs, in other works, family budgets.

Another decade has passed, and the compelling question that emerges from the chaos is whether the country's future will be guided by an authority handpicked outside its borders, or whether the government will become a democratic representation of society composed of outstanding specialists selected on the basis of comprehensive evaluation of their qualifications.

8795
CSO: 2600

BRIEFS

ELECTRIC POWER REQUIREMENTS, PLANS--Investments are obviously important for the construction of certain installations, for example, at Belchatow or Polaniec. Delays are occurring, and an additional power output of 1,680 MW is required in 1980 in order to strengthen the power system. In the next 1981-1985 plan, power equipment providing approximately 11,000 MW and heat generating systems having an output of 11,600 giga-calories per hour will have to be put into operation in the electric-power and power-heat generating plants of the public-utility type. In addition, power facilities, primarily transformer stations having a power rating of 36,000 MVA, and approximately 46,000 transmission and distribution lines in the power networks will have to be put into operation. [Excerpt] [Warsaw ZYCIE GOSPODARCZE in Polish No 33, 17 Aug 80 p 7]

CSO: 2600

AMENDED LAW ON ANIMAL RAISING PUBLISHED

Bucharest BULETINUL OFICIAL in Romanian Part I No 57, 9 Jul 80 pp 1-8

[Law No 40/1975 on the Raising and Improvement of Animals]

[Text] Law No 40/1975
on the Raising and Improvement of Animals*

In the Socialist Republic of Romania, animal husbandry represents an activity of national interest, it having a leading role in supplying to the population meat, milk, eggs and other products of animal origin and to industry raw materials needed to increase the production of consumer goods.

The erection of the multilaterally developed socialist society in our country and the continual raising of the standard of living and the consumption capacity of the population necessitate the raising of zootechny's percentage in agricultural production, through the raising of the populations of animals, the improvement of their productive potential and the improvement of the technologies for efficiently exploiting and utilizing all fodder resources.

For attaining these objectives, the state creates conditions for continual development of animal husbandry, both in the socialist agricultural units and on the population's farms, by allocating large amounts of investment funds for the construction of new zootechnical facilities, by granting loans for the procurement of animals, by staffing the units with specialized personnel, by organizing units specializing in the production of reproductive material, by importing animals from improved breeds and by establishing stimulative prices for animal production and for reproducers with high genetic potential.

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* Republished on the basis of Article II of State Council Decree No 184 of 11 June 1980, published in BULETINUL OFICIAL AL REPUBLICII SOCIALISTE ROMANIA, Part I, No 46, 13 June 1980, with a new numbering being given to the articles.

Law No 40/1975 was published in BULETINUL OFICIAL, No 134, 25 December 1975.

In order to fully utilize the soil, climatic, social and economic conditions existing in different zones of the country, the Ministry of Agriculture and the Food Industry, together with the people's councils, organizes zootechnical production on a territorial basis and is responsible for the achievement of animal production.

For the further development of animal husbandry, the Academy of Agricultural and Silvicultural Sciences, through the specialized research units and the institutes of agronomic higher education, participates in the activity of devising and applying the most efficient methodologies of breed improvement, in the expansion of the use of improved reproductive material in the production units, and in the improvement of the husbandry technologies and is responsible for their application and implementation according to the zones and the groups of units that are assigned to them.

The creation of a unified legal framework regarding the raising, improvement and reproduction of animals is required in order to fulfill these tacks.

To this end, the Grand National Assembly of the Socialist Republic of Romania adopts the present law.

Chapter I
Animal Husbandry

Article 1. Animal husbandry is an activity of national interest and has as a goal the supplying of the population at the level of the growing consumption requirements and the meeting of industry's needs for raw material with products of animal origin.

The development of animal husbandry is achieved in accordance with the National Program for Development of Zootechny and Growth in Animal Production, whose provisions are binding on all possessors of animals.

Article 2. For the development of animal husbandry, the establishment of the percentage of the species according to geographical and administrative zones, and the selection of the breeds and of the systems of raising and exploitation, the Ministry of Agriculture and the Food Industry and the executive committees of the county people's councils and that of the municipality of Bucharest will provide for the better utilization of pastures and hayfields, especially those in hilly and mountain zones, and of all fodder resources in agriculture, the food industry and other activities of the economy.

Article 3. In order to continually improve the population's supply of animal products and avoid the expenses caused by the transportation of products over long distances, the Ministry of Agriculture and the Food Industry, together with the people's councils, will provide in each county the conditions needed to develop animal husbandry, which should meet its own consumption needs and achieve the reserves arranged by means of the plan.

Article 4. In socialist agriculture, benefiting from the multilateral support of the state, the development of animal husbandry will be oriented further toward the concentration, specialization and integration of production and will be achieved through the construction of new, rationally dimensioned units and the modernization of the existing ones.

Article 5. The socialist agricultural units have the obligation to keep the animal shelters, the outbuildings and the technical resources on hand in optimum condition, in conformity with the technical instructions, and to keep the technical equipment in permanent operating condition.

The changing of the purpose of the zootechnical constructions or the resources on hand is permitted only with the approval of the higher-ranking body.

Zootechnical constructions with a value of over 200,000 lei cannot be removed from the animal production circuit except with the approval of the Ministry of Agriculture and the Food Industry.

Article 6. The state supports the development of animal husbandry on the population's farms, providing:

Reproducers, through the communal mating stations;

Seminal material and technical assistance for artificial insemination in animals, free of charge;

Technical assistance and financial resources for the improvement and arrangement of natural meadows, in order to increase the fodder resources;

The right to use, on easy terms, state-owned pastures and hayfields, as well as pasturable forests, in accordance with the legal provisions;

Some assortments of fodder for the animals and products contracted for with the state, under the conditions provided by law;

The awarding of bonuses for each heifer at the first calving;

Technical advice through personnel with specialized training, veterinary assistance, and medicine for veterinary use;

Loans, on easy terms for raisers, in order to procure production animals.

The population in villages and cities can buy or take over on a contractual basis from the socialist agricultural units animals and poultry for raising and fattening.

Article 7. For raising the contribution of the population's farms to increasing the vegetable and animal agricultural production and meeting their

own consumption needs with meat and other animal products, all inhabitants in rural and urban areas who possess farmland are obligated to cultivate it and to raise animals and poultry.

The farmland cannot be possessed except by the physical persons who cultivate it and raise animals and poultry, under the conditions provided by law.

The vegetable and animal production obtained on the population's farms will be used for the food needs of the producers and their family members, and the extra quantities will be able to be utilized, under the conditions provided by law, on the market or through contracting and purchases for the state supply.

Article 8. The executive committees and bureaus of the people's councils are responsible for the complete and efficient use of farmland, for the fulfillment of the plan for populations of animals and poultry on the population's farms, for the creation of the resources of animal products needed to meet the needs of the own consumption of the population in their range of activity, and for the fulfillment of the plan targets for contracting for and delivering to the state supply animals, poultry, milk, eggs and other animal products.

Article 9. The executive committees of the county people's councils and that of the municipality of Bucharest will assign and transmit annually to the executive bureaus and committees of the communal, city and municipal people's councils the plan indicators concerning the populations of animals that must be raised by the population's farms.

On the basis of the plan targets received, the executive bureaus and committees of the communal, city and municipal people's councils will draw up animal- and poultry-raising programs for each farm in territorial-administrative range, so that each can fulfill the obligation to raise animals and poultry.

The number of animals and poultry that can be raised by each farm for its own needs, for sale on the market or for contracting or purchases is unlimited.

The executive bureaus and committees of the communal, city and municipal people's councils will include in the programs concrete targets for each farm, on the basis of wide consultation with the citizens, establishing the number of animals and poultry, the production and the deliveries to the state supply, in correlation with the targets for economic and social development of the territorial-administrative unit. Targets for cultivating all areas and planting fruit trees and bushes, the agricultural output that will be obtained and the deliveries of vegetables, potatoes, fruit and other produce to the state supply will also be established accordingly.

The programs for developing the populations of animals and poultry are subjected to discussion by the general assemblies of the inhabitants in communes and become binding on all inhabitants in rural areas, after their adoption by the people's councils.

Article 10. The executive bureaus and committees of the people's councils will give the population's farms the support needed to develop their production base and will seek to provide the conditions needed to fulfill the tasks assigned to them, for increasing the vegetable and animal agricultural production and achieving the deliveries to the state supply.

To this end, the executive bureaus and committees of the people's councils will take the following steps:

a) The land in the possession or use of the inhabitants and that under the administration of the executive bureaus or committees of the people's councils will be cultivated completely with vegetables and potatoes, planted with fruit trees and bushes and cultivated with fodder plants or other farm crops, in accordance with the programs established;

b) The natural meadows administered by the executive bureaus and committees of the people's councils and the pasturable land in the forest reserves will be allocated, according to law, with priority to citizens who contract to deliver animals and animal products to the state supply.

The members of the agricultural production cooperatives, besides the measures stipulated in the preceding paragraph, benefit from facilities established by the general assembly of the agricultural cooperative, such as:

a) The granting of roughage and of land areas, for fodder production in the catch crop, with priority to contractors for animals and animal products;

b) The allotting of areas of hayfields, for harvesting with payment in kind, only to contractors for herbivores or for animal products from them.

Article 11. Distinct targets for the raising of piglets and chicks, which are to be sold to the animal raisers who contract to deliver animals, animal products and poultry to the state supply, will be established, within the framework of the plan, for the socialist agricultural units.

The socialist agricultural units are authorized to organize, beyond their plan targets, the production of chicks, piglets and rabbits that they may turn over, together with some quantities of fodder for raising and fattening, on a contractual basis, to producers on the population's farms that have conditions of space and certain possibilities of feeding and possess the necessary manpower.

The payment for the work of the producers will be made to the account of the respective agricultural unit on the basis of the rates established for

the weight of the fattened or raised animals that have been delivered to the state supply, at the weights stipulated by means of the contract.

Article 12. The units of the consumer cooperative system will participate in the fulfillment of the targets for increasing the populations of animals on the population's farms, through the organization of stock farms for sows and day-old chicks, in order to obtain products that may be sold to the animal raisers.

Article 13. The Ministry of Agriculture and the Food Industry, the National Union of Agricultural Production Cooperatives and the Committee for Problems of the People's Councils will take the steps needed to provide the population's farms with seeds and planting stock, with chemical fertilizer, with purebred animals for mating and with zooveterinary assistance. In addition, they will create possibilities of the rental or purchase of farm implements and animal-drawn agricultural machines by the population's farms and will provide service with tractors and agricultural machines for the mechanized performance of the necessary work on the land used by these farms.

Article 14. The socialist units within which cafeterias operate, the public food units, the tourist chalets and other such units are obligated to organize subsidiary activities for raising animals and poultry, through the utilization of all food scraps and other available resources, for meeting their own needs, within the established consumption quotas, and for utilizing the surplus for the state supply.

Article 15. In order to provide the population's farms with animals for raising and fattening, the Ministry of Agriculture and the Food Industry, together with the people's councils, will take steps to increase the breeding stock on these farms. To the same end, they will support the organization of the production of piglets, chicks and other species and categories of animals, both within the population's farms and within the animal-husbandry associations or through the consumer cooperatives in the locality.

The people's councils and the agricultural bodies will support the founding of the animal-husbandry associations and the organization by them of the actions connected with the improvement of livestock, the raising of animal production, the improvement and use of meadows, the mechanization of work in zootechny, the guarding of the health of the animals and the protection of them, and the contracting for and the sale of the production.

Article 16. In order to meet the need for fodder for the animals possessed by the socialist units and the population's farms, the Ministry of Agriculture and the Food Industry, together with the people's councils, will organize the production of fodder, will provide for the development of the material base for the production of mixed feed and will keep track of the manner of conservation and use of all fodder resources, in conformity with the standards in force.

Article 17. The Ministry of Agriculture and the Food Industry will draw up technical standards for raising and exploiting the animals, varying according to systems of raising, according to geographical zones and according to forms of ownership, based on the results obtained by the specialized research units. These standards are binding both on the socialist agricultural units and on the population's farms.

Chapter II
The Improvement of Animals

Article 18. The improvement of livestock, in the sense of increasing the genetic potential, is achieved on the basis of the improvement programs drawn up by the Ministry of Agriculture and the Food Industry. The methodology of selection, the husbandry technology, the volume of activity and the organizational framework for the production, quality control, and use of the reproductive material from each species of animal are established by means of these programs.

The production and use of reproductive material are achieved within the framework of the program for zoning of animal husbandry and have as a goal the fulfillment of the annual and long-term plans.

Article 19. By "reproductive material," in the sense of the present law, is meant:

a) The male reproducers and the young males kept for verifying their own performances;

b) The young males and females kept for testing the parents or collateral relatives from the cattle, swine, sheep, goat, horse, rabbit and furred-animal species;

c) The females from the cattle species, in their entirety, and the females from the swine, sheep, goat, bubaline, horse, rabbit and furred-animal species contained in the breeding records and approved on the basis of certificates of quality;

d) The lines and nuclei of certified poultry, as well as the eggs for incubation and the day-old chicks that have been obtained from these lines or from combinations of lines selected for the production of hybrids;

e) The nuclei of animals and poultry utilized for the creation of new breeds, types, lines or hybrids;

f) The seminal material used in artificial insemination and the zygotes utilized in the work of transplantation.

Article 20. For the production, quality control, and use of the reproductive material for animals, the Ministry of Agriculture and the Food

Industry, through its specialized bodies, bears the responsibility and provides for:

a) The organization and operation of the units that produce reproductive material, by continually concentrating the elite animals in order to form nuclei of the greatest zootechnical value;

b) The organization and operation of the units and work points at which the testing of the animals that are selected for maintaining and improving the elite nuclei and for providing reproducers for the rest of the livestock is done, on the basis of their own performances and the offspring;

c) The production of the assortments of feed necessary to the units at which work of testing and selection is done, in accordance with the formulas required by their technology, in order to correctly determine the genetic potential, and the organization of the production of fodder for the rest of the livestock, at the level required by their productive potential;

d) The inclusion of the livestock needed to achieve the improvement work, from the best nuclei of animals existing at the socialist agricultural units and on the population's farms, in the official production inspection, in order to know the productive capacity of the animals and identify the most valuable specimens;

e) The guaranteeing by the state of the zootechnical quality of the reproductive material, noted in certificates of quality issued after the official production inspection;

f) The recording of the specimens that, through the value of their performances, can contribute to the improvement of the breeds in the state genealogical registers;

g) The management of the supply of reproducers and the reproductive material, through the controlled allocation of them, for satisfying the requirements in all zones and systems of animal husbandry;

h) The importation of animals, poultry, eggs and seminal material from the improved breeds and types that can be utilized under the climatic and technical operating conditions of the production units in our country, with the guaranteeing by the exporters of their indemnity for specific contagious diseases;

i) The guarding of the health of the livestock subjected to selection through the continual providing of preventive and curative health and veterinary assistance, given by the own veterinary personnel of the units that possess them or of the health and veterinary districts.

Article 21. The Academy of Agricultural and Silvicultural Sciences, through the subordinate specialized research units, has the obligation and bears the responsibility regarding:

a) The continual perfecting of the methods of improvement and of the programs or instructions for applying them;

b) The management of the work of creating new breeds, types, lines or hybrids of animals and poultry;

c) The guidance of the work of studying the adaptive capacity of imported reproductive material and the establishment of the method of using it in the animal-improvement process;

d) The devising and the pursuit of the application of new animal-raising and -exploiting technologies;

e) The production and furnishing of reproductive material with a high genetic value, from its own units possessing animals.

Article 22. The organization, management, coordination and guidance of the actions of producing and using the reproductive material for animals are in the charge of the Ministry of Agriculture and the Food Industry and are achieved through specialized units that have as an object:

a) The production, raising and maintenance of the reproductive animals with a role in improving the livestock;

b) The testing of reproductive material on the basis of its own performances or on the basis of offspring;

c) The multiplication of the selected animals by means of pure breeding or by means of crossbreeding;

d) The production, preservation and furnishing of the seminal material for artificial insemination or of the zygotes used in the work of transplantation.

Article 23. In order to determine the productive potential of the animals in the specialized units, stipulated in Article 22, the feeding will be done in accordance with scientifically substantiated standards, diets and formulas devised by the specialized research units, approved by the Ministry of Agriculture and the Food Industry and applied only in the units with this type of activity.

Article 24. The Ministry of Agriculture and the Food Industry organizes, manages and guides the work of judging and certifying the quality of the reproductive material for animals, through the units that have as an object of activity the performance of the official production inspection.

The reproduction and selection units also have the task of guiding and supervising the way in which the use of the selected reproductive material is done in the production units and of providing for its dissemination and pursuing its reproduction.

For ensuring the accurate processing of the data resulting from the production inspection and for increasing the effectiveness in making the decisions on selection, the national reproduction and selection unit will organize the automatic data-processing system.

The official production inspection refers to the recording of the performances of the animals subjected to selection and to the respecting of the conditions of maintenance, feeding and care in the units that produce, test or receive for use improved reproductive material.

Article 25. The quality of reproductive material and its value are confirmed by means of certificates of origin and productivity issued by the county reproduction and selection unit that performs the production inspection for animals.

Certificates will not be issued except for the animals that are registered by means of numbers or codes applied directly on a part of the body or by means of standardized ear tags.

The system of registering the animals and marking the other reproductive material is established by the Ministry of Agriculture and the Food Industry.

Article 26. Pure breeding will be used as a chief method for improving the livestock.

The multiplication of the animals stipulated in Article 20, letters a and f, will be done only by means of pure breeding.

The work of crossbreeding and hybridization, done in order to increase the productive capacity of the animals and poultry in the production units, will be achieved in a controlled fashion, with the technical support and under the guidance of the units that perform the official production inspection, on the basis of scientifically substantiated programs drawn up through the Academy of Agricultural and Silvicultural Sciences by the specialized research units and approved by the Ministry of Agriculture and the Food Industry.

Article 27. The male reproducers—bulls, boars, rams and stallions—used at the units that produce seminal material and at the communal mating stations and points and the entire populations of animals in the units included in the provisions of Article 22, letters a and c, are subjected annually to evaluation and classification.

The organization and performance of the work of evaluation, the technical standards and the methodology for judging the reproductive material will be established by the Ministry of Agriculture and the Food Industry.

For verifying the origin of the reproducers and the quality and healthiness of the seminal material and for judging the production of the animals

subjected to the official inspection, the national reproduction and selection unit will found, with the approval of the Ministry of Agriculture and the Food Industry, its own laboratories, which will also function as laboratories for expert evaluation.

Article 28. The approval of the new breeds, types, lines and hybrids of animals, poultry, bees and silkworms that are achieved in the research and production units and by the population's farms is done by the Ministry of Agriculture and the Food Industry, on the basis of the conclusions drawn from the analysis of the results obtained in the verification work advised by the Zooveterinary Council.

The verification work is organized in centers for approval of the performances of animals by the units that perform the official production inspection and is done under the conditions established by means of verification protocols drawn up together with the specialized central research unit, it extending over at least two successive generations.

In the case in which it is considered necessary, nuclei of animals from the imported breeds or those that are intended to be imported are also subjected to the same verification.

Article 29. In order to recognize and popularize the socialist agricultural units and the raisers that distinguish themselves in the activity of raising livestock of great zootechnical value and in using a modern technology of exploitation, the Ministry of Agriculture and the Food Industry and the executive committees of the county people's councils and that of the municipality of Bucharest will annually organize animal and poultry fairs with the establishment of the county, zonal and national champions of the breed and with the awarding of incentives in money, objects and certificates, within the limits of the funds that have been allocated to them for this purpose.

Chapter III
The Organization of the Reproduction of Animals

Article 30. The activity of reproduction of animals has as a chief objective the rational use of the breeding stock and the young breeding stock, the continual raising of the birth rate and the obtaining of more valuable products that express the improved genetic potential as a result of the improvement work done.

Article 31. For performing the tasks stated in Article 30, annual indicators of birth rate according to species of animals and according to counties will be established in the sole national plan for economic and social development.

On the basis of these indicators, the managements of the socialist units will prepare, with the technical assistance of the reproduction and

selection units, mating and birthing plans for the animals belonging to these units.

For the animals on the population's farms, the mating and birthing plan is prepared by the local specialized personnel, together with the possessors of animals.

Article 32. Male reproducers can be used only after authorization.

The authorization of the use of male reproducers is done, for natural mating, by the county unit and, for artificial insemination, by the national unit that performs the official production inspection.

The reproducers reaching mating age for which use has not been authorized are subjected to sterilization.

Article 33. The production of reproductive material is provided as follows:

a) The male reproducers and the young males meant for testing their own performances will be produced by the units stipulated in Article 22, letters a, b and c, and by other socialist units or by the population's farms, from the animals included in the official production inspection, by means of listed pairings;

b) The young males and females needed for testing the parents or collateral relatives will be produced by means of controlled pairings, both in socialist agricultural units and on the population's farms, on the basis of the contract concluded with the units within which work of testing is organized, with the possessors having the obligation to furnish them on the agreed date and under the agreed conditions;

c) The female reproductive material from the cattle species will be produced in the socialist agricultural units and on the individual farms from their own breeding, and the female reproductive material from other species, stipulated in Article 19, Letter c, is produced in the socialist agricultural units or on the population's farms from animals included in the official production inspection;

d) The calves will be retained in their entirety and raised for reproduction.

The cow-raising zootechnical units will take steps to provide, within the existing space, sectors for separately raising and tending the bull calves and the heifers until mating.

Mating with suitable breeds, specific to the respective zone, will be provided for all heifers, and the selection of them for reproduction or for culling will be done only after calving in relation to the results obtained in the first production cycle.

In wholly special cases, due to incurable diseases that make them unfit for reproduction, the calves will be able to be butchered only with the approval of the health and veterinary inspectorate;

e) The selected lines of poultry, the eggs for incubation and the day-old chicks will be produced by the poultry-breeding units and by the population's farms, members of the association of breeders, with the authorization of the unit that performs the official production inspection;

f) The nuclei used to create new breeds, types or lines are formed in scientific research units and, by way of exception, in other agricultural units or on the population's farms, under the control and guidance of the specialized research unit under the Academy of Agricultural and Silvicultural Sciences;

g) The seminal material for artificial insemination will be produced as follows:

Frozen seminal material and zygotes for transplantation, in the specialized units authorized by the Ministry of Agriculture and the Food Industry;

Refrigerated and fresh seminal material, until its replacement with frozen seminal material, in the county reproduction and selection units or in subunits for artificial insemination;

Seminal material for experimental work, in research units, on the basis of the annual plan of subjects.

The seminal material is furnished or is disseminated along with a waybill, issued by the producing unit, that confirms its origin and quality.

Article 34. The activity of reproduction by means of artificial insemination is organized by the county reproduction and selection units or by state agricultural units, which are responsible for the proper operation of the artificial-insemination points in their range of activity.

The operations regarding artificial insemination will be performed by livestock experts and veterinarians, who are responsible for the results of this work. Until the need for such personnel is met, other, specially instructed personnel can also be utilized to perform this activity, under the same conditions of responsibility.

The right to perform artificial insemination is given on the basis of a permit issued by the county reproduction and selection units.

In the state agricultural units and in the agricultural production cooperatives, the farm foreman is responsible for the activity of reproduction and artificial insemination. The veterinarians and specialized personnel who perform artificial insemination are responsible for the fulfillment of the mating and birthing plan for the animals on the population's farms.

Article 35. In the localities in which artificial insemination of animals is not practiced for one or more species, the executive bureaus or committees, respectively, of the communal, city and municipal people's councils will organize communal mating stations, under the guidance of the local personnel with zootechnical or veterinary training who have in their responsibility the mating and birthing plan for the animals on the population's farms.

In the localities in which the stock of cattle, sheep, goats, horses and swine for organizing a communal mating station is not congregated, including the localities in which agricultural production cooperatives are organized, when their situation requires it, the executive bureaus or committees, respectively, of the communal, city or municipal people's councils will set up mating points, with state-owned reproducers or with authorized reproducers that belong to the population's farms.

Article 36. The use of reproductive material and its multiplication in the production units in order to increase the populations of improved animals are done in conformity with the reproduction program prepared by the Ministry of Agriculture and the Food Industry, on the basis of a uniform methodology, in accordance with each system of reproduction and each species of animal.

Article 37. The Ministry of Agriculture and the Food Industry, the executive committees of the county people's councils and that of the municipality of Bucharest, and all possessors of animals have the obligation to provide for the normal process of reproduction, for all species of animals, with high-quality reproducers, in accordance with the established standards.

The allocation of reproducers for the production of frozen or refrigerated seminal material and for natural mating is done annually by the Ministry of Agriculture and the Food Industry, at the proposal of the national reproduction and selection unit, on the basis of the need established on the occasion of the work of evaluation.

Article 38. The reproducers from the cattle, sheep, swine and horse species will be procured exclusively from the breeds stipulated on the zoning map and only from the units subjected to the official production inspection.

The furnishing of male reproducers is done with the technical assistance of the county reproduction and selection unit in whose range the supplying unit is found. The reproducers furnished will be accompanied by certificates of origin and productivity and by health and veterinary certificates.

Article 39. The financial resources needed for the procurement of reproductive animals are formed, for the state agricultural units, from their own circulating funds and, at the other specialized units and at the people's councils, from the investment funds.

In the cooperative agricultural units, the reproductive material is procured from their own development fund and from long-term loans, in conformity with the legal standards in force.

The seminal material, including zygotes, produced in the units that process frozen seminal material is furnished at cost to the purchasing units.

The reproduction and selection units pay for seminal material from budgetary funds under the conditions and at the prices that will be established by the Ministry of Agriculture and the Food Industry, with the advice of the Ministry of Finance, and disseminate it free of charge to the agricultural production cooperatives, the intercooperative economic associations and the population's farms.

Article 40. The male reproducers from the cattle species tested on the basis of offspring are treated as fixed assets and are excepted from amortization. In addition, the other reproductive animals treated as fixed assets, from the specialized units subordinate to the Ministry of Agriculture and the Food Industry and from the people's councils, are not amortized.

Article 41. In order to know at any time, according to breeds, the number and the quality of the reproducers in the artificial-insemination or natural-mating units and in the other socialist units, as well as the right to use them, the record of reproducers will be kept nominally as follows:

a) The national reproduction and selection unit will keep the record of imported bulls, stallions and rams, of those used in the production of frozen seminal material, and of those in the county reproduction and selection units, with the possessing units being obligated to report on the inclusion and exclusion of reproducers;

b) The county reproduction and selection units will keep the record of the state-owned reproducers, procured from the funds allocated to the counties, that they have under administration and of the other reproducers authorized for mating, regardless of ownership;

c) The socialist agricultural units and the executive bureaus or committees, respectively, of the communal, city and municipal people's councils will keep the record of the reproducers on hand or allocated for temporary use.

Article 42. The specialized technical bodies, the socialist agricultural units and the population's farms are obligated to keep, in conformity with the technical standards drawn up by the Ministry of Agriculture and the Food Industry, the pedigreed male and female reproducers in conditions that ensure high fecundity and prolificacy and the prevention of miscarriages, of losses of pregnant animals, and of mortality in birthing or after birthing and to record and report the results obtained.

The veterinarians and experts in the units are obligated to take steps to prevent and treat reproductive disorders in animals and to perform the diagnosis of gestation, in conformity with the rules established by the Ministry of Agriculture and the Food Industry.

Article 43. The Ministry of Agriculture and the Food Industry, together with the Ministry of the Chemical Industry and the other central bodies with tasks in providing for the production of preparations and medicine for veterinary use, will take steps to continually meet from domestic production the need for biological and medicinal products for preventing and combating reproductive disorders in animals.

The treatment of reproductive disorders in the cattle in the cooperative agricultural units and on the population's farms is done free of charge.

Chapter IV
Responsibilities and Penalties

Article 44. The violation of the provisions of the present law results in disciplinary, material, civil, contraventional or penal responsibility, as the case may be.

Article 45. The following constitute infractions:

a) The production of frozen seminal material outside the authorized units or from the reproducers for whose use permits have not been issued;

b) The dissemination of the seminal material produced outside the authorized units or from the reproducers for whose use permits have not been issued;

c) The act of disseminating out of fault the seminal material produced under the conditions stipulated in Letter b.

The infractions stipulated in letters a and b are punishable with imprisonment from 6 months to 5 years.

The infraction stipulated in Letter c is punishable with imprisonment from 1 month to 2 years or with a fine.

Article 46. The declaration of untrue data regarding the origin, age, productive performances, or state of health of reproductive material constitutes an infraction and is punishable with imprisonment from 3 months to 2 years or with a fine.

Article 47. The performance of artificial insemination by unauthorized persons constitutes the infraction of practicing a profession without the right and is punishable in conformity with Article 281 of the Penal Code.

Article 48. The following acts constitute contraventions to the provisions of the present law, if they are not committed under such conditions that, according to criminal law, they constitute an infraction:

a) The refusal to perform the animal-husbandry tasks established by the people's councils in accordance with Article 9;

b) The failure to comply with the technical standards with regard to numerically providing the male reproducers used in natural mating, in accordance with the established number of females;

c) The failure to comply with the plan of listed pairings, the depreciation of reproductive material, the unauthorized alienation of it or the butchering of it that cannot be justified by means of the health and veterinary certificate;

d) The use of unauthorized males for mating with females;

e) The changing of the purpose of zootechnical constructions in violation of the provisions of Article 5, paragraphs 2 and 3;

f) The preservation of seminal material or of eggs for incubation under conditions that cause their depreciation;

g) The failure to provide for individualization or the individualization that creates doubts about the identity of the animals subjected to the official inspection, of the animals used in the work of testing the male reproducers, and of seminal material or of eggs for incubation;

h) The act of entering, out of fault, erroneous data regarding the origin, age, productive performances and indices of quality of seminal material or the state of health of reproductive material in the zootechnical record, in the certificates concerning the quality of reproductive material, or in the veterinary certificates;

i) The use of unauthorized males as reproducers for mating or the refusal to sterilize them.

Article 49. The contraventions stipulated in Article 48 are penalized as follows:

The contraventions stipulated in letters a, b, c and d, with a fine from 300 to 1,500 lei;

The contraventions stipulated in letters e, f, g and h, with a fine from 1,000 to 3,000 lei;

The contravention stipulated in Letter i, with a fine from 1,000 to 3,000 lei and confiscation of the animal.

The contraventional penalites can also be applied to legal persons. The fines applied to legal persons will be charged by them to the physical persons at fault.

Article 50. The ascertainment of contraventions and the application of penalties are done by representatives of the minister of agriculture and the food industry, in the central apparatus of the ministry, in the reproduction and selection units and in the apparatus of the county agricultural bodies and that of the municipality of Bucharest, and by mayors.

Article 51. The provisions of articles 48-50 are supplemented with those of Law No 32/1968 on the Establishment and Punishment of Contraventions.

Chapter V
Final Provisions

Article 52. The present law goes into effect 60 days after the date of publication in BULETINUL OFICIAL AL REPUBLICII SOCIALISTE ROMANIA.* On the date that it goes into effect, any contrary provisions are repealed.

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* With the exception of the provisions of articles 7-14 and of Article 33, Letter d, which are applied from the date of publication of State Council Decree No 184/1980.

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CONSTRUCTION WORK IN FOREIGN COUNTRIES, 1974-1979

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 14 Jul 80 pp 21-24

[Text] According to date recently published by the Federal Bureau of Statistics, Yugoslavian building contractors completed capital investment projects with a value of about $1.2 billion outside the borders of the SFRY [Socialist Federal Republic of Yugoslavia] last year. This is an increase of 8.9 percent over the total for 1978. Construction projects were carried out in 48 countries, of which 15 were in Asia (with a value amounting to 34.1 percent of the total given above), 13 were in Africa (32.7 percent), 13 were in Europe (32.5 percent), and 3 were in South America. Work completed in the developing countries accounted for 67.4 percent of the total; in the industrialized countries, 17.4 percent, and in the socialistic countries of Eastern Europe, 15.2 percent. What is the story behind these data?

The fundamental reason that building contractors have taken on jobs in foreign countries is to employ their construction capacity more fully, especially since the demand for their services in the domestic market has not had a uniform rate of growth. Moreover, this type of employment offers possibilities for the creation of claims payable in foreign currency, or for the import of certain equipment and material. No less a motive is the better earnings, especially for skilled workers belonging to construction and related organizations. Finally, there is both a broader motive and interest for contractors to go abroad. This concerns the possibility of exporting other goods and services, of exchanging techniques and technology, and in general of creating a basis for a higher form of economic collaboration with foreign countries.

The present level of involvement of building contractors in foreign countries is rather modest if one is concerned with the realization of these efforts. The number of domestic workers employed in the construction of capital investment projects abroad is between 3 and 4 percent of the total number employed in Yugoslavian construction (Table 1). It would be difficult

to maintain that the level of employment in foreign countries is a crucial factor of stability, taking into consideration the level of employment in the construction industry as a whole. Nor does the fact that the worker employed on projects which are being constructed for foreign investors realizes 2.5 to 3 times greater total income than his colleague employed on domestic construction projects (or about 1.5 times if workers of the domocile country are also included in the number employed on foreign building sites) change the accuracy of this statement.

TABELA I.

(1) u 000

	1974.	1975.	1976.	1977.	1978.	1979.
(2) Ukupan broj zaposlenih u građevinarstvu SFRJ	—	484.7	496,7	531,4	567,2	—
(3) Broj jugoslovenskih radnika na gradilištima u inostranstvu	21,053	19,022	19,658	19,487	21,412	20,519
(4) Broj stranih radnika na gradilištima u inostranstvu	14,809	17,410	15,949	18,909	18,088	—

(5) (Podaci saveznog zavoda za statistiku)

Table 1.

Key:

1. In thousands
2. Total number employed in construction in SFRY
3. Number of Yugoslav workers on construction sites abroad
4. Number of foreign workers on construction sites abroad
5. (Data from the Federal Bureau of Statistics)

The income in foreign currency from the performance of capital investment work in foreign countries amounts to about 40 percent of the total value of this work. Of course, we are speaking here of the average amount (in the last 5 years), which means that in a certain, albeit smaller, number of jobs, a significantly greater foreign currency income is realized (the most frequently cited example in this regard is the Belgrade Autoput construction firm, which realized a foreign currency income of 75 percent of the value of the completed work in jobs for the government of Gabon in 1976 and 1977). The share of the income from foreign currency from capital investment work abroad which is realized on the basis of the export of domestic equipment and materials is far less than the share which is obtained from nongoods foreign currency income (in which again the most important item is the export of the work force). The value of domestic equipment and materials used in projects which our contractors have built for foreign customers in the last several years has amounted to between 5 and 7 percent of the total value of the work. Moreover, the value of the equipment itself made up between 4 and 5 percent of the value of the investment.

It is estimated that the cost of materials and equipment ranges from between 60 to 80 percent in the total expenses involved in the construction of capital investment projects. More precise data cannot be given because this amount varies greatly depending on the type of project. As a rule,

it is higher with projects involved with hydraulic engineering (especially hydroelectric projects), somewhat lower with low-rise construction projects, and the lowest with high-rise construction, where the significant items are skilled workers (in building trades), with a relatively high level of manual labor.

It is apparent from the data provided by the Federal Bureau of Statistics (Table 2) that more than half of the working capacity of Yugoslavian contractors employed in foreign countries is involved in high-rise projects (the only exception is 1975). The level of high-rise construction is proportionally the highest in the industrialized countries and the lowest in the developing countries. The more valuable, or the more complex job, which besides the export of construction services also means the export of materials and equipment, is, therefore, "easier" to obtain in the less-developed countries, which, along with the fact that developing countries are, of course, unable to construct capital investment projects with their own operations and are directed to the import market, is the main reason that our contractors turn to this market.

TABELA 2. (6) u mil. dolara 1 USA $=18,25 din.

	1974.	1975.	1976.	1977.	1978.	1979.
(7) Vrednost inv. radova u inostranstvu — UKUPNO	550,2	693,4	826,9	1.251,3	1.118	1.216
od toga:						
(8) Visokogradnja	311,4	321,0	471,2	664,1	647,4	—
(9) Niskogradnja	72,2	164,8	109,5	289,1	252,3	—
(10) Hidrogradnja	160,4	196,0	226,3	280,3	205,1	—
(11) Projektovanje	6,2	11,6	13,6	14,8	13,0	15,5
po regionima:						
(12) Zemlje u razvoju	274	431	532	849	769	819
(13) Soc. zemlje Istočne Evrope	106	109	148	189	196	185
(14) Razvijene zemlje	170	153	144	213	153	211

(15) (Podaci saveznog zavoda za statistiku)

Table 2.

Key:

6. In millions of dollars; 1 USA $ = 18.25 dinars
7. The value of capital investment work in foreign countries - Total
8. Of the total: High-rise
9. Low-rise
10. Hydraulic engineering projects
11. Planning
12. According to regions: Developing countries
13. Socialist countries of Eastern Europe
14. Industrialized countries
15. (Data from the Federal Bureau of Statistics)

Measured by the value of work carried out, over two-thirds of the capacity of Yugoslvian contractors employed in foreign countries is engaged in the developing countries (Table 2). Moreover, the level of this engagement is increasing the most uniformly (the exception was in the year 1977, when the final account of unpaid claims from earlier years was carried out). There has been a modest growth in activity in the socialist countries of Eastern Europe for the last 6 years (with the exception of 1979), while in the industrialized countries it has fluctuated.

Lack of Involvement in Planning

One can conclude from these data that our construction organizations have mainly been the physical performers of foreign projects and technological determinations which also anticipate the use of foreign equipment and materials, or that as contractors they have been large buyers of the equipment and materials as well (the jobs for which this cannot be said are the exception, such as the capital investment work in Iraq where more of Yugoslavian plans and technological determinations are being used).

One reaches the same conclusion by also examining the participation of planning in capital investment work which has been completely finished in foreign countries (Table 2). The small part of the planners, on both an absolute and a relative level, in the capital investment work which has been completely finished (about 1.5 percent) is the result of the fact that on the whole they are hired independently, and this involvement is only in the extension of planning services or in the development of planning documentation for the performers of the work who have accepted the job on the basis of foreign offers. Only exceptionally are projects carried out which mean the realization and transfer of knowledge, techniques, and technology (something in this regard has been done only in the field of agroindustry). The basic reason for this is the fact that the planning organizations are not connected financially and technologically with economic areas which are interested in disposing of their products on the foreign market. Without this connection they are not, nor can they be, an exponent of producers, but appearing individually "from time to time" and at the same time maintaining buyer-seller relations, they cannot contribute in a more significant way to the disposal of goods through export by means of the performance of capital investment work in foreign countries. An "association" of planners and contractors would probably be the most acceptable solution to the problems connected to the financing of studies and the preplanning for investment undertakings for some of the developing countries (especially those whose needs are in accord with the strategy of our development).

Since studies, preplanning, and planning as a rule are the precursors to the export of materials, equipment, and technology of the countries who make these plans, it is the practice of the industrialized countries, who are far more successful than we are in the international market of capital investment work, to perform these jobs free of charge or with minimal

compensation, or if the planning is to be paid for, then it is most often financed. This type of investment, of course, is returned many times over if the job is obtained.

Reasons for Lack of Coordination

This type of practice, which is quite worthwhile in other countries, is almost inapplicable in our country under the present circumstances. Planners are not able to enter into the development of studies and pre-planning, and therefore not into the development of consulting and engineering work either (through which this type of job is actually carried out), first of all because the resources which are necessary for this are far greater than those which they possess, and in addition because of the fact that no one guarantees them that the product of this work will be accepted or paid for. No less of a problem in this regard is the fact that the development of consulting and engineering work also means a full insight into the production possibilities (and plans) of the domestic contractors and the producers of the equipment.

On the other hand, the contractors, if they pursue their own interests exclusively, are not willing to work according to domestic plans which mean the use of domestic equipment, construction machinery, and materials (or to finance their production), simply because of the fact that foreign producers provide prompter delivery of higher quality products at a lower price (along with servicing, more favorable credit conditions, and other benefits) than do domestic. The producers of equipment, again, are not prepared to share the risk of a joint excursion into the foreign market of capital investment work. It has been shown in former practice that in most cases they are not competitive enough with foreign firms, and that quite often they do not respond to the call of the contractors to offer their equipment (or materials), or that when they do offer it they give very short options causing a change in the agreed upon conditions depending on the conditions in the domestic market.

It is certainly not possible to increase the total impact of our appearance on the international market of capital investment work, or to overcome the problems with which this appearance is burdened, by measures which apply only to individual activities which participate in any sort of way in the export of goods and services through construction work. Taking on complex capital investment work in international bidding is objectively more and more dependent upon the existence of a strong and effective system in which those who perform the work and those who produce the cpaital investment and other equipment, the construction machinery, etc., are connected. Of course, the proper motive for the connection in such a system can only be the possibility that those who make up the system will realize a profit by these means. Therefore one can say that the former results of the export of construction work (as well as the other products exported by means of this) are first of all the expression of the immediate possibilities no only of the construction industry, but also of the whole economy. Because

as long as the industry which accompanies construction in foreign countries realizes a greater profit placing their products on the domestic market than they would by exporting these products (that is, while there is no justification according to income for export), there will not be any more essential changes with respect to the latest results of our participation in the international market of capital investment work. Moreover, without the creation of more favorable conditions for the economy as a whole, one should expect a narrowing of the extent of the investment of the construction services themselves as well. Considering that contractors have had up to now (and still have) an interest (more or less independently) in being employed in foreign countries because they realize a profit, which, according to some data, is about 10 percent of the total value of the project they are working on, because they employ their working capacity, because they improve themselves in a personnel, technical and technological, and organizational sense, as well as in other ways, this might be a motivation for the contractors themselves to become involved with tying themselves in with the other participants in the construction of capital investment projects.

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24 September 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2044

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24 September 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2044

CONTENTS

INTERNATIONAL AFFAIRS

CEMA Attitude on EEC Participation Viewed
(Sandor Nedeczky; MAGYAR HIRLAP, 25 Jul 80) 1

Yugoslav-Hungarian Commodity Trade Lists for 1979
(MEDJUNARODNI UGOVORI, 17 Jul 80) 5

Yugoslav-Czechoslovak Commodity Trade Lists for 1979
(MEDJUNARODNI UGOVORI, 17 Jul 80) 12

Yugoslav-Bulgarian Commodity Trade Lists for 1979
(MEDJUNARODNI UGOVORI, 17 Jul 80) 17

Yugoslav-Polish Commodity Trade Lists for 1979
(MEDJUNARODNI UGOVORI, 17 Jul 80) 22

CZECHOSLOVAKIA

Energy Problems, Consumption Evaluated
(PLANOVANE HOSPODARSTVI, No 7, 1980) 29

Structural Changes in Primary Energy Sources, by Vitezslav Vinklarek
Rationalizing Consumption, by Karel Houdek
Consumption of Oil Products Viewed, by Eliska Rohlova

Northern Bohemia Coal, Energy Problems Discussed
(Jaroslav Vejrazka; HOSPODARSKE NOVINY, 15 Aug 80)... 49

Briefs
Oleaginous Plant Self-Sufficiency Planned 61
Gasoline Consumption 61
Sugar Beet Harvest 62
Forest Calamity 62
Trucks for Morocco 62

[III - EE - 64]

GERMAN DEMOCRATIC REPUBLIC

Budget Accounting for 1979 Published
(Various sources, various dates) 63

West German Commentary
Revenues, Expenditures Listed

Development of Inland Waterway System Reviewed
(PRESSE-INFORMATIONEN, 15 Aug 80) 72

Crop, Weather Report Published for June 1980
(D. Krumbiegel; FELDWIRTSCHAFT, Aug 80) 75

Crop, Weather Report Published for July 1980
(D. Krumbiegel; FELDWIRTSCHAFT, Sep 80) 78

HUNGARY

Difficulties, Problems of National Economy Examined
(Janos Kornai; VALOSAG, May 80) 81

Establishment of New Foreign Trade Enterprise Described
(Istvan Matko; MAGYAR HIREK, 18 Jul 80) 95

Role, Future of Agroindustrial Associations Weighed
(Gabor Soos; PARTELET, No 8, 1980) 98

Private Plots, Farms Need Aid Despite Added Burden
(Gyula Poden; PARTELET, No 8, 1980) 106

Wheat Grading System, Quality of High-Yield Foreign Wheat Explained
(Sandor Illes; MAGYAR NEMZET, 10 Aug 80) 113

Deputy Minister Interviewed on Clothing Industry Plans
(Imre Szabo Interview; MAGYAR HIRLAP, 17 Aug 80).... 116

POLAND

Briefs
Natural Gas Imports 120

YUGOSLAVIA

Low Price Reduces Sugar Beet Acreage, Production
(PRIVREDNI PREGLED, 30 Aug-1 Sep 80) 121

Crop Changes Planned in Macedonia Up to 1985
(G. Dimovska; PRIVREDNI PREGLED, 23-25 Aug 80)..... 123

Briefs
Hard Currency to Railroads 126
Excessive Bureaucracy 126
U.S. Bank Credit To Split 127

CEMA ATTITUDE ON EEC PARTICIPATION VIEWED

Budapest MAGYAR HIRLAP in Hungarian 25 Jul 80 p 7

[Report by Sandor Nedeczky: "What Is the Topic of the Talks Between the CEMA and the EEC? A Clear Picture of the Situation"]

[Text] The two European organizations have been meeting for some time. The press and the official circles of the CEMA countries have limited their discussion up until now to the significance of the talks, and urged resolving differences of opinion in the name of mutual amenableness. Precisely in order to guarantee the undisturbed continuation of the present talks, certain circles refrained from criticizing certain stands of the EEC. Not so the press of the EEC. There, on the basis of detailed information--which was leaked on some details of the talks that are otherwise considered confidential--a conscious propaganda activity is taking place to influence public opinion. It is no accident that this so happens, for the EEC's delegation repeatedly refers to this manipulated, misinformed and preconceived public opinion in order to force its conceptions and will on the delegations of the CEMA and its member states.

The organs of the press and propaganda and certain representatives of the European Parliament are not sparing of destructive and provocative statements either. In these cases, the official representatives of the EEC refer to freedom of the press, freedom of speech and the immunity of parliament representatives, and say that these are only the opinions of the press or individual persons and politicians. They, that is, the EEC, have no sinister intentions at all and it is not their objective to undermine the unity of the CEMA and the socialist countries.

Still, there are two things apparent to the unbiased observer. One of them is that the EEC's official organs, the much advertised committee and its president and political executive responsible for foreign relations, and the Council of Ministers or its president have not found it necessary up to now to distance themselves publicly and officially from these irresponsible statements. The other striking phenomenon is that the delegation of the EEC represents views which seem to serve the above-mentioned political and provocative goals. This is possibly only accidental.

but perhaps not. For this reason it is important, then, to give a clear picture to the public. This is the objective of the few thoughts below.

Recognition, Lack of Recognition

This question was for a long time the focal point of the disagreement between the CEMA countries and the EEC. The Western propaganda that accompanies the present talks gives this an appearance that the CEMA countries, too, have finally accepted and recognized this reality which has been accepted and recognized by every other nation. The everyday use of language does not differentiate between acceptance and recognition. Interstate relations, however, take the form of rights and obligations, and there is a great difference between a country's acceptance of something--i.e., the recognition of a fact--and the recognition of something in an appropriate form--i.e., legal acceptance. The former is the given country's own sovereign will and act, with no obligation. The latter is an act agreed upon by contract, therefore it obliges. The EEC, they say, is a reality. This is true. This reality, however, has several aspects, especially if we view it from our own economic and political interests. The fact, for instance, that the EEC is a customs union, i.e., there are no duties between its own countries, and that it has external customs tariffs, is an absolute fact that "must be recognized." But such customs union affects the interests of other countries as well, for duties afflict the prices of these countries when they enter the EEC's customs area. Thus, in order to recognize customs unions by international law, it is not enough to state the fact that a customs union has been created, but it also must be stated whether and to what extent the given customs union has fulfilled the obligations that are set in international contracts. From this aspect, the EEC's customs union character has not been entirely and legally recognized. This is so not because of the CEMA countries' attitude but because of the reservations of the EEC's most important trade partners.

It must be noted at the same time that the EEC's customs union character was de facto recognized by all of its important trade partners.

Economy and Politics

The EEC is not only a customs union but also an economic union, and a joint noncustoms-policy was established in certain sectors such as agriculture (for in the area of agriculture, there are still customs-like levies between individual EEC countries). The United States, for example, did not recognize this joint agricultural policy for a long time. Legal recognition came about only in 1979 during the GATT conference, and it had its price, of course. All of this illustrates that there is a significant difference between recognition and acceptance; this difference is not only formal but affects economic interests.

In addition, the EEC is not only an economic but also a political union. This was never denied by the EEC itself; on the contrary, it openly

proclaims it even today. The only time it keeps bashfully quiet about it is when it directs its propaganda toward the socialist countries. It is only us they want to make believe that they are only an economic organization or integration. Their argument for a long time was that you and I are both integrations, you cannot blame us for anything.

If we take a glance at the so-called Pact of Rome which created the EEC, we will see that all of its pores smell of politics. It commits its member states not only to implement the so-called free economy (this elicited the criticism of the socialist and communist parties of certain EEC countries; these parties are talking about the Europe of the monopolies) but also to engage in foreign policy. One of the signs of this is that the Pact of Rome that created the EEC reflects a situation which corresponds to the situation before the agreements between the two Germanys. With reference to West Berlin, it contains orders which cannot be guaranteed to be in harmony with the relevant four-power agreements.

Thus, he who confers with the EEC must also consider the political reality. But this is not tantamount with the legal acceptance of these and with giving up our own interests. This is why we must talk about it and this is why the conferences are taking place.

In addition to this, the EEC also created a joint trade policy. The essence of this that is relevant to us is that it is the EEC that acts and makes contracts in the name of and instead of the member states. But the Pact of Rome also states that this does not affect the earlier contracts of the individual countries either from the aspect of rights or from that of obligations. This is the way it happened, with the exception of certain socialist countries. Some EEC countries canceled the earlier contracts with them which contain, among other things, most-favored-nation treatment—which means the minimum of normal relations. This is how they wanted to force the socialist countries to "recognize" the EEC unconditionally and regardless of their interests. It must be noted that this did not happen in our case. Obviously because, as a signatory, we made contracts with all EEC countries and with the EEC itself for most-favored-nation status, which is unconditional and cannot be canceled.

Separate Contracts?

After this came a much-advertised proposal that every single socialist country should sign a separate contract with the EEC. This contract scheme (schema d'accord) was greatly supported by propaganda. They made it to appear as if it were a constructive step; however, the propaganda, the press and certain politicians talked about other things as well. They argued that this contract was beneficial for the smaller socialist countries because they would be thus freed from CEMA's straitjacket and might receive special benefits. This objective was never refuted by the official organs of the EEC and the governments of the member states. The behavior of the CEMA countries in this matter was cautious. The EEC's

propaganda viewed this with a wonder full of resentment. Here you are, an outstanding opportunity, an advantageous proposal, and they do not even reply. We can only wonder at this wonder. Or some people thought that we were not aware of their intentions, or thought that we could not wait to fall into the embracing arms of the EEC, an organization which in the meantime loudly proclaims that it does not want to regulate its relations with the socialist countries on the basis of the most-favored-nation treatment and lack of discrimination.

CEMA and its member states in turn made a proposal in 1975 that the two organizations should begin talks with consideration of their own areas of competence. The talks are being conducted on this basis.

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YUGOSLAV-HUNGARIAN COMMODITY TRADE LISTS FOR 1979

Belgrade MEDJUNARODNI UGOVORI (supplement to SLUZBENI LIST SFRJ) in Serbo-Croatian No 8, 17 Jul 80 pp 310-314

[Commodity lists from trade protocol ratified 6 April 1979 in Belgrade by the Federal Executive Council and signed by FEC chairman Veselin Djuranovic]

[Text] List A/1979. Exports From the People's Republic of Hungary to the Socialist Federal Republic of Yugoslavia, in thousands of dollars U.S.

No 1	Designation 2	Unit of Measurement 3	Quantity 4	Value 5
1	Machines, equipment, road and rail vehicles, instruments, products of the electronic industry, volume products of machinebuilding, and components	Dollars		71,000
	Breakdown:			
	Cooperation in the production of highway vehicles and in the motor industry	"		30,000
	Other cooperation in industrial production	"		5,000
	Electric motor trains	"		10,000
	Mechanical equipment for locomotives and parts for rail vehicles	"		1,000
	Port equipment (cranes and parts)	"		1,000
	Machinery and equipment for the Danube-Tisa-Danube Canal	"		6,000
	Machine tools	"		2,000

List A/1979 (continued)

1	2	3	4	5
	Agricultural machines and equipment for the food processing industry	Dollars		2,000
	Equipment for the electrical products industry, lamp parts and other components	"		5,000
	Parts for highway vehicles and garage equipment	"		4,000
	Miscellaneous instruments and components	"		1,000
	Tools and products of the metal manufacturing industry	"		4,000
2	Long-term cooperation			
	Pulpwood for Djuro Salaj of Krsko	Cubic meters (stacked)	280,000	
	Pulpwood for Matroz of Sremska Mitrovica	"	97,000	
	Ammonia for the Bor Mine and Smeltery, Generaleksport of Belgrade	Tons	27,500	
	Ammonium sulfate for the Bor Mine and Smeltery, Generaleksport of Belgrade	"	17,000	
	Carbamide for the Bor Mine and Smeltery, Generaleksport of Belgrade	"	17,000	
	PVC pellets for the Bor Mine and Smeltery, Generaleksport of Belgrade	"	4,200	
3	Products of ferrous metallurgy	"	66,000	
4	Exchange of products of ferrous metallurgy	Dollars		20,000
5	Products of electrometallurgy	"		2,700
6	Ethylene	Tons	10,000	
7	Propylene	"	10,000	
8	Polypropylene	"	6,000	
9	Sulfuric acid	"	60,000	
10	Synthetic resins	"	1,700	
11	Sodium hydroxide	"	20,000	
12	Butyl and isobutyl acetate	"	1,200	
13	Creosote for impregnating wood	"	4,000	
14	Ammonia	"	50,000	
15	Chemicals for plant protection	Dollars		500

List A/1979 (continued)

1	2	3	4	5
16	Carbamide	Tons	20,000	
17	Motor vehicle tires and industrial rubber	Dollars		2,000
18	Miscellaneous chemical products	"		3,000
19	Drugs, raw materials for the pharmaceutical industry and laboratory raw materials	"		2,500
20	Propane-butane	Tons	40,000	
21	Gasoline, reformed	"	10,000	
22	Blown oils	"	6,000	
23	Paraffin	"	2,000	
24	Finishing in the petroleum industry	Dollars		1,800
25	Silica sand	Tons	45,000	
26	Molding sand	"	8,000	
27	Perlite	"	15,000	
28	Cement	"	160,000	
29	Pulpwood	Cubic meters (stacked)	50,000	
30	Miscellaneous products of the lumber and paper industries	Dollars		2,000
31	Consumer goods	"		13,000
	Breakdown:			
	Textile products	"		6,500
	Housewares, camping furniture and camping supplies	"		4,000
32	Books, films and other products of printing and publishing	"		1,000
33	Raw and processed foods (including vegetable oils)	"		10,000
34	Border trade	"		9,500
35	Services (carriage, tourism, etc.)	"		54,000

List B/1979. Exports From the Socialist Federal Republic of Yugoslavia to the People's Republic of Hungary, in thousands of dollars U.S.

No 1	Designation 2	Unit of Measurement 3	Quantity 4	Value 5
1	Machines, equipment, road and rail vehicles, instruments, products of the electronic industry, volume products of machinebuilding, and components	Dollars		65,000

List B/1979 (continued)

1	2	3	4	5
	Breakdown:			
	Cooperation in the production of highway vehicles and in the motor industry	Dollars		30,000
	Other cooperation in industrial production	"		5,000
	Power engineering equipment, equipment and parts manufactured by the electrical products and electronics industries (including storage batteries)	"		5,000
	Construction and mining machines and parts	"		500
	Pumps	"		2,600
	Machine tools	"		1,000
	Agricultural machines and equipment for the food processing industry	"		1,800
	Parts for ships and cranes	"		1,000
	Parts for highway vehicles and garage equipment	"		4,000
	Parts for railroad cars	"		1,300
	Industrial fittings and couplings	"		5,800
	Tools and products of the metal manufacturing industry	"		7,000
2	Long-term cooperation			
	Cellulose for Lignimpex of Budapest (Djuro Salaj of Krsko)	Tons	40,000	
	Cellulose for Lignimpex of Budapest (Matroz of Sremska Mitrovica)	"	13,000	
	Monobasic ammonium phosphate for Chemolimpex of Budapest (Bor Mine and Smeltery)	"	70,000	
	Triple superphosphate for Chemolimpex of Budapest (Bor Mine and Smeltery)	"	100,000	
3	Ferroalloys (ferrochromium, ferromanganese and ferrosilicon)	"	5,000	
4	Castings	Dollars		1,000
5	Products of ferrous metallurgy	"		2,500
6	Exchange of products of ferrous metallurgy	"		20,000

List B/1979 (continued)

1	2	3	4	5
7	Coke	Tons	50,000	
8	Copper and semifinished copper products	Dollars		4,500
9	Lead	Tons	2,400	
10	Zinc metal	"	5,000	
11	Metallic silicon	"	600	
12	Cable	Dollars		500
13	Raw materials for polyurethanes, including polyols	Tons	2,000	
14	Nitrogen-phosphorus-potassium fertilizers	"	50,000	
15	Monobasic calcium sulfate	"	5,000	
16	Tribasic sodium phosphate	"	2,000	
17	Zinc oxide	"	1,000	
18	Methanol	"	8,000	
19	Boric acid	"	1,000	
20	Titanium dioxide	"	400	
21	Chemicals for plant protection	Dollars		1,500
22	Low-density polyethylene	Tons	5,000	
23	Motor vehicle tires and industrial rubber	Dollars		2,000
24	Miscellaneous chemical products	"		2,000
25	Drugs, pharmaceutical and laboratory raw materials	"		1,000
26	Barite	Tons	12,000	
27	Alumina	"	7,000	
28	Miscellaneous products of the nonmetallic minerals industry, including refractory material	Dollars		1,500
29	Slaked lime	Tons	30,000	
30	Beech lumber	Cubic meters	10,000	
31	Railroad ties	"	10,000	
32	Miscellaneous products of the paper industry	Dollars		1,300
33	Cigarette paper	Tons	600	
34	Rayon cord	"	500	
35	Polyester fiber	Dollars		2,000
36	Textile finishing	"		1,500
37	Consumer goods	Dollars		13,000
	Breakdown:			
	Textile products	"		6,500
	Housewares	"		4,000
38	Books, films and other products of the printing and publishing industry	"		1,000

Li-t B/1979 (continued)

1	2	3	4	5
39	Raw and processed foods, including deliveries on the basis of the Danube-Tisa-Danube Canal and tobacco	Dollars		9,500
40	Border trade	"		9,500
41	Services (carriage, tourism, etc.)	"		83,000

List C/1979. Exports From the People's Republic of Hungary to the Socialist Federal Republic of Yugoslavia Under the Exchange of Goods, Services and Economic Cooperation in Border Trade, value in thousands of dollars U.S.

No	Designation	Value
1	2	3
	Industrial consumer goods	3,100
1	Metal housewares and small farm machinery	800
2	Housewares made of synthetics, chemical products and cosmetics	200
3	Glass products, including glass bottles	400
4	Light bulbs	100
5	Textiles	800
6	Housewares	100
7	Exchange between department stores	700
	Agricultural products and foodstuffs	2,750
8	Eggs for hatching	300
9	Poultry for the food processing industry	1,000
10	Leguminous vegetables (peas, buckwheat, sorghum seed, etc.)	400
11	Alcoholic beverages in bottles	50
12	Miscellaneous agricultural products and foodstuffs	1,000
	Building and other materials	1,650
13	Building materials for flood control	1,450
14	Limestone for the sugar industry	200
	Production cooperation (finishing and services)	400
	Fair exhibits	100
	Exchange of consumer goods under the general contract between Konsumex and the Pomurke Agroindustrial Combine	1,500

List D/1979. Exports From the Socialist Federal Republic of Yugoslavia to the People's Republic of Hungary Under the Exchange of Goods, Services and Economic Cooperation in Border Trade, value in thousands of dollars U.S.

No	Designation	Value
1	2	3
	Industrial consumer goods	4,300
1	Metal housewares and industrial goods (electrical products, tools, bicycles, etc.)	800
2	Chemical products and cosmetics	900
3	Footwear	200
4	Soles and patterns	100
5	Sporting goods and toys	100
6	Textiles	800
7	Housewares	500
8	Motor vehicle tires	200
9	Exchange between department stores	700
	Agricultural products and foodstuffs	3,100
10	Canned foods	200
11	Chestnuts	200
12	Beer	2,500
13	Cigarettes	150
14	Liquor	50
	Building and other materials	100
15	Hydrated lime and tiles	100
	Production cooperation (finishing and services)	400
	Fair exhibits	100
	Exchange of consumer goods under the general contract between the Pomurke Agroindustrial Combine and Konsumex	1,500

7045
CSO: 2800

YUGOSLAV-CZECHOSLOVAK COMMODITY TRADE LISTS FOR 1979

Belgrade MEDJUNARODNI UGOVORI (supplement to SLUZBENI LIST SFRJ) in Serbo-Croatian No 8, 17 Jul 80 pp 315-317

[Commodity lists from trade protocol ratified 31 May 1979 in Belgrade by the Federal Executive Council and signed by FEC chairman Veselin Djuranovic]

[Text] List A/1979. Exports of Commodities From the Socialist Federal Republic of Yugoslavia to the Czechoslovak Socialist Republic

No 1	Designation 2	Unit of Measurement 3	Quantity 4	Value, 000 $ 5
1	Raw and processed foods, including fresh fruit, vegetables, prunes and seed			5,000
2	Canned fish			3,500
3	Tobacco and tobacco manufactures			10,000
4	Wine			1,000
5	Sorghum straw			1,500
6	Veneer and panelboard	Cubic meters	10,000	
7	Lumber	"	1,500	
8	Miscellaneous paper, cardboard and paper containers			1,000
9	Bauxite	Tons	150,000	
10	Chromium ore concentrate	"	10,000	
11	Electrolytic zinc	"	5,500	
12	Zinc dust	"	6,000	
13	Castings of zinc alloys	"	300	
14	Rolled and drawn aluminum products, including aluminum tube	"	2,000	
15	Rolled and drawn copper and brass products	"	500	
16	Nonferrous metal fittings			2,000

List A/1979 (continued)

1	2	3	4	5
17	Miscellaneous chemical raw materials and products, including dibasic calcium phosphate and exchange of chemical products			17,000
18	Miscellaneous pharmaceutical raw materials, products and drugs, including veterinary preparations			5,500
19	Deliveries under a specific contract			6,300
20	Products of the electrical equipment industry, including telephone cable			9,500
21	Passenger cars	Units	2,000	
22	Machines, including machine tools, equipment and parts and agricultural machines			45,000
23	Railroad cars, tanks and parts for railroad cars			5,000
24	Parts and accessories for motor vehicles			7,500
25	Gears			12,000
26	Tools and instruments			4,000
27	Miscellaneous metal products, including plumbing fittings, antifriction bearings, typewriters, etc.			3,000
28	Castings and forgings			7,200
29	Storage batteries			3,000
30	Motor vehicle tires and industrial rubber			5,300
31	Exchange of products of ferrous metallurgy			15,000
32	Textiles and textile products			16,000
33	Hemp and tow			1,200
34	Footwear and leather products			5,000
35	Consumer goods, including housewares			14,000
36	Viscose fiber, polyols and polyurethane products	Tons	3,000	
37	Electrocorundum			2,000
38	Books, films and printing and publishing services			500
39	Exchange of building materials, including asbestos-cement products			5,000

List A/1979 (continued)

1	2	3	4	5
40	Construction of building projects and construction services			35,000
41	Transportation services, including petroleum pipeline			50,000
42	Tourism			18,000
43	Miscellaneous invisibles			9,000
44	Deliveries related to industrial cooperation			50,000
45	Deliveries related to the Danube-Tisa-Danube contract			5,400
46	Deliveries under the NK [expansion unknown] contract			10,000
47	Deliveries related to the Jadran Department Store			1,000
48	Cooperation in agriculture: UPI of Sarajevo, AGROKOMERC of Velika Kladusa, and others, with TRANSAKT of Prague			2,000
49	Electric power			6,000
50	Deliveries under the contract between KTK [expansion unknown] of Visoko and METALIMEX of Prague			10,700
51	Miscellaneous			2,000

List B/1979. Exports of Commodities From the Czechoslovak Socialist Republic to the Socialist Federal Republic of Yugoslavia

No	Designation	Unit of Measurement	Quantity	Value, 000 $
1	2	3	4	5
1	Coking coal	Tons	600,000	
2	Rolled and drawn products of ferrous metallurgy, including semifinished products	"	110,000	
3	Miscellaneous products of ferrous metallurgy			5,000
4	Machines and equipment, including machine tools, 3,000 tractors, electrical equipment and other capital goods			95,000
5	Miscellaneous products of the electrical products industry			1,500
6	Miscellaneous metal products			2,000
7	Trucks and special vehicles			14,000

List B/1979 (continued)

1	2	3	4	5
8	Passenger vehicles	Units	7,500	
9	Parts for highway vehicles and tractors			8,000
10	Parts for railroad cars			1,000
11	Antifriction bearings			3,000
12	Tools and instruments			4,000
13	Deliveries under the special contract			8,200
14	Miscellaneous pharmaceutical raw materials and products			1,500
15	Miscellaneous chemical raw materials and products, including monoethylene glycol and exchange of chemical products			19,000
16	High-density polyethylene	Tons	5,000	
17	Polypropylene	"	5,000	
18	Synthetic rubber	"	1,500	
19	Tires and industrial rubber, including tires for construction machines			8,000
20	Raw and fired clay	Tons	24,000	
21	Kaolin	"	35,000	
22	Cement	"	50,000	
23	Exchange of building materials, including asbestos-cement products			5,500
24	Glass products			3,500
25	Glass wool			1,700
26	Exchange of products of ferrous metallurgy			15,000
27	Textiles, footwear and intermediate products			22,500
28	Consumer goods, including musical instruments and sporting goods			16,000
29	Wood products			5,400
30	Pulpwood			6,000
31	Miscellaneous paper, including kraft paper and scrap paper			3,000
32	Books, films and printing services			500
33	Deliveries under industrial cooperation			50,000
34	Deliveries under the Danube-Tisa-Danube contract			500
35	Deliveries under the NK [expansion unknown] contract			14,000

List B/1979 (continued)

1	2	3	4	5
36	Deliveries under the aluminum contract			16,000
37	Cooperation in agriculture between UPI of Sarajevo, AGROKOMERC of Velika Kladusa, and others, on the one hand, and TRANSAKT of Prague on the other			15,000
38	Tourism			3,000
39	Transportation services, including gas pipeline			20,000
40	Deliveries under the contract between KTK [expansion unknown] of Visoko and METALIMEX of Prague			10,700
41	Miscellaneous			8,000

7045
CSO: 2800

YUGOSLAV-BULGARIAN COMMODITY TRADE LISTS FOR 1979

Belgrade MEDJUNARODNI UGOVORI (supplement to SLUZBENI LIST SFRJ) in Serbo-Croatian No 8, 17 Jul 80 pp 318-321

[Commodity lists from trade protocol ratified 31 May 1979 in Belgrade by the Federal Executive Council and signed by FEC chairman Veselin Djuranovic]

[Text] List A/1979. Exports From the People's Republic of Bulgaria to the Socialist Federal Republic of Yugoslavia

No 1	Commodity Designation 2	Unit of Measurement 3	Quantity or Value 4
1	Forklift trucks (electric and internal combustion)	000 $	2,500
2	Electric hoists	"	400
3	Spare parts for forklift trucks	"	500
4	Greenhouses	"	6,000
5	Irrigation and drainage systems	"	4,000
6	Metal fabrications	"	6,000
7	Diesel engines	"	100
8	Battery separators and elements	"	1,000
9	Rakes	"	100
10	Agricultural machines and spare parts	"	1,000
11	Miscellaneous machines, equipment and mutual deliveries under cooperative arrangements	"	4,000
12	Cooperation in the production of washing machines	"	500
13	Products of the electronics and electrical equipment industries	"	2,000
14	Complete equipment for warehouses	"	1,000
15	Metal- and woodworking machines	"	500
16	Bearings	"	150

List A/1979 (continued)

1	2	3	4
17	Fifth wheels and parking wheels for trailers	000 $	500
18	Cables and conductors	"	200
19	Exchange of products of ferrous metallurgy	"	8,000
20	Processing of aluminum	"	4,000
21	Processing of nonferrous metals and semi-finished products	"	1,000
22	Products of nonferrous metallurgy	"	700
23	Metal products (special shapes for electric and gasoline forklift trucks)	"	2,000
24	Hot rolled strip	"	80
25	Tinplate	Tons	3,000
26	Lead	"	5,000
27	Zinc in ingots	"	2,000
28	Scrap iron	000 tons	30
29	Sodium nitrate	Tons	2,000
30	Sodium nitrite	"	500
31	Carbon disulfide	"	2,000
32	Tribasic sodium phosphate	"	3,000
33	Ammonia	000 tons	5
34	Ammonium sulfate	"	15
35	Carbamide	"	20
36	Borax	Tons	200
37	Paraffin	"	2,000
38	Acetone	"	2,000
39	Ethylene oxide	"	1,000
40	Acrylonitrile moncmer	000 tons	10
41	Styrene monomer	Tons	200
42	Red lead oxide	"	600
43	Litharge	"	300
44	Diethylene glycol	"	300
45	Phenol	"	2,000
46	Propylene	"	1,000
47	Toluene	"	3,000
48	Arizol	"	3,000
49	Liquid chlorine	"	2,000
50	Chemicals for plant protection	000 $	100
51	Products of the petroleum industry	"	1,000
52	Propane-butane gas	000 tons	20
53	Tires and rubber products	000 $	100
54	Miscellaneous chemical products	"	3,000
55	Kraft and other paper pulp	"	800
56	Miscellaneous paper and cardboard	"	1,000
57	Wood chipboard	"	2,000
58	Charcoal	Tons	1,000
59	Cement	000 tons	50

List A/1979 (continued)

1	2	3	4
60	Raw and processed foods	000 $	3,000
61	Seed and nursery stock	"	500
62	Pharmaceutical raw materials and cosmetic products	"	3,000
63	Essential oils and plants	"	400
64	Textiles, textile raw materials, garments, textile accessories and trimming	"	4,000
65	Raw hides and leather products	"	3,000
66	Synthetic fibers and yarn	"	500
67	Consumer goods	"	3,000
68	Border trade	"	5,000
69	Carriage	"	4,000
70	Tourism	"	2,600

List B/1979. Exports From the Socialist Federal Republic of Yugoslavia to the People's Republic of Bulgaria

No	Commodity Designation	Unit of Measurement	Quantity or Value
1	2	3	4
1	Equipment and spare parts for shipbuilding	000 $	1,200
2	Ship repairs	"	4,000
3	Railroad cars	Units	150
4	Forgings	000 $	500
5	Nickel-cadmium storage batteries	"	700
6	Drive chains	"	200
7	Diesel engines	"	1,000
8	Spare parts for diesel engines	"	800
9	Construction machines, medical equipment and equipment for the chemical industry, steel fittings and other machines and equipment	"	10,000
10	Welding machines	"	300
11	Railroad trestles	"	4,000
12	Tanks for beer	Units	8
13	Spare parts for railroad cars	000 $	500
14	Agricultural machines and spare parts	"	1,500
15	Metal- and woodworking machines	"	700
16	Other machines, equipment and mutual deliveries under cooperative arrangements	"	4,000
17	Bearings	"	150
18	Cooperation in production of washing machines	"	500

List B/1979 (continued)

1	2	3	4
19	Products of the electronics and electrical equipment industries	000 $	3,000
20	Sieves for the paper industry and other industries	"	300
21	Refractories	"	200
22	Cables and conductors	"	3,000
23	Abrasive material and corundum	"	1,000
24	Tools	"	100
25	Processing of nonferrous metals and semi-finished products	"	1,000
26	Castings of gray iron	Tons	1,500
27	Exchange of products of ferrous metallurgy	000 $	8,000
28	High-grade steel	Tons	8,000
29	Seamless pipe	"	8,000
30	Steel gas cylinders	Units	5,000
31	Aluminum, aluminum shapes and aluminum manufactures	000 $	8,000
32	Aluminum foils	Tons	500
33	Antimony	"	1,000
34	Metallic silicon	"	700
35	Products of nonferrous metallurgy	000 $	1,200
36	Metal products	"	1,000
37	Nitrocellulose	Tons	400
38	PVC pellets	"	400
39	Polyvinyl acetate	"	2,000
40	Dodecyl benzene	"	5,000
41	Titanium dioxide	"	500
42	Xanthates	"	500
43	Chromium-potassium sulfate	"	500
44	Gelatin	"	50
45	Monochloroacetic acid	"	300
46	Lindane	"	50
47	Polyols	"	500
48	Sodium chlorate	"	400
49	Polyurethane	"	100
50	Chemicals for plant protection	000 $	1,000
51	Auxiliary supplies for leathermaking and textiles	"	700
52	Paints, varnishes and raw materials	"	1,000
53	Tires and rubber products	"	1,000
54	Conveyor belts and other rubber products	"	500
55	Equipment for workplace safety	"	100
56	Products of the petroleum industry	"	1,000
57	Miscellaneous chemical products	"	3,000
58	Cellophane	Tons	500

List B/1979 (continued)

1	2	3	4
59	Cellophane tape	Tons	50
60	Miscellaneous paper and cardboard	000 $	2,200
61	Textiles, garments, textile accessories and trimming	"	4,000
62	Viscose silk	Tons	600
63	Wool-type cellulose fiber	"	1,000
64	Viscose cord	"	200
65	Synthetic fibers and yarn	000 $	500
66	Pharmaceutical raw materials, cosmetic products and lacquers, etc.	"	2,000
67	Seed and nursery stock	"	500
68	Consumer goods	"	3,000
69	Housewares	"	500
70	Raw and processed foods	"	3,500
71	Border trade	"	5,000
72	Goods based on installments of the highway loan which have come due	"	850
73	Miscellaneous goods	"	2,000
74	Carriage	"	14,000
75	Tourism	"	2,600

7045
CSO: 2800

YUGOSLAV-POLISH COMMODITY TRADE LISTS FOR 1979

Belgrade MEDJUNARODNI UGOVORI (supplement to SLUZBENI LIST SFRJ) in Serbo-Croatian No 8, 17 Jul 80 pp 322-326

[Commodity lists from trade protocol ratified 31 May 1979 in Belgrade by the Federal Executive Council and signed by FEC chairman Veselin Djuranovic]

[Text] List A/1979. Exports From the Socialist Federal Republic of Yugoslavia to the People's Republic of Poland in 1979

No	Item Designation	Unit of Measurement	Quantity	Value, 000 $
1	2	3	4	5
1	Deliveries based on cooperation and specialization			85,900
	Breakdown:			
	Motor vehicle industry			40,500
	Ignition devices in the motor industry			500
	Automotive electrical equipment			1,000
	Industry of tractors and farm machines			25,000
	Including spare parts alone	$2 million		
	Rail vehicle industry			300
	Electronics industry			6,000
	Electrical equipment industry			2,000
	Machine tool industry			6,400
	Including woodworking machines	$400,000		
	Construction and roadbuilding machine industry			2,000
	Industry of household appliances and municipal service equipment			1,300
	Household plumbing fittings			300

List A/1979 (continued)

1	2	3	4	5
	Medical instruments			600
2	Equipment for the fuel and power industry and the processing industry			11,000
	Breakdown:			
	Equipment for the fuel and power industry	$9 million		
	Equipment for the processing industry	$2 million		
3	Miscellaneous machines and equipment			9,000
	Including:			
	Equipment for the food manufacturing industry			
4	Buses	Units	600	
5	Construction machines and parts			10,000
6	Machines for the textile, leather and footwear industries			1,800
7	IMR-33 motors	"	500	
8	Equipment for garages and service stations			350
9	Truck assemblies			600
10	Parts for the Zastava 750 car			1,000
11	Parts for buses			6,100
12	Mining equipment and parts			5,000
13	Products of the electrical equipment industry			5,000
	Including:			
	Transformers			
14	Tools			2,500
15	Industrial fittings			300
16	Medical instruments and equipment			1,000
17	Office machines			500
18	Ball bearings			1,100
19	Metal products			2,000
20	Electrical porcelain			2,500
21	Abrasives			1,600
22	Castings			3,500
23	Semifinished aluminum products	Tons	5,000	
24	Products of the cable industry			3,000
25	Exchange of products of the cable industry			2,000
26	Copper foils	"	190	190
27	Bauxite	"	p.m.*	
28	Alumina	"	75,000	

List A/1979 (continued)

1	2		3	4	5
29	Metallic silicon		Tons	1,000	
30	Ferromanganese		"	4,000	
31	Ferrochromium		"	2,500	
32	Ferrosilicon		"	5,000	
33	Ferrosilicomanganese		"	2,500	
34	Exchange between steel mills				25,000
35	Exchange of other products between steel mills				3,500
36	Products of ferrous metallurgy obtained from the processing of ingots		"	100,000	
37	Burned magnesite		"	18,000	
38	Refractory brick		"	14,500	
	Acid-resistant and fireclay	8,000	"		
	Silicate	4,000	"		
	Magnesite	2,500	"		
39	Miscellaneous nonmetallic minerals		"		p.m.*
40	Bentonite		"	20,000	
	Including:				
	For drilling and casting				
41	Asbestos products				800
42	Laboratory and technical glass				300
43	Paper, paperboard and finished paper products				2,500
44	Sorghum straw				400
45	Beech lumber		Cubic meters	10,000	
46	Ash lumber		"	1,500	
47	Veneer		000 m^2		
48	Pharmaceutical products				6,000
49	Products of the rubber industry				4,200
50	Chemicals for plant protection				3,000
51	Tribasic sodium phosphate		Tons	1,500	
52	Aluminum hydroxide		"	25,000	
53	PVC pellets		"	4,000	
54	Polyvinyl acetate		"	2,000	
55	Phthalic anhydride		"	1,000	
56	Dibasic calcium phosphate		"	5,000	
57	Petroleum coke		"	2,000	
58	Miscellaneous chemicals				4,400
59	Exchange of fibers and yarn for the textile industry				5,000
60	Alcoholic beverages				2,000
61	Tobacco		"	400	
62	Pork				p.m.*

List A/1979 (continued)

1	2	3	4	5
63	Corn	Tons		
64	Seed corn	"	9,000	
65	Miscellaneous raw and processed foods			15,000
66	Knitwear and other textile products			10,000
67	Exchange of an assortment of products of the leather industry			300
68	Housewares			1,000
69	Cooperation in the production of housewares			500
70	Miscellaneous glass products			1,500
71	Industrial consumer goods			22,000
72	Films, books and philatelic articles			100
73	Exchange of goods between organizations for domestic trade and cooperative organizations			4,500
	Including:			
	Exchange between cooperative organizations	$3 million		
74	Miscellaneous			3,000
75	Tourist services			6,000
76	Construction services			8,000

* (?) Depending on availability--translator's note.

List B/1979. Exports From the People's Republic of Poland to the Socialist Federal Republic of Yugoslavia in 1979

No 1	Item Designation 2	Unit of Measurement 3	Quantity 4	Value, 000 $ 5
1	Delivery on the basis of cooperation and specialization			85,900
	Breakdown:			
	Motor vehicle industry			40,500
	Ignition devices in the motor industry			500
	Automotive electrical equipment			1,000
	Tractor and agricultural machine industry			25,000
	Including spare parts	$2 million		
	Rail vehicle industry			300

List B/1979 (continued)

1	2	3	4	5
	Electronics industry			6,000
	Electrical equipment industry			2,000
	Machine tool industry			6,400
	Including woodworking machines	$400,000		
	Construction and roadbuilding machine industry			2,000
	Industry of household appliances and municipal service equipment			1,300
	Household plumbing fittings			300
	Medical instruments			600
2	Complete facilities			
	Breakdown:			
	Fuel and power facilities	$21.3 million		
	Equipment for sugar mills	$11.8 million		
	Other equipment	$ 8.0 million		
3	Conveyor belts and mining equipment			10,000
4	Construction machines and parts			15,000
5	Textile machines and parts			3,000
6	Tools			2,000
7	Miscellaneous machines and equipment			3,000
	Including:			
	Machines for the food manufacturing industry			
8	Trucks	Units	150	
9	Ball bearings and parts			4,500
10	Products of the electrical equipment industry			2,500
	Including:			
	Transformers			
11	Office machines			500
12	Parts for buses			2,000
13	Equipment for garages and service stations			350
14	Medical instruments			500
15	Metal products			2,000
16	Abrasives			600
17	Rolled products	Tons	65,000	
18	Exchange of products of ferrous metallurgy			25,000
19	Exchange of other products between steel mills			3,500

List B/1979 (continued)

1	2	3	4	5
20	Semifinished products of ferrous metallurgy (processing of ingots)	Tons	150,000	
21	Exchange of products of the cable industry			2,000
22	Coking coal	Tons	p.m.*	
23	Charcoal	"	80,000	
24	Coke fines	"	25,000	
25	Electrodes			500
26	Sulfur	"	65,000	
27	Synthetic rubber	"	1,200	
28	Pharmaceutical raw materials and products			4,000
29	Products of the rubber industry			2,800
30	Dyes and pigments			4,000
31	Dibasic ammonium phosphate	"	p.m.*	
32	Lye	"	15,000	
33	Ammonium sulfate	"	p.m.*	
34	Polypropylene	"	10,000	
35	Carbon disulfide	"	12,000	
36	Terephthalic acid	"	1,000	
37	Nitric acid	"	10,000	
38	Chemicals for plant protection			1,000
39	Miscellaneous chemicals			10,000
40	Cement	"	p.m.*	
41	Raw refractory materials			1,000
	Including: Roasted corundum, fused mulite, and high-alumina cement			
42	Miscellaneous nonmetallic minerals			p.m.*
43	Pulpwood, softwood	Cubic meters (stacked)	100,000	
44	Scrap paper	Tons	10,000	
45	Miscellaneous products of the paper industry			1,000
46	Miscellaneous products of the wood industry			3,500
	Including: softwood lumber, telephone and telegraph poles	$3.5 million		
47	Exchange of fibers and yarn for the textile industry			5,000
48	Vodka			1,000
49	Miscellaneous raw and processed foods			6,000

List B/1979 (continued)

1	2	3	4	5
50	Products of the textile industry (fabrics, knitwear and accessories)			10,000
51	Exchange of assortment in the leather industry			300
52	Housewares			p.m.*
53	Cooperation in the housewares industry			500
54	Miscellaneous glass and crystal products			1,500
55	Porcelain, porcelite and ceramics			2,000
56	Industrial consumer goods			13,000
57	Films, books and philatelic articles			100
58	Exchange of goods between organizations for domestic trade and cooperative organizations			4,500
	Including:			
	Exchange between cooperative organizations	$3 million		
59	Miscellaneous			3,000
60	Tourist services			1,500

* (?) Depending on availability--translator's note.

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ENERGY PROBLEMS, CONSUMPTION EVALUATED

Structural Changes in Primary Energy Sources

Prague PLANOVANE HOSPODARSTVI in Czech No 7, 1980 pp 1-6

[Article by Vitezslav Vinklarek, deputy chairman of the State Planning Commission]

[Text] The development of the Czechoslovak economy in the postwar period made possible truly revolutionary changes in the life of our society. From the time when the problem was to make sure that people had enough to eat and adequate clothing and shoes, a situation has emerged in which the vast majority of the population, rather than only a few privileged individuals, is selectively choosing from among better types of food, clothing and footwear. Today even young families consider a high living standard and the best of everything for children, as quite normal. Whole cottage communities have sprouted in the countryside, we are establishing second residences for our leisure time, and we travel abroad in large numbers during summer vacations. We have developed and maintained a high European living standard which, unlike those in the capitalist countries, has its socialist certainties.

The global situation, however, has also undergone changes. The most significant of these with respect to the CSSR economy are the changes on the world markets of fuels, energy, raw materials and foodstuffs. Their procurement is much more difficult, both physically and in economic terms. In the Czechoslovak economy, with its own insufficient and limited raw material base, this causes severe problems. The main consequence of the 1973-74 changes, and their escalation in 1978-79 and thereafter, lies in the fact that the demands of fuels, raw and other materials on the national income are growing. In the long run this acts the same as if the national income's very formation were slowing down.

The changes at home and throughout the world levy new demands on our economy and the resources developed within it. It goes without saying that the nature of these demands is not so much quantitative as primarily qualitative. In production, and gradually also in consumption management, we

must find a way to focus attention on problems of quality. We need to reach a point where, through better quality and more intensive use of labor, fuels, energy, raw and other materials in production, we turn out products of ever-rising technological and qualitative level, and where these products become more profitable especially in foreign markets, but also in domestic markets.

Among the areas which most influence the effectiveness of the formation and allocation of national revenue in the present period of development is the fuels and energy complex. Physical facts might create the impression that everything is in good order, that here we have a process which reflects the growth of efficiency, and that the only thing to be concerned about is its pace, i.e., possible acceleration.

For each billion korunas of national revenue we use up the following quantities of primary energy sources (in thousands of tmp [tons of standard fuel]):

	1970	1975	1980 (est)
	259	225	210
drop	--	34	15

The lowering of energy demands on national revenue formation is thus clear. What is also visible, however, is its slowdown. This is obviously linked to higher use of solid fuels which occurred following the sharp rise in the price of oil in 1973-74 (and transformation of energy and its refining is less effective when based on solid fuels). There is no doubt that this process is also influenced by a slower growth in the national income which occurred in recent years.

The question of lower pace in energy demand assumes a different dimension when we examine how much it costs to procure a given quantity of primary energy sources. Without great analysis and evidence, I can state that 210,000 tmp in 1980 is considerably more expensive than 225,000 in 1975, and 259,000 in 1970. Stated simply, the cost of primary sources needed to form a unit of national income, is growing. In other words, it is a fact that either the pace of lowering energy demand slowed down too much, or the energy structure has become too costly. It seems that both aspects have become the order of the day.

Let us first examine what types of fuels (judged by the cost of their production) are increasing their significance in the overall structure of primary energy sources for domestic use. In this, let us consider that

--while domestic sources are acquired under steadily worsening conditions, their cost nevertheless rises relatively slowly (this, of course, does not mean that we are indifferent to this rise and that funds for this purpose can be approved lightly),

--imported sources consist largely of oil and natural gas. Their cost has risen enormously in two waves, first in 1973-74, and second in 1978-79, and continues to rise.

Supplying the growing domestic consumption needs, under above-mentioned circumstances, is developing as follows (in millions of tmp):

	1970	%	1975	%	1980(est)	%
Domestic sources	58.4	71.9	58.7	63.0	61.5	57.9
Sources from import	22.8	28.1	34.5	37.0	44.7	42.1
Domestic use overall	81.2	100.0	93.2	100.0	106.2	100.0

Constantly rising in the past decade is the percentage of imports to meet domestic consumption needs of primary energy. Even without documentation, I must say that this picture, i.e., growth of imported fuels, is also clearly visible in securing the production of electricity and heat. The cost growth per unit of primary sources needed per unit of national revenue results, in the first place, from the percentage growth of expensive imported fuels, especially oil, in the overall domestic consumption of primary energy sources.

Thus arose a whole new situation. Ten or 15 years ago, we promoted the line in the national economy of using oil and its byproducts to the maximum extent possible for the needs of the energy industry, switching from electrification of long-distance and urban transport to diesel power, and utilization of primarily motor and heating oil as a factor in labor productivity growth in mining and the other industries, as well as in construction and agriculture. For example, for long years we were satisfied with virtual stagnation in the extraction of energized brown coal--for all practical purposes, until 1975. All that was correct then, in a period of cheap (and getting cheaper) oil and low-cost raw materials. However, to continue this policy even now, especially with the argumentation "why, for 10 years you were pushing us into it," would be an anachronism, to say the least. Failure to understand that to operate, in a period of expensive oil and raw materials, the same way we did when they were inexpensive, would represent a heavy loss to the national economy.

Naturally, the new situation does not mean immediate abolition of all past practices and introduction of new ones. The national economy does not tolerate abrupt measures which have "catastrophic" consequences. Moreover, we have been reacting to the new conditions to some extent ever since 1974. We slowed down the growth of oil-related product consumption for energy purposes, and even in motorization, etc. The new situation, however, requires more consistency and continuation in the adopted course in a more programmatic and thoughtful manner in all respects. The price rise which we are currently experiencing again on all world markets, is beginning to affect our economy to the full extent--the grace period we were granted, and still are, by virtue of the system of price formation with respect to

the Soviet Union and the other socialist countries, is beginning to be exhausted. What, then, is the situation; what are the conditions and remedies; and what may, or must, be the approach to resolution? If in the immediate future we can still count on a modest rise in oil processing, in a more long-term view it will be wise to expect a certain decrease. Simultaneously, oil consumption for chemical purposes will apparently continue to grow. The same will be true in mechanization, even though such consumption is subject to all-embracing effectiveness and economy standards. The production capability of light particles in oil must be raised by the cracking process. This is one side of the problem which, however, is linked with the lower projection of the dark particles, thus with lower oil utilization for energy purposes. In our circumstances, this lower oil utilization cannot be replaced by anything but energized coal and nuclear electricity. That is the other side of our problem. Consequently, more intensive oil processing, more extraction of brown coal especially, and more nuclear electric power, constitute the Gordian knot, the cutting of which, as relates to this branch, will determine the future growth of effectiveness of our national economy, as a gradual resolution of a number of problems in the fuels and energy balance in our country.

This means that we are on the threshold of important changes in the structural makeup of the national economy. These changes must seek to ease the burden on national income formation placed on it by the situation in fuels and energy. As the following will demonstrate, this involves a whole series of changes.

What problems and tasks must we focus on? What needs to be done?

1. Remove gasoline as rapidly as possible from use in the energy industry. As surprising as it may seem, we are using 100,000 tons of it for these very purposes. Even today, it is the most expensive fuel and there is no doubt that when it is manufactured by the cracking process, it will be even more expensive. Most likely, the best substitute must be natural gas.

The use of gasoline as fuel must, for all intents and purposes, be limited to private motor transport and even there technological progress must assist in reducing standard consumption. Efficiency in the use of gasoline in this one area is achieveable. That particular use of gasoline aside, it must be considered a form of petrochemical raw material the relative value of which will be reassessed in future phases of the reproduction process. In this regard, we should note that the replacement of certain products made from domestic raw materials (glass, ceramics) by plastics, is currently not always desirable. On the contrary, by doing this there is considerable wasting of plastics.

2. More effective and economical handling of motor and heating oil throughout the national economy, since it is the second most expensive fuel. This is especially important in

--transportation, where (in addition to elementary discipline, such as full utilization of each trip) we face two basic problems: The range of transport operations as such, and the type of fuel power base. The range of transport operations is tied to the overall national economic tendencies, the pace of development, the extent of fuels, metals, and raw materials consumption, their relative values, etc. Intensification in national economic development therefore represents the principal criterion in determining the scope of transport operations, as well as in lowering oil consumption. In this connection we are about to strengthen the role of rail transport in the overall transportation structure, in both freight and passenger operations. The fuel power base which has in the past relied on higher use of diesel oil, will henceforth have to be reoriented toward electricity. Motor oil for long-distance, but also urban, transport, will have to be replaced by nuclear electricity. This constitutes a major structural change, the implementation of which will result in electrification of railroads, as well as urban mass transit, and in production restructuring of locomotives, buses, and streetcars. This must be synchronized in time with the construction of nuclear electric plants and the increase in electricity production therein;

--in the construction industry we must avoid projects which require great movement of materials and thus high consumption of motor oil. This is, of course, linked with the concepts of capital investment and its orientation in greater measure not on large construction projects with extensive ground operations, but rather on such structures as can be built with less movement of materials than was the case before. The use of motor oil in this area for heating will not be possible in the future.

--in agriculture today we can no longer manage without extensive mechanization and ensuing consumption of motor oil. We must, however, avoid its use for other than these technological purposes. We should note that there is high consumption of motor oil as a source of heat, for hot water, for the production of pressed fodder, etc. In each individual case, we must calculate whether, given the foreign (not domestic) price of motor oil, its use is still profitable (e.g., production of pressed fodder, considering the quality of other types of fodder).

Generally, we must say with respect to motor oil consumption that its domestic price does not reflect its relationship to other types of fuels, that it distorts the view of its effective utilization, and invites a tendency to ignore conservation in its use.

3. As soon as possible we must halt the rise in light and heavy heating oil consumption for electricity and heat production, and soon thereafter begin to limit their use throughout the industry. Production of electricity and heat by means of fuels whose price is several times higher than the price of domestic fuels, is obviously counterproductive.

This is one of the complicated ways of resolving the problem. Part of the answer (as in changes in the power source in transportation) doubtless

lies in the construction of nuclear plants and their production of electricity. After all, in the growth structure of primary energy sources entering the national economy, the growth of nuclear-produced electricity will be of ever increasing importance. While in 1971-75 oil alone represented almost two thirds of the overall increase in domestic use of primary energy, in 1976-80 it still represented about one third. However, in the coming 5 years its increase will represent roughly only one tenth of the overall consumption of primary sources. In contrast, nuclear energy which in this five-year plan is about one tenth, will in the next 5 years represent almost half of the overall increase in primary energy consumption. It is because of this that corresponding transformation (direct and indirect) of this increase in usage must be found.

What then is of primary importance?

--reduce production of electricity in all plants which depend on heating oil, to gradually correspond to the growth in nuclear energy production, that is, transformation, the implementation of which is relatively easy. As a result of this change, we must achieve an absolute lowering of heating oil use.

--however, to turn a portion of the increase in primary sources gained by nuclear process into heat is a more difficult transformation with respect to both structure and location (excepting a relatively small portion intended to supply heat in the vicinity of nuclear power plants). Several alternatives are possible, the individual advantages of which must be tested, but each of them can prove useful to some degree.

a) the simplest way would be to use electricity from nuclear plants for direct heating of, for example, family houses or installations of the tertiary sphere. This would be best with respect to the environment, and acceptable in terms of energy distribution. The converse of this could be using the increased production of electricity from nuclear plants to further lower production in traditional coal plants, thus reducing the consumption of coal. Low-quality brown coal made available in this way can be used in heating plants and, assuming that the engineering industry produces even smaller boiler units for effective use, we can gain heat for even smaller living and other areas.

b) somewhat harder and governed by location is the possibility of transition of condenser electric plants to thermal operations. This can be advantageous where a major overhaul has already been deemed necessary, where there is potentially large consumption in industry and communal housing, and where the distribution is linked to installation where obsolete heating oil equipment can be replaced.

Generally speaking, it will apparently be necessary to envisage that it will not be possible everywhere to renew obsolete heating and adapter equipment using heating oil. Given the fact that import of expensive oil will decrease in the future, it will be necessary to use the cracking

process; consequently, there will be a drop in heating oil sources and much of the existing equipment will have to be reconstructed. Possible replacements can be provided by some of the above-mentioned methods; in exceptional cases it may be possible to use natural gas.

The cost of primary energy sources needed to form a unit of national income must be purposefully regulated. Their tendency to rise will continue in domestic, but especially in foreign imported sources. Limiting this tendency in brown and black coal, and effectively managing fuels in nuclear plants, must be one of the most important goals of the overall fuels and energy policy. But most of all, we must limit consumption of the most expensive primary energy sources, namely oil and oil-related products, in the transformation of the energy complex. Burdening national revenue with these expensive sources is the same as not having any formation of national income at all. And this is the more serious the slower the formation of national income becomes.

Given the high price of fuels, energy, and raw materials, the primary concern throughout our national economy must be in their conservation and maximum effectiveness in utilization. This is even more important when we consider the fuels and energy situation in the whole country. It is for this reason that we are preparing a special, targeted state program for fuels and energy conservation. The main thrust of this program must be directed at the largest possible savings in oil and oil-related production. Moreover, we will have to learn to utilize more efficiently that portion of primary sources which will then enter the reproduction process. All products, be it foodstuffs, textile, glass, footwear, engineering, construction, or metallurgy, every one of them contains primary energy which costs us dearly in labor and funds. To some extent, we can even claim that virtually the same amount of energy is expended on a bad product as on a good one, on a technically obsolete one or one which is modern in every respect. The point is, however, that the good, technically flawless product can be profitably sold on the domestic or foreign market, which balances the cost of the primary energy which helped to produce it.

It must be the concern of the national economy as a whole and of all levels of management to economize in fuels and energy, to utilize them effectively in the course of the production cycle. Only then will the country have a sufficient supply of fuels and energy to make sure that we produce excellent, high-quality merchandise. Only in this manner can we cut the Gordian knot of primary energy sources, and overcome its limiting force.

Rationalizing Consumption

Prague PLANOVANE HOSPODARSTVI in Czech No 7, 1980 pp 7-10

[Article by Karel Houdek, State Planning Commission]

[Text] In the Directive for Economic and Social Development in the CSSR during 1976-80, the 15th CPCZ Congress decreed more effective management

and valuation of all types of fuels and energy, raw and other materials, and the reaching in industry of 2 to 2.5 percent annual savings in fuels and energy. To accomplish this task the CSSR Government adopted resolution No 123 of 13 May 1976, according to which respective ministers ensure, in the specifications of the state plan, implementation of rationalization measures, and thus guarantee, within the ceilings of the industrial branches, savings of 10.4 million tons of standard fuel [tmp].

These savings are being achieved. It is anticipated that their volume in industrial branches will be more than 10 percent higher. Moreover, since 1978, the kraj national committees have been tasked in this direction and savings there are expected to reach 380,000 tmp. In addition, the state program of rationalization of energy and fuels consumption, established long-term concepts of lowering energy demands in the Czechoslovak economy by setting up regional mechanisms, especially in the manufacture of energy-consuming products. These measures deal primarily with accelerating the introduction of semiconductor technology in high- and low-tension electric operations, better utilization of secondary energy sources, modernization of energy-consuming equipment, rationalization of electricity consumption in lighting technology, regulation and reduction in the use of heat and utility hot water in apartment and communal housing, and reduction in heat losses caused by faulty insulation of buildings.

Despite certain progress in lowering energy demand in our national economy, we cannot be satisfied with the results achieved. Completion of the process of replacing mercury regulators by those made of silica is suffering from delays, we have not fully met the needs of semiconductor welders, nor have we ensured to the needed extent the production and application of high-tension semiconductor technology in the regulation of industrial motors, and we have delayed delivery of thyristor regulators for both industrial motors and transportation. Manufacture of measuring and regulating instruments for heating systems intended for complex housing construction operations, does not fully meet the need.

The above-mentioned facts are partially reflected even in the structure of the fulfillment of the rationalization measures plan. They do not, howevery, fully explain certain negative trends which, in achieving savings in fuels and energy, are clearly evident, especially the high percentage of small rationalization measures, growth in the share of operations where savings in fuels and energy are merely an accompanying feature, and the relatively low percentage of important operations which are achieving measurable saving in fuels and energy. This, together with the fact that, for the purpose of saving over 500 tmp, or 1,000 MWh, the branches are spending 0.5 to 1 percent of their overall investments, would indicate insufficient appreciation of consumption rationalization in fuels and energy in the investment and economic policies of the industrial branches.

The future outlook for the Czechoslovak fuels and energy inventory, which relies on its own geological reserves of fuels, a realistic forecast for

nuclear energy development, and import of fuels and energy sources, indicates the need for fundamental changes in branch approaches to resolving the problems of fuels and energy conservation. Without substantial intensification of the rationalization process aimed at maximum economic performance with minimized fuels and energy consumption, the fuels and energy inventory will become a limiting factor in national economic development. Acceleration of the conservation process in energy demand must be initiated even now, in 1980, and fully implemented during the Seventh and Eighth Five-Year Plans. This task should be understood as part of complex economic relationships and must be implemented in all branches of the national economy.

An important prerequisite for the accelerated pace of lowering energy requirements in the Czechoslovak economy, is better utilization of fixed production assets. Their low utilization is one of the causes of insufficient economic performance. Yet, buildup of fixed assets, the cost of which rises along with their lower utilization, itself ties up considerable capital investment and consumes energy sources. Due to ceilings in capital investment and construction assets, it is impossible to maintain production potential at the most advanced world level, which further reduces economic performance and, at the same time, raises energy demand per production unit.

Among important conditions on which success depends in a dynamic development of supplying the Czechoslovak economy with fuels and energy, we must include:

--modernization of aging energy-consuming equipment which will decrease standard fuels and energy consumption for corresponding production;

--maximum utilization of secondary energy sources which, given the shortages in the primary sphere, represent a potential reserve in the Czechoslovak fuels and energy inventory (construction of incinerators, etc.);

--lowering material demand of the Czechoslovak economy, especially machinery, outfitting, and construction;

--substantially increasing the technical level of a number of our products so that their technological and economic parameters become comparable with products of the most advanced countries. This, in the process of international exchange, will bring about their better reassessment and, at the same time, in most cases also reflect their lower operation consumption of energy in their production.

An example of this type is the following survey of excavator production where the new model KU 800 offers only slightly better performance than the K 800, yet the new model has substantially higher operational weight and is almost six times as expensive:

Excavator designation	Theoretical performance m^3/hr	Theoretical performance per 1,000 m^3/yr	Actual performance per 1,000 m^3 from	Actual performance per 1,000 m^3 to	Op. weight tons	Price mil korunas
E 25	160	1,380	800	1,200	110	0.8
E 302	280	2,400	1,000	1,250	110	1.0
K 300	480	4,150	1,500	2,000	600	7.9
RK 400	480	4,150	2,000	3,300	800	21.5
K 800	1,200	10,300	3,500	6,000	1,315	19.8
KU 300	800	6,900	2,000	2,600	1,050	25.0
KU 800	3,000	25,850	6,000	7,800	3,800	115.0

Resolution of the problems of maximum effectiveness in the use of energy has, due to the more difficult conditions in securing fuels and energy, become a global concern. It is even part of the targeted long-range programs of economic cooperation of the CEMA member states, which deal primarily with problems of lowering fuels and energy consumption, development and perfection of new technological processes, decreasing energy losses in all branches, and maximum utilization of the expensive energy sources.

An important step toward implementation of accelerated decrease in the energy demands in Czechoslovak economy during the Seventh and Eighth Five-Year Plans is the elaboration of the long-term programs of consumption rationalization, savings, and utilization of all types of fuels and energy, as part of the targeted state program. The applicable CSSR Government Presidium resolution No 240/1979 directs, among other issues, the following in this matter:

--achieve lowering of energy demand in Czechoslovak economy through the implementation of concrete measures which will allow savings in 1985 of at least 11 million tmp, and in 1990 at least 25 million tons,

--in the development of iron metallurgy, eliminate increases after 1980 in the overall volume of technological consumption in fuels and energy,

--manage fuels and energy consumption in the nonproduction sphere at roughly the same pace as that of the overall domestic consumption of primary energy sources. At the same time, utilize to the maximum local energy sources, especially combustible waste, regulate the pace of development in the use of private cars in consonance with the development of available sources, and guarantee, with lower fuel consumption, necessary facilities in rail transport and, without increasing consumption, in road transport.

The cited government resolution also approved the intent of the targeted state program of consumption rationalization and utilization of fuels and energy, which embraces concrete tasks in securing a trend toward more effective lowering of energy demands in all branches of the national economy.

In the area of improvement, transformation, and in transporting fuels and energy, we are getting ready for the utilization of selected condenser, traditional, as well as nuclear electric plants to supply industry and the population with heat. High savings can be achieved by modernizing the boiler inventory. Through innovation in the branch and distribution networks we will, in addition to cutting losses, also achieve higher reliability in transit and deliveries. Overall, through the implementation of concrete measures in this sphere, we expect to save in 1985 1.5 million tmp/yr, as compared with 1980.

In the metallurgy of iron and nonferrous metals, we can save in 1985 at least 1.9 million tmp/yr. This, however, depends primarily on changes in the technology of steel production, introducing automated systems in blast furnace operations without a cupola, and better utilization of costly energy sources.

In engineering we can save in 1985 600,000 tmp/yr, especially by implementing a program of reconstruction and modernization of the engineering base and measures in the production of casts. The engineering branch has an important role in the Czechoslovak national economy with respect to lowering its energy demand, because it defines in large measure level of value added of metal composition and quality, as well as the energy parameters of engineering equipment used in all the branches. By means of this, it strongly affects both the suitability of our machinery in the international exchange, and the level of energy losses in Czechoslovak economy. Based on preliminary findings, we can count on relative saving of 1.2 million tons of ferrous metal which, computed in fuels, represents about 1.5 million tmp during the period of the Seventh Five-Year Plan.

In the chemical and consumer goods industries, it is possible by introducing new technology and utilizing secondary sources, to achieve in 1985 a saving of at least 1.2 million tmp/yr. In the production of building materials we can, through the introduction of new, modern technology, save 360,000 tmp annually. Considerably higher savings can be achieved by higher production of perfected heat insulation, fiber, and heat-resistant materials and their application in other branches of the national economy. Their volume in 1985 is to reach 1.8 tmp/yr, compared with 1980.

In agriculture and food industry we expect to save in 1985 about 260,000 tmp, primarily through optimum resolution of problems in agricultural transportation, innovation in pressed fodder production, and higher utilization of secondary energy sources.

Economy in all fuels and energy consumption and the program of their relatively higher valuation, is becoming one of the basic prerequisites of successful future development of our national economy and higher living standard of the population.

Consumption of Oil Products Viewed

Prague PLANOVANE HOSPODARSTVI in Czech No 7, 1980 pp 11-17

[Article by Eliska Rohlova, State Planning Commission]

[Text] After World War II, there was a marked increase in Europe in oil consumption resulting from a sharp growth in private automobile travel, air passenger and freight transport and, in the economically advanced countries, the use of oil products in chemical processing. The share of raw materials based on oil for a new branch of the chemical industry--petrochemicals--increased sharply, especially since the early 1960's. Gradually, oil began to replace certain types of traditional sources of fuels because, in comparison with coal especially, it was economically profitable. The result of this trend was that global consumption of oil in the early 1970's reached 3 billion tons per year. As illustration, we can state that in 1973 the share of oil in primary energy sources in the European Economic Community [EEC] was about 63 percent; in Japan, 75 percent; and in the United States, 45 percent (in the United States energy needs are met to a large extent by natural gas). The rapid rise in consumption in the initial economic growth of the developing countries could not be satisfied by traditional sources. It became necessary, therefore, to explore oil reserves which are very demanding in terms of capital investment (North Sea, Alaska, Siberia).

The World Oil Market

Given the trend in oil consumption in the early 1970's, it was estimated that in 1990-2000 the global production of oil would reach about 5.5 to 6 billion tons. This amount was considered the technical and economic maximum achievable and would mean that, after easily accessible sources had been exhausted, there would be a conflict between demand and supply with all the consequences for world economy.

The price of oil until 1973 was, in comparison with other primary energy sources, very advantageous, way below its exploitable properties. In the period when the rate of inflation in capitalist economies rose dramatically, the low price of oil became one of the barriers in the development of the producer countries. The first price increase by the OPEC countries was influenced by the cost of U.S. production and the production cost of the new drilling operations in the North Sea and Alaska. Even though the rise in oil prices was influenced by economic development, its principal impulse is to be found in the political events in the Middle East where roughly two thirds of the global oil supply are produced. Production and marketing of oil in 1973-79 were seriously affected by these events and prompted the producers to institute further price increases.

The advanced capitalist countries which import a large percentage of the oil they need from the Middle East, were unable, due to economic and

technological considerations, to replace it by other raw materials. Acceptable replacements for gasoline, motor oil, asphalt, and raw materials for chemical processing, have not been found.

As already stated, the concrete level of imports after 1973 was influenced by many factors. It was therefore necessary to reduce the inordinate rise in consumption and orient the economy toward other energy sources.

The reaction of the advanced capitalist countries to the changes in the oil market is illustrated in the following table (in millions of tons):

Consumption of Oil Products in Economically Advanced Countries

	1973	1978	% of own oil in 1978
United States	827.7	887.9	54.9
Japan	271.5	262.6	0.2
FRG	151.9	142.7	3.6
France	127.7	119.0	0.9
England	114.4	94.0	56.8
Italy	106.2	99.5	1.5

Where consumption of oil products had not decreased, as shown by the example of the United States, complications arose, the final resolution of which will inevitably lead to a significant reduction in consumption.

Development of Oil Consumption in the CSSR

Oil consumption, which immediately following World War II was practically zero, has since then registered roughly the same upward trend as in other economically-developed countries. In 1970 production based on oil was 10 million tons; in 1975, about 16 million tons; and in 1980 we expect it to be about 19 million tons. The volume growth of oil products in the CSSR made possible development in private automobile travel, public freight and passenger transportation, mechanization of strenuous labor in agriculture and forestry, and use of diesel oil in rail, river, and air transport.

Since, compared to our need, our domestic sources of oil are negligible, we must meet this need by imports almost exclusively from the Soviet Union. In 1978, for example, the Soviet Union provided 97.8 percent of Czechoslovakia's requirements in oil, and this under very advantageous conditions for our economy, using the most effective transport means, namely, the oil pipeline.

Soviet aid to the CEMA member countries in meeting their needs, especially in energy, is documented by the volume of deliveries in 1976-80, within the framework of long-term trade agreements. This involves 375 million tons of oil, 46 million tons of oil products (gasoline, airplane fuel, petroleum, motor oils, paraffin, and others), 88 billion cubic meters of natural gas, and 64 billion kWh of electric energy.

With respect to imports in the next five-year plan, we envisage that deliveries of oil and oil products from the USSR will be maintained at the 1980 level, even though conditions of producing this raw material have changed. New reserves are located in areas with arctic climate and their exploitation is as much as five times as demanding as in conditions of the European part of the USSR, both in terms of capital investment and technology, not to mention the human element. Conditions in these localities are quite different from production in, for example, Saudi Arabia where the cost of producing one barrel of oil is about half a dollar.

Increases in oil consumption by the Czechoslovak economy will essentially be supplied by imports from nonsocialist countries at world market prices. Also, we must be prepared for the possibility that even oil imported under long-term agreement with the USSR will in the future undergo certain price adjustments. This requires a reevaluation of the original plans for the utilization of liquid fuels in the energy industry, transportation, and other branches, and bringing them into harmony with the realistic possibilities of Czechoslovak economic development. The price of oil, as well as its physical sources on the world market, will depend on the course of the energy crisis in the capitalist world, but also on the development of the political situation and events in the Middle East, and possibly in other areas.

Lowering the Growth Rate in Oil Product Consumption

The favorable price development of oil imported from the USSR, especially increased deliveries, enabled us to expand the utilization of all oil products. An overall analysis of oil use shows that the bulk of oil products are used for the production of heat, electricity, motor fuels and asphalts. The most promising and, so far, irreplaceable way of using oil is chemical processing which in the CSSR did not expand greatly until 1977, and will gradually double, following the introduction of the ethylene unit in Litvinov in 1980. The growing consumption of light products for chemical processing (liquid gas, gasoline, petroleum, and gas oil) will be met basically by existing oil sources. Given the fact that oil will become increasingly expensive and that the criteria for effective utilization of oil and petrochemical products, plastics, india-rubber, etc., will be increasingly demanding, we must draw appropriate conclusions regarding their management in all sectors of the national economy.

Utilization of oil byproducts as fuel in the CSSR will decrease in the coming years and will gradually be replaced by other sources. This stagnation in the first phase and decrease in the next, emanate from the global trend caused by the unfavorable price development, as well as gradual curtailment of production because of factors mentioned above.

In the interest of securing needed sources of light products with higher utility value than can be acquired by oil refining alone, the developed capitalist states and most of the CEMA countries have focused on broader

processing of oil through the so-called secondary sources. With the aid of modern technology it is possible to manufacture from residual oil, which so far has been used for heating, high octane gasoline, motor oil and other products needed more than the original raw material. Given the overall stagnation in oil processing, it is only in this manner that it will be possible in the CSSR in the future to lower the consumption in fuels and secure the propellants which are virtually irreplaceable to the extent required by current needs.

Problems of Savings in Propellants

When we consider that buying a million tons of oil from nonsocialist countries represents, at the 1980 price level, about 310 million dollars, it becomes understandable that the Czechoslovak economy must orient itself toward savings in all types of oil products. If we analyze consumption in the course of the Sixth Five-Year Plan, we see that in many respects it developed spontaneously and the trend was not reflecting the new conditions which emerged in the world oil market after 1973. The sharp increase in private automobile travel, and public road, rail, and air transport, was reflected in the growth in consumption of propellants. Considerable increase in utilization was not always sufficiently justified, and in some areas there was uneconomical usage. Nevertheless, until 1978 it was possible to satisfy all these needs without restriction.

Significant annual increases were registered in diesel fuel where, especially consumption for heating and electricity production showed inordinately rapid growth. Given the relatively large difference in price, uncontrolled sale of propellants enabled some socialist industries to heating oils for certain types of solid fuels. Heating oils had been intended exclusively for the purpose of keeping the population supplied with heat.

The trend in the consumption of diesel fuel, which comprises more than 25 percent of the overall amount of processed oil, indicated that without planned regulatory measures in consumption, it will not be possible in future years to guarantee steady supply for all branches of the national economy. For this reason, in approving the 1979 plan, the government decided to limit its consumption by major users. Following evaluation of the first year since the introduction of appropriate ceilings, we can say that, even though the response by users is so far not commensurate with the current price relationships on the world market, the goal of the plan to halt increases in the use of motor oil, was essentially met. Following a period of annual increases throughout the Czechoslovak economy of 6 percent, the trend has been virtually halted.

Regulatory Measures in 1980

In 1980 we must face the existing situation on the world market and be prepared for further intensification of economic measures in the whole structure of oil products. The system of consumption ceilings is being

expanded to the entire socialist sector in gasoline and, in relation to this, the plan also calls for lower consumption of motor oil. With respect to gasoline, this means a substantial curtailment--about 18 percent, compared with 1978--which will require a whole set of rationalization measures in technological consumption and, above all, a considerable reduction in passenger transport in the socialist sector. The consumption of asphalts was also specified in detail in the formulation of the plan. Along with this, related production will be strengthened (as, for example, cardboard and asphalt products) at the cost of not always economical maintenance and reconstruction of road surfaces.

Methods for the Near Future

Lowering of oil product consumption which, following the introduction of regulatory measures, was implemented largely by organizational intervention in the consumption system, should be resolved in the following important areas by means of thoughtful concepts:

--in structural development and quantity of oil-consuming appliances and their modernization;

--in more economically efficient operations using oil;

--in resolving the effects of slower growth of oil product consumption in related branches;

--in preparing systematic measures in management and the rewards program with the aim of lowering the consumption of oil products in absolute terms.

One of the basic tasks is a substantial lowering of the trend in the consumption of motor oil which represents over 25 percent of the overall balance of processed oil. Since the bulk of motor oil is consumed in freight road transport, we must guarantee its rationalization. The basic goal of rationalization measures is to achieve the planned dynamism performance, without any increases in consumption of propellants, tires, and the number of workers. In road transport which includes public transport of the CSAD [Czechoslovak Automobile Transport], plant planned and unplanned transport, and transport of agricultural organizations, we have experienced certain anomalies. Instead of strengthening CSAD public transport which uses 55 percent less propellant per 1 kilometer than plant transport, its share in road transport in 1978 was 5 percent less than in 1971. As a result, roughly 40 percent of all freight and special vehicles today operate outside the framework of statistical monitoring of their performance and utilization effectiveness. This state of affairs is quite unsatisfactory, not only with respect to propellant consumption, but also with respect to management of economic development. It is therefore necessary to search for methods and means which will gradually increase the effectiveness of transport equipment and performance which are now not monitored by the plan.

In order to raise the share of public automobile transport which, from the point of view of social effectiveness is most desirable, we need to focus on the resolution of the following problems:

--division of transport labor in road freight transport between public and plant road transport, along with consistent strengthening of planned road transport;

--increased role of the center in planned development of CSAD public automobile transport;

--intensification of closer targeting of plant transport with the aim of better satisfying transport requirements;

--consideration in all components of automobile transport of the need for a purposeful, more efficient utilization of trailers and semi-trailers by lowering the percentage of unproductive trips (apply sanctions against drivers who ignore the directive on vehicle inspection);

--issuing binding consumption norms for all types of transport equipment;

--allotting available road transport vehicles to those sectors which practice rationalization of utilization;

--rate performance fulfillment, along with savings in propellants, in the system of material incentive in automobile, rail, river, and air transport;

--explore the feasibility of transferring certain road transport operations to river transport.

In accord with the tasks which road transport must perform in the Seventh Five-Year Plan, the Federal Government directed the Federal Ministry of Transportation and central transportation agencies of the republics to prepare a complex program of freight automobile transport for 1981-85, including stabilization, and/or minimum increase in the use of propellants and tires.

In the building industry which ranks among branches with relatively high consumption of propellants, the following has great influence on economizing:

--composition of the vehicle and machine assets,

--technological level of the engineering inventory,

--settling producer-consumer relations, especially in allocation of sources, and economical transport of materials and products.

Replacement of the vehicle and engineering assets is limited by the capabilities of deliveries, both domestic and imported, from nonsocialist

countries. However, because there are shortcomings similar to those in freight transport, it is necessary to focus on their elimination and on raising the effectiveness of operations.

An important source of savings in the branches of the transportation ministries is the settlement of producer-consumer relations where the crux of the problem lies in:

--supply of construction materials from domestic sources;

--optimum earth removal;

--utilization of seasonal free capacities in rail transport.

Since the building industry, aside from its own plant transport, is a branch which in large measure participates in CSAD public transport, it was decided that we should prepare a program to reduce to a minimum the production and transport of clay in the planning and implementation of capital investment formation, so that the extent of production and transport operations would remain on the 1980 level.

Agriculture and the food processing industry are sectors with a distinct character where statistics conducted to date insufficiently define consumption in the allocations needed for setting directions which will be decisive in terms of rationalization.

Based on assessment by the branches, the basic sources of savings in the consumption of propellants for the coming period, lie in the following measures:

--transfer of additional branch organizations to planned plant transport, the relative pricing of which forms the basis for monitoring propellant consumption and organizing savings;

--gradual structural changes in and renewal of the transportation inventory;

--replacement of tractors used for road transport with trucks;

--expansion of the method of sowing without plowing;

--minimizing operations in field work, especially plowing and cultivation;

--economic reassessment of the expected volume of pressed produce and fodder production and its reduction to an economically effective minimum;

--improvement of the technical condition of vehicles through the necessary range of general and medium overhauls;

--ensuring availability of spare parts and batteries.

In addition to rationalization of propellants used by the major consumers, all branches must check on any other utilization of gasoline and motor oil, such as heating, electricity production, needs of certain technology with high energy demand, where it will be necessary to gradually exclude fuels produced from oil and replace them with other sources of energy.

An important share in the Czechoslovak fuels and energy inventory consists of deliveries of light heating oils, low-sulphur oils, and residuals oils, which represent about 50 percent of processed oil. Even though the demands of the national economy in fuels and energy are rising, deliveries of heating oil will remain at their present level during the Seventh Five-Year Plan, and the level in light- and low-sulphur oils will be lower.

At the same time, it is necessary in this period to create conditions in heavy heating oil consumption for its gradual curtailment, especially in electricity and heat production, and thus achieve a corresponding amount of heavy oil derivatives as a raw material for secondary processing into propellants. Current technology in oil processing does not permit us to reduce proposed oil imports while consumption of propellants is rising. It is therefore necessary to decide in time not only on the construction of a cracking unit but, especially, make enough residual oil available for this purpose.

Prospects in Oil Processing

If we consider that by 1975 about a third of all known oil reserves in the world had been exhausted and that since then consumption has significantly increased, the prospect for the branch which processes oil is not optimistic. Even though the share of the OPEC countries in world oil reserves is 59 percent and that of the socialist countries 10 percent, all economically-advanced countries recognize that the supply of oil is not inexhaustible. In addition to measures cutting import, these countries are focusing on research and the search for substitute energy and raw material sources.

In accord with the global trend, the Czechoslovak economy is passing from extensive utilization of sources toward their intensive reassessment. A part of this strategy is also the planned stabilization of oil product consumption, while maintaining the dynamism of economic development, as well as reliance on chemical processing of oil derivatives as the most effective method of oil reevaluation.

As stated in the report of the Presidium of the CZCP Central Committee at its Fourteenth Session in December of last year, "in the past 4 years, there have been further changes on the world markets which--especially the new rise in the prices of raw materials, fuels, energy, and foodstuffs in the nonsocialist countries--we have not anticipated to such a great measure. This development further underscored our own shortcomings in overall performance, effectiveness, slow application of scientific and technological development and, generally, in the adaptability of our economy to more stringent conditions."

In view of the growing difficulties in obtaining the needed quantities of oil and oil products, focusing on more rationalized management and qualitatively higher cost efficient oil utilization, is one of the factors governing a dynamic future development of the Czechoslovak national economy.

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NORTHERN BOHEMIA COAL, ENERGY PROBLEMS DISCUSSED

Prague HOSPODARSKE NOVINY in Czech 15 Aug 80 pp 8-9

[Article by Czech Planning Commission Staff Member Jaroslav Vejrazka: "Problems Transcend the Coal Mining Industry"]

> [Text] The Guideline for the Economic and Social Development of the CSSR for the Years 1976 to 1980 emphasized the prime importance of the North Bohemia kraj as the state's fuel and energy base by calling for a total output of 68 million tons of brown coal in the North Bohemia coal basin in 1980. By way of comparison: the mere 28 million tons mined here in 1955 increased by 1965 to 48 million tons, 10 years later to 57.5 million tons and, in the fourth year of the current five-year plan, to a full 68 million tons. This development occurred at a time when coal began to be mined at a depth exceeding 100 meters at times. These exacting tasks raised considerable problems especially in the capital construction sector. The situation put in doubt the fulfillment of the plan by a shortfall amounting to roughly 1.2 billion korunas. Therefore, in the first half of 1978 central organs decided to look into the problems facing the North Bohemia kraj. After analyzing the situation, the governments of the CSSR and the CSR adopted measures for the last 2 years of the five-year plan. In 1979 the situation improved partly and the volume of completed construction projects rose by 10 percent. This can be viewed positively, but the serious situation concerning the filling of the Ervenice corridor persists: the 1978 shortfall was not eliminated. Moreover, the 1979 plan also remains unfulfilled. How will the situation develop in the last year of the Sixth Five-Year Plan?

The Guideline for the Economic and Social Development of the CSSR in the Years 1976-1980 called for finding a comprehensive solution to the deleterious impact of strip mining and the development of the energy base, especially

on the environment. The following facts will shed light on the situation. Two thousand two hundred apartments had to be replaced in the course of the Sixth Five-Year Plan. A number of communities had to be razed to make room for strip mining. The Most corridor was completed to permit the relocation of the rail line, highway, engineering network and the Bilina River to make room for the mining of high quality coal under the old city of Most. This complicated construction project required an investment of roughly Kcs 700 million and the movement of 1.7 million cubic meters of earth. Another important construction project started during the Sixth Five-Year Plan is the relocation of the Trebusice-Chomutov rail line as a prerequisite for continued progress and increased production of the Jan Sverma mine after 1983. This project will cost about Kcs 1.5 billion.

A second very important construction project involves the relocation of the Usti nad Labem-Teplice rail line which will open access to the new Chabarovice mine in the middle of 1982. This relocation will cost about Kcs 1.2 billion. Continued exploitation of the Ceskoslovenska armada mine is contingent on the elimination of the Drinov water works. Replacing it will cost about Kcs 1.1 billion and will require five construction projects.

The most important project under construction is the Ervenice corridor. This corridor is being built by the mining method (uncompacted) by dumping 400 million cubic meters of earth into the more than 100-meter high earth body.

Coal mining and the construction of new power plants in the Sixth Five-Year Plan will require an overall investment of Kcs 5.5 billion, representing one sixth of all contracted construction work on the North Bohemia territory in the Sixth Five-Year Plan.

Further, the Guideline for Economic and Social Development of the CSSR in the Years 1976-1980 calls for starting the production of a pipe extrusion and a pipe finishing plant from special steels at the Valcovny trub a zeleza Chomutov (Chomutov Pipe and Iron Rolling Mills) and for continuing the construction of the petrochemical complexes at the SCSP Chemical Works in Litvinov. Rail transportation capacity must be increased, the lines must be electrified and automated. To stabilize and increase the labor force will require the construction of 53,000 to 55,000 apartments with all necessary technical facilities and services.

The above survey of fundamental tasks reveals that in the North Bohemia kraj the principal aim of the Sixth Five-Year Plan has shifted to capital construction. Therefore, a separate document was prepared to secure financing of the necessary construction work in the years 1976 to 1980 which was approved by the CSSR Government Presidium by resolution No 251/1976 and the CSR Government by resolution No 295/1976.

Protection of the environment was not forgotten and the respective separate document was approved by the CSSR Government Presidium and the CSR Government.

The Results of Intensified Mining

The unfavorable situation in the area of fuel and energy resources began to be felt in our country as long ago as 1976, which led necessarily to an increase in the volume of mining above the original targets set by the Sixth Five-Year Plan. As a result the construction program had to be expanded which in turn required additional capital funds, an increased labor force and additional needed housing construction (the requirement was raised to 58,000 apartments). Proposed measures required to increase the volume of coal mining were adopted by the CSSR Government Presidium by resolution No 215/1977.

In 1976 and 1977 the situation became even more involved as a result of the functional shortcomings of the newly introduced giant diggers especially in the M. Gorkiy mine, which threatened to cause a shortfall of almost 40 million tons of coal. To maintain the volume of coal mines at the required level, the Most, Merkur, Lezaky and J. Sverma mines had to make up for part of the shortfall even at the risk of reducing the lead of overburden removal over the advancing mining front. For example, the Most mine accelerated its stripping progress so markedly that even under the difficult conditions where the old City of Most had to be demolished to permit mining, it produced in 1978 a full 3.3 million tons, compared with the goal of 1.8 million tons planned originally.

In this period in most cases the volume of coal mined increased at the cost of proper technical preparedness of the mines, especially of overburden removal. This also increased the pressure on the removal or relocation of objects which stood in the way of mining progress. Since this fast mining pace was not foreseen, replacement construction was mostly not included in the Sixth Five-Year Plan. A typical example is the replacement of the Drinov water works, where the replacement projects were originally scheduled to go gradually into operation in 1982: today this deadline had to be moved forward to 3 years.

To ensure the output by the Nastup Tusimice mines the relocation of the Chemutov-Prunerov rail line had to be completed ahead of schedule. The measures adopted to increase the volume of mining by shifts within the basic had necessarily deleterious repercussions also on capital construction, specifically on preliminary and project preparation, and on actual construction. Therefore, adequate measures had to be taken also in this sector.

The CSR Government and the Czech National Control Commission discussed the progress report on the fulfillment of tasks in the North Bohemia kraj in the first 2 years of the Sixth Five-Year Plan, as early as June 1978. The evaluation revealed a number of shortcomings, especially in capital construction. It further became obvious that in some sectors the program adopted for the development of the North Bohemia kraj is not continually being fulfilled. All this could potentially have a deleterious effect on coal output, power output, rail and highway transportation and the programmatic targets in developing the territory.

Reacting to this report the CSSR and CSR Governments requested the submission of proposals aimed at improving the situation in the years 1979-1980. The measures proposed were designed to catch up with the implementation of tasks which remained unfulfilled in the first 3 years of the Sixth Five-Year Plan.

The Causes of the Unsatisfactory Situation

An analysis of the situation revealed that the failure to fulfill the plan was due to the following principal causes:

--Unsatisfactory preparation of construction projects in the field and poor design work, especially in the first years of the five-year plan, as compared with the requirements of the capital construction plan. This was why the construction of a number of projects had to be postponed or replaced by other projects. This complicated in large measure the actions of suppliers and customers: suppliers on one hand chose construction projects which suited them, but on the other hand were forced to accept implementation of projects for which they had no proper project documentation. In housing and special purpose construction, for example, poor project preparation constituted an impediment to the full utilization of construction capacities.

--The planned increase in construction capacities was not fulfilled; the necessary shifts of capacities were not carried out, emergency help and worker transfers had to be organized within the enterprises. Construction capacities were not pooled to the extent needed or in the required structure. The expansion of key construction organizations was limited to their own resources in the kraj. Without substantial help from the other enterprises of economic production units they were unable to fulfill the tasks assigned them. The North Bohemia Konstruktiva, whose assigned tasks exceeded by far its construction capacity, can serve as an example.

--The structural reordering of construction capacities was not adapted to the existing needs in a situation where the proportion of repairs and other work is rapidly growing, drawing off building capacities to the detriment of capital construction. This creates a condition where a plan financed with the amount "S" (capital construction, repairs and other work) is being fulfilled while the capital construction plan is now.

--The fulfillment of the plan was also affected deleteriously by the fact that the other oblasts of the state failed to render adequate assistance to the development of the kraj. The national priority of the North Bohemia kraj was recognized only formally. Local interests prevailed in negotiations regarding transfers, assistance ensuring the implementation of project construction work and organizing the recruiting of labor and apprentices.

The concluding of supplier-consumer contracts for 1979-1980 was an indication of the danger that capital construction in the Sixth Five-Year Plan would fall short by about Kcs 1.2 billion.

Measures for Completing the Five-Year Plan

On the basis of the results of the analysis the CSR and CSSR Governments adopted the following measures:

--Raise allocations to construction organizations for the capital construction plan by Kcs 259 million for the year 1979 and by Kcs 324 million for the year 1980;

--Transfer construction capacities from other krajs since the potential to increase capacities in the kraj has been exhausted, and set for specific organizations the volume of transfer needed to implement tasks at specific projects or their autonomous parts. Channel these transfers primarily to projects which are under construction to effect their quick completion;

--Designate beginning with 1979 the volume of work and deliveries for capital construction as a mandatory indicator of the state plan with the indicator of the overall fulfillment of construction tasks serving for orientation purposes;

--Free the North Bohemia Konstruktiva from its obligations in the peripheral oblasts of the basin and transfer these obligations to outside contractors respecting the already prepared project documentation;

--Transfer the Silnice enterprises, which are managed by kraj national committees, from other krajs to work on the construction of a selected highway network to the limit of Kcs 60 to 65 million and designate this construction work as a mandatory task of the state plan;

--Set a limit for the allotment of funds for the construction of housing in accord with the resolution of the CSSR Government Presidium No 184/1976 in order to ensure the establishment of the material production and manpower base for the construction industry in the kraj;

--Increase staff strength of organizations in the kraj under the jurisdiction of the CSR Ministry of Building Construction by 210 workers by a nationwide hiring campaign;

--Assign the capacities of building construction organizations on a priority basis to projects of the fuel and energy base, those designed to improve the environment or projects vital for the continued economic and social development of the oblast. Special attention must be paid to capital investments arising from coal mining needs, the completion of the relocation of the Chomutov-Prunerov rail line, the construction of the Most corridor, and other projects in the city of Most on which the mining progress of the Most mine depend, the temporary relocation of the Trebusice-Chomutov rail line, and the filling of the road bed of the Ervenice corridor. Further, ensure the construction of installations replacing the Drinov water works and the relocation of the Trebusice-Chomutov and Usti nad Labem-Teplice rail lines, and carry out the comprehensive housing construction and special construction projects of the national committees;

--Strengthen project managements by securing experienced specialists and organizers from other krajs to ensure proper execution of the construction work;

--Secure for construction organizations active in the kraj deliveries of trucks, building machines, supplies and assembly of technological installations for comprehensive housing construction on a priority basis;

--Beginning in 1979 assign to individual construction contractors the volume of capital construction work to be completed for the North Bohemia Kraj National Committee as a mandatory task to prevent further increase in the deficit of the national committee;

--Grant preferential wages and special bonuses in socially important construction projects in accord with resolution of the CSSR Government Presidium No 54/1975;

--Monitor construction work progress of selected civilian construction projects undertaken within the framework of comprehensive housing construction;

--Ensure the installation and servicing of fly ash separators and the adaptation of power plants as pollution control measures on a priority basis;

--Erect in 1979 one, and in 1980 three, nature schools as mandatory tasks of the state plan;

--Create a system of control indicators for the assigned tasks to be carried out by workers designated by the CSSR and CSR Government Commission.

Situation after 1979

A year has now passed since the government resolution came into force which makes it possible to assess how their stipulations and principles were complied with.

A basic prerequisite for developing the kraj is improving the quality of capital construction and its preparation by the investor and designer. The respective tasks were being implemented in a situation when the planned yearly increase in the volume of construction work after a long period of nonfulfillment rose from Kcs 220-230 million in years past to Kcs 981 million in 1979. Neither the supplier nor the investor were fully prepared for so exacting a task which therefore was expected to require many operative interventions. In the end the state capital construction plan was only 94.2 percent fulfilled, with the annual gain amounting to Kcs 586 million.

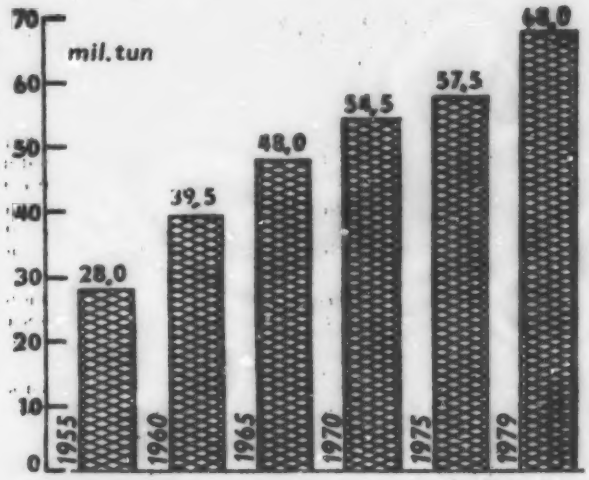
The failure to fulfill the state plan in 1979 had its repercussions on the results of the largest construction contractor on the territory of the North Bohemia kraj, the CSR Ministry of Building Construction, which fulfilled

only Kcs 388 million of the planned increase of Kcs 711 in capital work. Nevertheless, this is the highest increase ever achieved in the territory of the kraj. The main reasons for the failure to fulfill the plan lie primarily within the ministry, but external factors also played a role.

The primary internal cause for the failure was the inability to fulfill the plan in the first quarter when, as a result of extraordinarily adverse weather conditions the construction volume remained at the level of the first quarter of 1978. But the impact of bad weather cannot account for a whole year's result. Even though the Ministry of Building Construction constantly monitored the fulfillment of the plan and exerted pressure on enterprises to raise their goals by specifying output targets, the shortfall was not made up by the end of 1979.

The second principal cause of the failure to fulfill the plan is a shortage of construction capacities of the industrial and engineering construction sector. The planned reorganization of construction organizations has still not been achieved. But attaining a high planned increase of capacities was predicated on shifting construction capacities.

Construction capacities were not shifted for a number of reasons. The key factor was indecisiveness of general managements in making public interest prevail. Subordinate components and later even the general managements failed to abide by the ministry's order, and this undermined the ministry. The pressure for a shift of capacities also encounters artificial obstacles which must be dealt with once and for all by central organs irrespective of whether technology, complicated relations in the handover of completed construction projects, deliveries of materials, or deliveries by subcontractors are involved.



Mining output trend in the North Bohemia coal basin in 1955-1979.

In this connection we also need to mention the negative attitude some regional organs take when it comes to supporting a shift of capacities to the North Bohemia kraj, an attitude which is based on a lack of understanding and the pretext of having to cope with local problems.

One of the principal factors responsible for the failure of the CSR Ministry of Building Construction to fulfill its tasks is also the unstable situation of the Severoceska Konstruktiva enterprise, which is responsible for 79 percent of the ministry's overall shortfall. It appears that even this year no fundamental change in the prevailing situation can be expected without strengthening the enterprise with the best professional and politically most mature cadres from the entire economic production unit. The thrust of the enterprise's orientation and specialization will again have to be reconsidered. It cannot be expected to build everything from apartments to the most complicated industrial projects.

Among the external factors responsible for the failure of the CSR Ministry of Building Construction to fulfill the plan is also the failure of investor ministries to fulfill the planned construction volumes in the amount of Kcs 120 million.

In the course of the year in a number of projects additional time was lost by a delay in investor preparation and delays in handing over project documentation which necessarily affected also the fulfillment of the agreed-upon or set plan. The proportion due to lack of investor preparation amounts to about Kcs 80 million of the overall shortfall.

When the low gains of preceding years and the unfavorable conditions prevailing at the beginning of 1979 and other factors are considered, the increase of construction work in capital construction by 10 percent over 1978 can be considered a plus, even though the overall planned volume remains unfulfilled. The fourfold rate of growth of construction work compared to the mean overall rate of growth in the country testifies unequivocally to the gradual achievement of priority for the North Bohemia kraj.

As in Investments....

One of the objectives of the adopted resolutions was to fulfill the volumes of construction projects designated as mandatory tasks of the state plan especially in construction projects of the fuel and energy base and the respective investments. In assessing the year's results it can be said that the objective was carried out. The mandatory tasks of the state plan were fulfilled by 96.3 percent, even though no preparations were ready for some mining projects (such as homogenizing and crushing installations at the Chabarovice mine) and there was a 10 percent increase in the volume of work assigned over 1978 levels. The builders fulfilled not only the volume of construction, but also performed the material tasks.

In the course of the year the Lovosice coal transfer point, the electrified Usti nad Labem-Vranany rail line and the third track of the Bilina-Ceske Zlatniky line were put into operation; these projects were of considerable help in getting the coal out of the basin. The tasks of constructing power plant fly ash repositories were also fulfilled. Therefore, compared to last year, when power outages threatened, this year's winter passed without problems.

The successful completion of relocating the Chomutov-Prunerov rail line at the end of 1978 enabled the Nastup Tusimice mines to continue mining. Attention also focused on completing the Most corridor, a project amounting to an investment of Kcs 643 million. By opening the new line to traffic on 1 May 1979 the way was fully cleared for continued work in the Most mine, whose advance was blocked by the old right of way.

The construction of the Ervenice corridor and replacement projects for the Drinov water works constitute vital investments connected with mining. The completion of the Ervenice corridor will allow full-scale operation of the Ceskoslovenske armady and Jan Sverma mines. But a very serious situation arose during the filling of the corridor. The North Bohemia Brown Coal Mines organization failed to make up not only the 1978 shortfall, but also the 1979 shortfall. This caused a delay in freeing part of the areas needed for building the rail line, and mainly the relocation of the Bilina River. Failure to free the building site considerably complicates the progress of construction and the work piles up for completion in the last period.

In contrast, the building of replacement installations for the Drinov water works proceeded successfully. The planned tasks were exceeded also in relocating the Usti nad Labem-Teplice rail line, a key project in the basin. The project is being built by Dopravni stavby Olomouc [Transportation Projects Olomouc], which can serve as an example to other contractors not only for the way this contracting enterprise approaches the fulfillment of its tasks on the territory of the kraj and organizes work, but also for its care for its workers and technical cadres.

With the launching of construction of the new theater, the building of the new city of Most entered its final stage. In the course of the year Severografie was completed, two projects which now house Kancelarske stroje [Office Machines], Barum and Obnova; also the Severoceske energeticke zavody (North Bohemia power enterprises) the okres veterinary facility and the Debora establishment started operation.

To enable the uninterrupted advance of the Most mine the premises of the Okres Communications Administration and of Severoceske keramicke zavody (North Bohemia ceramic works) had to be moved temporarily because their new permanent premises were not completed within the deadline. The construction of special purpose projects such as the hotel, the house of culture, the industrial college, the okres library planned for Most were delayed indefinitely.

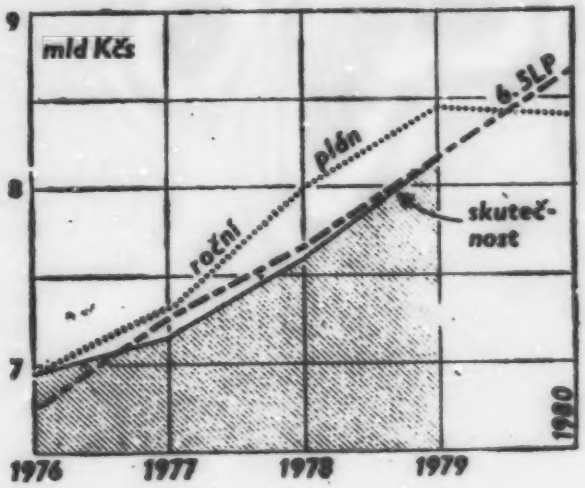
...and in Housing Construction?

On the whole, if we can be satisfied with the progress of projects carried out for individual ministries, such is not the case with the progress of capital construction for the North Bohemia Kraj National Committee, with a shortfall in construction work for 1979-capital construction of national committees amounting to Kcs 573 million. This again delayed fulfillment of the material program of the Sixth Five-Year Plan. Completing work worth Kcs 420 million, the CSR Ministry of Building Construction failed to deliver the greatest part.

This failure cannot be taken lightly because it recurs each year with serious repercussions for the living environment, especially in the baisin's okreses, where it has a deleterious effect on peoples' lives. All economic managers, but also political workers from other krajs providing construction work for national committees in the North Bohemia kraj, should wake up to this reality.

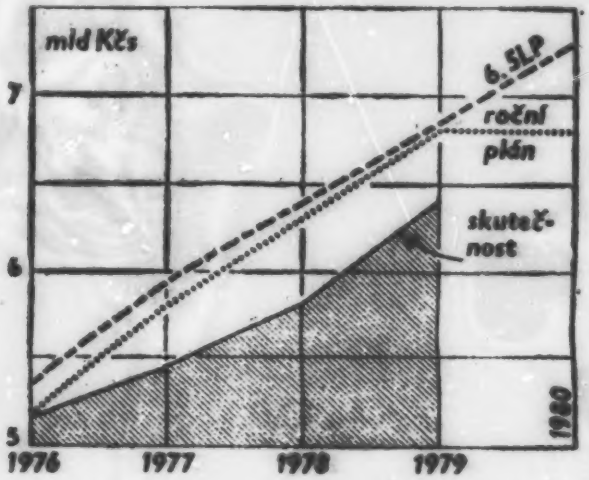
The only positive factor in 1979 was the improvement achieved in housing construction, where out of 11,018 apartments planned, 10,571 were completed. But the construction of the respective technical and service facilities large behind, with tasks fulfilled by only 64 and 71 percent respectively.

Overall volume of construction work in the North Bohemia brown coal basin done by construction contractors



Key: mld Kcs...billion korunas
rocni plan...annual plan
6.5LP...Sixth Five-Year Plan
skutecnost...reality

Volume of construction work on capital construction projects for the North Bohemia brown Coal Basin done by construction contractors



After initial difficulties the situation improved markedly in 12 selected government-managed comprehensive housing construction projects. Of five projects slated for completion, four were handed over completed. The Chomutov shopping center was not completed because of insufficient construction capacity of the North Bohemia Konstruktiva. The change in coal mining prospects in some parts of the basin also changed the housing construction plans. In the course of the year the Nove Sporice site, where by the end of 1979 the construction of 2,500 apartments was to begin, had to be abandoned. An alternative solution had to be found to meet the housing construction plan for 1980 and the subsequent 5 years. An alternative site was found by joint efforts of the Ministry of Construction and the North Bohemia Kraj National Committee. A similar situation also had to be resolved in the Teplice okres.

Throughout the year the construction of housing turned out to be extraordinarily difficult and suffered from considerable shortcomings. Even though these projects are designated as mandatory projects in the state plan, some were not properly prepared and difficulties arose also during construction. This was the case primarily in the building of heating installations, which is the responsibility of the Federal Ministry of Fuels and Energy, and in transportation projects, whose investor is the North Bohemia Kraj National Committee.

Selected highway network projects exhibited the greatest underfulfillment of the plan with only Kcs 77 million spent, of the stipulated Kcs 107 million. Here the unsuitable structure of construction organizations became most manifest as the result of excessive concentration of engineering capacities for the relocation of rail lines which left inadequate resources for the selected highway network project.

In accord with the government guideline, the 1980 plan was also prepared. To plan realistically capital investment was scaled downward on the basis of expected 1979 results. The output potential of the construction capacities of the CSR Ministry of Building Construction and its ability to transfer additional capacities and workers in 1980 were assessed realistically.

With the participation of supplier ministries a survey of the territory and of preparations by investors and designers was undertaken involving all central investors to ensure the implementation of developmental objectives by adjusting the volume of construction work. The survey revealed that the set volumes meet the necessary extent of planned and properly prepared capital construction on the territory of the kraj.

To master the unsatisfactory situation in the construction of civilian projects implemented within the framework of comprehensive housing construction a CSSR Government resolution on the 1980 plan directed the kraj national committees, excepting the national committee of the City of Prague and the North Bohemia kraj, to render assistance by okres construction enterprises in the amount of Kcs 60 million.

The adopted government resolutions, No 273/1978 and No 316/1978, create favorable conditions also in 1980 to ensure the uninterrupted construction of mining and power supply capacities, the establishment of the Czechoslovak uranium mining industry in the Ceska Lipa region, and the construction of power plant fly ash repositories. Attention focuses also on securing funds for emergency investments and investments for housing construction.

8664
CSO: 2400

BRIEFS

OLEAGINOUS PLANT SELF-SUFFICIENCY PLANNED--Per capita consumption of pure fats in Czechoslovakia, as food, will reach about 25 kg in 1980, approximately 70 percent higher compared with the pre-WW II statistics. In 1936, the percentage of animal fats amounted to 70.2 percent of the total pure fats consumption; the current figure is 58.4 percent. In 1979, the per capita consumption of vegetable oil and fats reached 9.8 kg. During the first four years of the Sixth Five-Year Plan, the average CSSR annual production of oleaginous plant seeds reached 162,000 tons, a 30 percent increase compared with the Fifth Five-Year Plan annual average. Still, in spite of increased yearly production, 60 percent of raw materials for production of vegetable oil and fats have to be imported. The 1980 plan calls for production 240,000 tons of oleaginous plant seeds; of this 190,000 tons of rape, 25,000 tons of sunflower, 15,000 tons of flax and 2,500 tons of soybean seeds. The figure also includes 7,500 tons of poppy seed, mustard seed and other raw materials not processed by the industry producing vegetable oil and fats. Estimated 1985 production of oleaginous plant seeds calls for 287,000 tons, reaching 300,000 tons in 1990 and thus hopefully reducing the current level of exports by two-thirds. [Bratislava ROLNICKE NOVINY in Slovak 27 Aug 80 p 4]

GASOLINE CONSUMPTION--In 1979 a total of 398,000 tons of gasoline for cars were sold in Slovakia; 58.3 percent of this was sold to private car owners. The percentage is expected to increase to 62.7 percent in 1980. At present 290 gasoline stations are operating on Slovak territory; the average distance between stations is less than 20 kilometers. This year socialist organizations are expected to save a full 25 percent of the 1978 level of gasoline consumption, resulting in consumption at the 1971 level. Private car drivers are expected to save enough gasoline to reach the 1978 consumption level. Slovakia now has no gasoline stations on the super highway; stations are planned for sections between Bratislava and Lamac, and between Sekule and Zelenec. The realization of this plan depends on the financial means allotted by higher bodies. Bratislava now has 15 stations, which is not enough; the target of having 30 stations is being constantly delayed due to the lack of finances, and only 10 new stations at most will be built in Bratislava during the seventh 5-year plan. [Bratislava SMENA in Slovak 9 Aug 80 p 3]

SUGAR BEET HARVEST--In the Czech Socialist Republic sugar beet was sown this year on more than 157,000 hectares; 45 percent of this acreage was sown with genetically one-sprout seeds. But crops had to be plown under on roughly 3,500 hectares because of late sowing, dry weather in May and excessive moisture in June. At present 26 percent of the acreage is in very good condition; 38 percent in good condition; more than 25 percent satisfactory, and more than one tenth of the acreage is in bad condition. The largest acreage--4,700 hectares--awash with ground water is in Eastern Bohemia. [Prague PRACE in Czech 12 Aug 80 p 1]

FOREST CALAMITY--Current timber losses by natural causes in the CSR forests are the worst experienced since WW II. This year's damage amounts to about 80 percent of the annual lumber production. Most of the damage is in forests of the South, West and Central Bohemia Krajs. Because of the huge amount of accumulated timber, its removal from forests is not expected to be completed prior to 1982. Organizational and individual help in form of work brigades is needed in reforestation of these areas. About 1.5 million cubic meters of wood is available in certain areas, where the populace is offered firewood and lumber through self-help. [Prague SVOBODNE SLOVO in Czech 9 Sep 80 p 4]

TRUCKS FOR MOROCCO--The AVIA Enterprise of Prague has built the first series of 50 of its A-15 trucks for Morocco, with the second series to follow in September. The trucks are adapted for use in rough terrain and hot climate. [Prague VECERNI PRAHA in Czech 21 Aug 80 pp 1, 2]

CSO: 2400

BUDGET ACCOUNTING FOR 1979 PUBLISHED

West German Commentary

Bonn INFORMATIONEN in German No 13, Jul 80 pp 11-13

[Background' report by FRG Ministry for Inner-German Relations: "GDR Budget Accounting for 1979 Approved by People's Chamber." The official budget accounting text as published in East Berlin NEUES DEUTSCHLAND follows this commentary]

> [Text] On the occasion of its 11th session (3 July 1980), the GDR People's Chamber approved the Council of Ministers' budget accounting for 1979, as presented by new Finance Minister Werner Schmieder. This accounting of the state budget was once again published by the SED organ NEUES DEUTSCHLAND -- as was done for the first time last year with the 1978 budget. The volume of the budget (including social insurance) rose in 1979 to M 140.6, which means an increase of about 6 percent. To be sure, the budget plan for 1979 called for a volume of only M 137.4 and thus was exceeded by about 2 percent. Bycontrast, the rise in national income planned for 1979 could not be reached; it was around 4 percent.

The budget volume had already expanded at a greater rate than national income between 1976 and 1978. The government sector expenditure share -- or the share of the state budget in the GDR's national income or national product -- was increased from 79.9 percent (1976) to 83.9 percent (1979). This points up a growing direct influence by the state on the distribution and utilization of the national product.

Revenues

Revenues from the GDR's total public budget (= income of the central government, the bezirks, kreises and municipalities) amounted to M 125.7 billion last year. Including employee social insurance contributions and the share paid by employers (VEB's, combines, cooperatives, state

administration) in the amount of approximately M 14.9 billion, GDR state and social budget revenues totaled M 140.6 billion.

Compared to 1978, the GDR treasury obtained a 6.3-percent increase in pure budget income in 1979 (excluding revenues from social insurance contributions). Within the current five-year plan period (1976-1980), this figure constitutes the highest increase thus far for actual revenues in a single year. The rates of increase for state income amounted to 2.5 percent in 1976, 6.1 percent in 1977 and 5.7 percent in 1978.

The main sources of GDR budget revenues are the compulsory payments by state economic organizations (VEB's, combines, VVB's /associations of state enterprises/) and banks. These enterprise taxes are comprised primarily of payments by production organizations and banks out of net profits earned (= profits taxes) as well as production fund and inventory taxes (= taxes on working capital). In 1979, approximately 44 percent of all state income (excluding social insurance revenues) derived from tax payments by enterprises and banks.

The second most important source of revenue for the state budget in the GDR is the direct or indirect taxation of the public. In 1979, one-third of the revenues came from taxes on private income and from the tax burden on consumer expenditures by private households. Unique to the system of procuring revenue for the state in the GDR is the fact that the emphasis in tax contributions required of the citizenry lies with (invisible) indirect taxes -- in other words, with the sales and consumption taxes that are figured into the prices of consumer goods. The levying of sales and consumption taxes in 1979 brought the state about 28 percent of its total income. On the other hand, revenues are comparatively small from the tax on wages and salaries and from the income tax for "free-lance members of the intelligentsia" on income derived from independent work. Their contribution to the procurement of funds by the state has for years amounted to a mere 5 percent of the total tax bill (M 6.6 billion).

By contrast, private artisans in the GDR pay heavy taxes. In 1979, the state treasury took in revenues of around M 2.7 billion from payments made by this group of taxpayers. This amounts to a somewhat greater than 2-percent share of the total revenues of the GDR's unitary budget (excluding social insurance contributions). Thus, for example, the taxes paid by private artisans are twice as high as the agricultural taxes paid to the state by "socialized agriculture" (LPG's and VEB's together).

The tax payments of private artisans are also considerable when compared to the tax revenues which the treasury receives from all artisan producer cooperatives (PGH) and the various other types of "socialist cooperatives" that exist: For instance, the private artisan enterprises pay not much less in taxes than do the collectivized artisan trade, the consumer cooperatives and all other forms of cooperatives (excluding LPG's) combined,

which together contributed the sum of approximately M 2.9 billion to the state treasury in 1979.

Expenditures

Heading the list of expenditures in the budget accounting are those for social insurance, with M 27.4 billion (+ 3.0 percent). Excluding social insurance expenditures, but including supplements credited to social insurance, the volume of expenditures amounts to M 126 billion (+ 7.0 percent).

The importance of investments and outlays for science and technology, repeatedly stressed by the GDR government and media, is not reflected in the budget accounting. On the contrary, the development of expenditures in this sector is below average; there was even a further absolute decline in such investments financed out of the state budget in 1979. They amount to M 6.1 billion, after having been pegged at M 6.5 billion in 1978 and even M 7.0 billion in 1977.

Subsidies

Approximately half of the indirect increases in income granted to private households out of the state budget in 1979 (in the form of setting prices and rates below the costs needed to produce goods and services) were used to cut the cost of foodstuffs. About 28 percent of the subsidies that benefit the public directly were needed to bring down retail sales prices for sociopolitically important goods, to cut the purchase price for household fuels and to fix the rates for gas and electricity at low levels. Among the many industrial goods for which the government grants to the public retail prices that are below the actual cost of manufacture are baby clothes, clothing for young children, children's shoes, baby carriages and strollers, books, newspapers and pharmaceuticals.

The largest increases in budget subsidies since 1975 are the additional payments for the combined entry entitled "Price supports for industrial goods, household fuels and energy rates." The GDR government was able to get by with subsidies amounting to about M 1.2 billion in 1975, but it was already costing the government the sum of M 2.9 billion in 1978 to maintain the stability of ultimate consumer prices for this group of goods. Compared to 1978, an additional amount in the neighborhood of M 1.5 billion had to be spent in 1979 to assure stable prices and rates in this sector.

The most important reason for this increased need for subsidies is the tremendous rise in the cost of producing electricity, gas and household fuels. And these increased costs are in turn a direct result of the price explosion affecting raw materials and energy sources (especially petroleum) on the world market and in internal CEMA trade.

Revenues, Expenditures Listed

East Berlin NEUES DEUTSCHLAND in German 4 Jul 80 p 3

[Official text of "Budget Accounting for the Year 1979 -- Important Revenues and Expenditures of the State Budget"]

[Text] I. Revenues

	In millions of marks
Total Revenues:	140,633.4
Revenues from state enterprises, combines and VVB's:	
Payments from production fund taxes and inventory taxes	16,815.9
Payments from net profits	32,882.7
Payments from product-related taxes	34,975.8
Payments by banks	5,271.5
Taxes on agriculture	1,394.3
Revenues from agricultural facilities, especially state veterinary services	458.5
Land use fees	338.4
Revenues from water use fees and other revenues from water management directorates	165.4
Revenues from:	
Artisan producer cooperatives and other socialist cooperatives	2,859.8
Private artisans and tradesmen	2,665.5
Taxes on the wages of workers and salaried employees	6,586.5
Revenues from research by the Academy of Sciences as well as by advanced schools	406.2
Rental revenues of municipal communal housing administrations	177.4

Revenues from state educational institutions, particularly for room and board and fees	671.6
Including:	
Public education	368.9
Advanced and technical schools	267.0
Vocational training	5.8
Adult continuing education	29.9
Revenues from state health institutions	6,236.3
Including:	
Payment for health services through social insurance	5,037.4
Revenues from pharmacies and orthopedic stations	751.5
Other revenues, such as those from laundry services, contributions by parents to day-care centers, defrayal of costs at recreation centers and nursing homes	447.4
Social insurance revenues	14,902.8
Including:	
From the shares contributed by enterprises, state organs and institutions, cooperatives	8,478.4
From worker contributions	6,424.4
Revenues from state cultural, recreational and sports facilities as well as youth facilities	615.9
Including:	
Culture	453.1
Recreational and sports facilities	137.7
Youth facilities	25.1
Radio revenues	111.9
Television revenues	381.0
Revenues from communal measures and services	162.2

Fees and other administrative revenues of the state apparatus and economic management organs	261.5
Municipal taxes	536.1

II. Expenditures

	In millions of marks
Total Expenditures:	140,222.6
Budget funds for science, technology and research facilities	2,306.1
Including:	
Funds for science and technology in state enterprises and combines	1,000.7
Funds for science and technology in the field of agriculture and forestry	313.5
Funds for research and development in state institutions and facilities	991.9
Including: Research expenditures of the Academy of Sciences	480.6
and of the advanced and technical school system	399.7
Budget funds for research in the social sciences	176.5
Budget funds for financing investments	5,614.9
Expenditures for the maintenance and repair of transport routes (roads, waterways, railways, seaports, inland harbors and airports)	3,024.3
Product-related price supports for raw materials and base materials	5,180.0
Price equalization fund for industrial enterprises for the temporary equalization of effects of scheduled industrial price changes	1,065.8
Subsidies to agriculture for soil improvement, investment credits, product-related price markups and other measures designed to encourage production	2,341.0

Product-related price supports for means of production for agricultural enterprises	5,156.0
State expenditures for agriculture and forestry, such as veterinary medicine, crop protection, special schools, exhibitions	581.3
Expenditures for recultivation measures	15.9
Expenditures for water management	556.8
Expenditures for housing	6,708.4
Including:	
Expenditures for new housing construction, including new social facilities	1,865.5
Expenditures for the modernization of residential structures	230.0
Construction repairs on existing housing	1,053.3
Expenditures for administering and managing existing housing	1,553.9
Credit allowance for young married couples, as well as interest deductions for the use of credits	188.1
Interest on and retirement of investment loans for new housing construction	1,817.6
Price supports to assure stable prices for basic goods and rates for the public	15,726.8
Including:	
Food	7,721.8
Industrial goods	4,415.2
Long-distance and local passenger fares	2,674.8
Drinking water and sewage treatment fees	676.3
Repairs and services	238.7
Expenditures for minor price adjustments and seasonal measures	161.8

Expenditures for education	9,674.8
Including:	
Expenditures for public education	6,799.3
Including:	
Instructional and learning aids and toys	186.7
Meals for schoolchildren and younger children	866.3
Transportation of schoolchildren	141.5
Advanced and technical schools	1,984.0
Including:	
Scholarships	455.2
Expenditures for boarding schools	108.1
Meals for students in dining halls	105.0
Vocational education	797.1
Facilities for continuing adult education	94.4
Expenditures for health and social affairs	9,259.4
Including:	
Expenses for hospitals	3,280.8
Expenses for polyclinics, out-patient clinics and general practices	1,832.6
State aid to minor dependents and maternity benefits	1,363.2
Supplementary payments to large families	83.0
Expenses for recreation centers and nursing homes	522.4
Expenses for providing the elderly with housekeeping services and noon meals	173.2
Social insurance expenditures	27,375.3
Including:	
Pensions	14,383.8
Sick benefits	3,598.3
Pregnancy and maternity benefits	688.0
Aid to mothers for paid leave (baby year)	259.8
Expenditures for youth facilities, including tourism	100.0

Expenditures for culture	1,599.1
Expenditures for sports facilities	328.2
Expenditures for recreation and vacation services	392.9
Subsidy for foreign tourism	273.6
Municipal measures and services; for example, street lights, trash pickup, maintenance of parks and open space	819.7
Expenditures for radio	197.8
Expenditures for television	472.4
Expenditures for state apparatus and economic management organs	3,719.1
Civil defense and fire protection	114.0
Expenditures for national defense	8,674.0
Expenditures for public safety, the administration of justice and securing the state border	3,474.0

7458
CSO: 2300

DEVELOPMENT OF INLAND WATERWAY SYSTEM REVIEWED

East Berlin PRESSE-INFORMATIONEN in German No 97, 15 Aug 80 p 6

['Facts and Figures' report by Press Office, Chairman, GDR Council of Ministers: "The Inland Waterways of the GDR"]

[Text] Today, the inland shipping of the GDR has at its disposal a waterway system with a total length of 2,546 kilometers. Of this, 1,680 kilometers can be navigated by ships having over 800 tons of capacity. The most important waterways are the Elbe, with a total length of about 1,300 kilometers, of which 566 kilometers either lie within the GDR or form part of the national border with the CSSR and the FRG, and that section of the Oder, 161.7 kilometers in length, which forms the national border with the Polish People's Republic. In addition to these there are connecting waterways between the Elbe and the Oder such as the Elbe-Havel Canal and the Lower Havel Waterway. Other important waterways are the Mittelland Canal, the Hohensaaten-Friedrichshaler Waterway, and the Saale. The waterway system also includes rivers such as the Unstrut, the Elde, and the Lusation Neisse, which however have only minimal significance for shipping.

An example will give an idea of the extent of the waterways in the GDR. The distance along the waterway between Eisenhuettenstadt on the Oder and Niegripp on the Elbe amounts to 255 kilometers. Given an average traveling speed of 8 kilometers per hour and taking into account the times spent passing through locks, about 37 hours of travel are needed for this journey.

For decades now, extensive regulating measures have been carried out with respect to the rivers in the territory of the GDR. Back in the 19th century, interconnections had already been established between the individual river and stream systems through the canalization of rivers and the cutting of canals. The completion of the interconnections between the Elbe and the Oder, which include the Elbe-Havel Canal, the Havel-Oder Waterway, and the Spree-Oder Waterway, caused traffic along the waterways to increase substantially.

The founding of the GDR ushered in a new stage of development for the inland shipping. First of all, the destruction caused by World War II had to be eliminated in order for inland ships to be able to run again at all on the waterways of the GDR. Numerous bridges had been blown up, and a large proportion of the vessels of the transport fleet had been sunk and thus blocked the waterways. Locks, weirs, embankments, levees, and so forth showed extensive damage and had to be restored. After the worst of the wreckage had been cleared away by an enormous effort, the working people of the waterways administration set about the systematic reconstruction of all facilities. By the beginning of the 1950's, the 32-kilometer-long Havel Canal had already been built, thus establishing a beneficial link between the Lower Havel Waterway and the Havel-Oder Waterway.

On the Elbe, the water depth amounts to between 2 meters and 2.40 meters at medium water level. It is primarily dependent on the supply of water from the respective catchment basins of its tributaries. In May and July of this year, shipping had to be banned because the river overflowed its banks, became difficult for the navigation of ships, and was flowing too fast. In such cases, the clearance heights under the bridges are too small in some places.

In dry periods, the water depth can fall to values ranging around 1.50 meters. In the exceptionally dry year of 1964, the smallest depth was only 65 to 80 centimeters between the CSSR border and Boizenburg. With normal water levels, individual vessels 80 meters in length and 11 meters in width are allowed on the Elbe between Schoena and Boizenburg. Barge trains can have dimensions of up to 190 meters in length and 25 meters in width, depending on the water level and on the section of river. The depth conditons of the Oder are similar to those of the Elbe. Depending on the water level, loaded barge trains with a length of 156 meters and a width of 11 meters can be operated on this river.

Canals and canalized stretches of river have essentially constant depths. Thus, between the capital of Berlin and the Elbe, by way of the Lower Havel Waterway and the Elbe-Havel Canal vessels with a draft of 2 meters can be run continually. Between Berlin and Hohensaaten, the Havel-Oder Waterway is suited for individual vessels having a length of 67 meters and a width of 8.20 meters. The depth comes to 2 meters here. Barge trains with a length up to 135 meters and a width up to 8.20 meters are permitted on this waterway.

The connection between Berlin and Eisenhuettenstadt by way of the Spree-Oder Waterway can be passed through by individual vessels with a length of 67 meters and a width of 8.20 meters. For barge trains, the permissible size is 123 meters in length and 8.20 meters in width. The designed draft is 1.85 meters, and for machine-driven vessels it is 1.75 meters. The other principal waterways have similar proportions.

All the canals and canalized stretches of river have locks and ship elevators. The most important and at the same time most interesting structure here is the ship lift at Niederfinow near Eberswalde. This lift overcomes a height difference of 36 meters. The second ship elevator is located at Rothensee near Magdeburg and overcomes a height difference of between 11 and 18.50 meters, depending on the water level of the Elbe.

Numerous locks are located along the individual waterways. The Brandenburg Lock is one of the most extensively used of all large locks, having two coffers 210 and 170 meters long. The twin chamber lock of Eisenhuettenstadt has two coffers 130 meters long and 12 meters wide. The height difference between the upper and lower water level is between 9 and 14.2 meters, depending on the water level of the Oder.

Of course, the GDR's waterways are not restricted to serving as a traffic channel for transport shipping. For example, industry takes coolant water from them, and agricultural operations partly supply their sprinkler systems with water from the rivers and canals. In the summer months, many citizens use these waterways for outings with the White Fleet or for water sports. Then there is a lively bustle above all on the Mueritz-Elde Waterway, the Mueritz-Havel Waterway, and the Upper Havel Waterway. In these areas, numerous working people find relaxation every year.

12114
CSO: 2300

CROP, WEATHER REPORT PUBLISHED FOR JUNE 1980

East Berlin FELDWIRTSCHAFT in German Vol 21 No 8, Aug 80 p 384

[Article by Dr D. Krumbiegel, GDR Meteorological Service, Central Weather Bureau, Potsdam]

[Text] The Weather in June 1980

Subnormal air temperatures at the beginning of the month and after 18 June included a warm weather period. Rain was unusually frequent and especially abundant in the northern GDR. There was not much sunshine.

During the first two 10-day periods daily average air temperatures only on a few days deviated by more than 3 K from normal values. Between 22 June and the end of the month anomalies of usually between -3 and -5 K occurred. The weather period that was too warm generally brought in daytime maxima above 20°C. Values around 25°C were recorded widespread on 5, 9, 10 and 13 June. On 14 June, maxima went up to 32°C locally. For the rest of the time, maxima mostly ranged between 15 and 20°C, at the end of the month they often even dropped below 15°C. Night ground minima dropped below 5°C only in the first few days of the month (1 June recorded -1°C in the Cottbus area). Thereafter they mostly ranged around 10, and during the third 10-day period between 5 and 10°C. Only the first 10-day period had much sunshine in the northern GDR. The second part of the month was marked by very little sunshine.

Only two days (4 and 6 June) remained completely without rain in the entire area. The rest of the time brought in a lot of rain, with showers predominating. In the second 10-day period the rain was most abundant. Altogether, the northern GDR got more rain than the southern. Frequently there were daily volumes between 30 and 60 mm (Schwerin got 112 mm on 11 June). There were between 5 and 8 days with rain volumes around 3 mm widespread in the second and third 10-day period. Schwerin got the extreme monthly volume of 234 mm (= 442% of the normal value).

Temperature Data for June 1980 according to the Chief Climatological Office, Potsdam

1. Monthly Average Air Temperatures and Deviations from the Norm

Schwerin	15.2°C	-0.4K	Erfurt	14.5°C	-0.7K
Neubrandenburg	15.0°C	0.0K	Leipzig	15.9°C	+0.1K
Potsdam	16.1°C	-0.2K	Goerlitz	15.2°C	-0.4K

2. Mean Precipitation according to Bezirks

Rostock	122 mm	= 235%	Halle	70 mm	= 127%
Schwerin	129 mm	= 235%	Erfurt	99 mm	= 160%
Neubrandenburg	144 mm	= 215%	Gera	92 mm	= 133%
Potsdam	89 mm	= 165%	Suhl	111 mm	= 156%
Frankfurt	107 mm	= 195%	Dresden	84 mm	= 106%
Cottbus	87 mm	= 143%	Leipzig	76 mm	= 121%
Magdeburg	97 mm	= 187%	Karl-Marx-Stadt	76 mm	= 87%

3. Evaporation Potential

Northern Bezirks	60...75mm
Central Bezirks	70...90mm
Southern Bezirks	60...80mm

Soil, Crop and Labor

Toward the middle of the first 10-day period, surface soil temperatures rose to around 20°C. On 18 June the ground started cooling off rapidly. In the third 10-day period surface soil temperatures lay around 15°C. In the subsoil, the warming up period was delayed. There, with the end of the second 10-day period, temperatures dropped down to clearly subnormal values. By the end of the month, from 13 to 15°C were recorded at a 50-cm depth, from 12 to 15°C at a 100-cm depth. Ground water content diminished in the southern plains, widely in the first 10-day period and still locally in the second. Then the ground water level rose strongly everywhere in the third 10-day period, as it had already done before in the northern GDR. Under the turf they recorded at the end of the month at a depth down to 50 cm between 70 and 95% of usable field capacity in ground water in areas that had been heavily soaked. Elsewhere, values were between 40 and 70%. Showers in part were very intensive and then there were considerable runoff losses on ground level. Erosion damage, mud formation and temporary soaking resulted. Soil climatic conditions improved in the course of the first half of the month depending on rain supply. Composting and nutrient mobilization were held up, starting with the end of the second 10-day period, when subnormal ground temperatures were persistent.

The high air temperatures in the first half of the month greatly stimulated growth. Initially, to be sure, that was limited by moisture supplies, mainly for the cultures going through their main growing period. At the same time there was an acceleration in development and a rapid succession of the phenological phases. Starting with the end of the second 10-day period the low air temperatures (daytime averages mostly between 12 and 15°C) and the lack of sunshine then prevented a full utilization of the meanwhile very good moisture supplies. Most strongly disadvantaged were cultures that need a lot of heat, like corn, fruit vegetables and beets. These conditions were advantageous for forage growth, especially grasses, the filling in of potatoes, the grain formation for the winter crop, but also the growth of weeds. The cool and humid weather once again delayed developments which became most conspicuous in the ripening processes. Heavy rains made the winter barley and winter rye turn over, but not too much because of the rather solid stalks. Hail caused local damage. Fungus pests had an easy time.

During the first 10-day period field work hardly suffered from disturbances due to the weather, but then came more and more interruptions because of the rain. The beet crop cultivation had been delayed anyhow (delayed cultivation, slow early growth), and that significantly diminished the time available for labor. Furthermore, the effect of mechanical anti-weeding measures was curtailed. For the forage harvest the high ground moisture content often led to vehicle tracks and required extra tractor power. Starting at mid-month drying conditions became very unfavorable that hardly permitted hay formation and considerably interfered with the preparation of ensilage (losses of nutrients, inadequate dry substance content). Average daily duration of relative air humidity below 70% dropped from 8 to 10 in the first half of the month to from 5 to 7 h in the second. Whereas first there had still been a great need for rain, this was reduced in the course of the second 10-day period, starting in the north. In the third 10-day period only small areas were left in the southern plains that needed extra water. Reservoir and damming areas had to be drained to ensure the trafficability and grazing capacity of the areas and prevent scar damage.

Meteorological Projections for Farming for August 1980

As the June weather was perfect for widespread potatoe rot extensive herbicide measures are of increased importance. In scheduling dates for that one should consider the possible extra growth and harvesting deadlines.

For the grain harvest, due to the introduction of the summer season, there is a one-hour shift for drying operations in the morning and watering the crops in the evening, which should be taken into account in drawing up working plans. Also recommended is recording the duration of rain periods which is more important after showers than the rain volume for the absorption of moisture. For example, when the rain lasts up to 1 h, the moisture gained is between 1.5 and 2.5%, when 2 or 4 h, between 3.0 and 4.0 or between 4.5 and 6.0% respectively.

Crops accustomed to much and easily accessible water will need extra water even in brief rain poor periods.

5885
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[Article by Dr D. Krumbiegel, GDR Meteorological Service, Central Weather Bureau, Potsdam]

[Text] The Weather in July 1980

Subnormal averages in daily air temperatures lasted until the 23th, and subsequently the weather was somewhat too warm. There was a lot of rain, especially in the first two 10-day periods. Sunshine was considerably below normal.

The very cool weather of the third 10-day period of June lasted until the 6th, with from 2 to 4 K subnormal daily air averages. Between the 12th and 22nd it was from 3 to 5 K too cold most of the time. Daytime maxima up to the beginning of the third 10-day period mostly ranged between 16 and 22°C. Starting with the 24th, maxima generally came to from 20 to 25°C, on some days, up to 28°C. At night, ground air temperatures several times dropped to from 5 to 10°C. For the rest of the time the minima mostly stayed around 10 or between 10 and 15°C, at the end of the month, around 15°C. Only between the 23rd and the 27th did the daily duration of sunshine in the whole territory of the GDR amount to from 12 to 15 h. For the rest of the time, sunshine was very poor, still more so in the south than in the north. In circa 20 days less than 5 h in sunshine were recorded widespread.

Only between the 23rd and 27th the territory of the GDR remained absolutely rain-free. For the rest of the time, precipitation fell mainly in the form of showers, which brought regionally very uneven water supplies. Almost on all rain days, local or regional volumes recorded were between 5 and 20 mm. Especially high were the volumes in the first 5-day period (regionally from 15 to 35 mm), on the 21st (Gera Bezirk, Karl-Marx-Stadt Bezirk and Dresden Bezirk, 50 to 85 mm), and at the end of the month (locally 30 to 40 mm, Teterow, 75 mm). At selected stations, total rain periods between 75 and 105 h were recorded (Magdeburg 55 h, Dresden and Karl-Marx-Stadt 135 h). The daily averages of relative air humidity dropped somewhat below the 70% limit only during the brief period when the weather was fine and otherwise mainly ranged between 75 and 90%.

Weather Data for July 1980 according to the Chief Climatological Office, Potsdam

1. Monthly Mean Air Temperatures and Deviations from the Norm

Schwerin	15.7°C	-1.8K	Erfurt	14.7°C	-2.1K
Neubrandenburg	15.8°C	-1.3K	Leipzig	14.5°C	-3.5K
Potsdam	16.3°C	-1.8K	Goerlitz	15.4°C	-2.1K

2. Mean Precipitation according to Bezirks

Rostock	89 mm = 124%	Halle	87 mm = 124%
Schwerin	101 mm = 137%	Erfurt	79 mm = 105%
Neubrandenburg	100 mm = 132%	Gera	108 mm = 135%
Potsdam	87 mm = 119%	Suhl	134 mm = 166%
Frankfurt	83 mm = 112%	Dresden	151 mm = 162%
Cottbus	111 mm = 146%	Leipzig	109 mm = 133%
Magdeburg	75 mm = 110%	Karl-Marx-Stadt	162 mm = 162%

3. Evaporation Potential

Northern bezirks	55...70 mm
Central bezirks	50...65 mm
Southern bezirks	45...60 mm

Soil, Crop and Labor

Up to the start of the third 10-day period, surface soil temperatures mostly ranged between 15 and 18°C. After mid-month, often values below 15°C were temporarily recorded. In the third 10-day period up to the 26th and 27th, the soil got much warmer, by from 4 to 7K in the north, from 6 to 9K in the south. Then values dropped to around 20°C by the end of the month. In the subsoil, no noteworthy temperature drop could first be found. Starting with the middle of the third 10-day period it warmed up. By the end of the month, 17 to 19°C were recorded at the 50 cm depth, and 15 to 18°C at the 100 cm depth. All the rain kept the ground very moist both in the subsoil and surface soil, between 70 and 90% of usable field capacity. Somewhat lower values were recorded at the loess areas of the bezirks of Magdeburg, Halle and Erfurt. In areas where it had rained a great deal, ground water temporarily reached field capacity values. The conditions were mostly unfavorable to vegetation. Only in the third 10-day period, temperature conditions improved. So much dampness in the soil interfered with the air budget and led to crowding. And when in addition then there were heavy rains, erosion and puddles occurred, and floods in low lying areas. The condition of the plots was such that, especially in the forage harvest, tracks remained and the crop was damaged. One must also assume that deeper down in the soil, nutrients were dislocated.

With so little sunshine and little heat, the ample ground water supplies still did not permit a full benefit. To be sure, there was massive growth, especially for varieties that do not demand much heat, but the assimilation and thus the concentration in nutrients were greatly diminished. The weather delayed ripening. A phenological delay of 5 to 10 days persisted. The advantages deriving therefrom for kernel formation in grain are not likely to make up for the disadvantages resulting from the delayed harvest. Weeds and fungus were heavy (mildew, blight, rot). Heavy downpours compacted the grain, especially on amply fertilized lots. Proliferation and partly double growth too occurred there. On overly wet lots, potatoes reacted to air shortages by turning yellow. The second corn, not yet having formed a proper climate for its firmness, almost stagnated in growth during the first two 10-day periods.

Due to the rain, there was much interference with field work. Drying conditionswere extremely poor, practically preventing all hay production and even placing ensilage production in doubt (long waiting periods, losses in nutrients, growing in). For fighting potato rot, one had to spray fast (strong growth and rains). There was no need for irrigation. Reservoirs were drained. For the harvesting-threshing of winter barley there were only a few days in the third 10-day period when meteorological conditions were favorable. But even there, strong dew formation further cut down the working time. But for the summer catch crop cultivation, the conditions were very good.

Meteorological Projections for Farming in September 1980

Abiding by optimum seeding periods for winter crop remains crucial for its yields. As the grain harvest was delayed this year, the straw must quickly be gathered. For improving soil structure and fighting weeds, we recommend, quite generally, intensive stubble working. That would, at once, also have advantages for the seed bed quality, for preserving the subsoil's water reserves, and for reducing the traction requirements in the seed or fall furrow. Since there has been so much rot in the potato plots, extensive and timely herbicide measures are recommended. Since the weeds are so abundant, chemical and mechanical measures should be combined. We must expect large-tubered and very wet crops that can easily be damaged. Thus great caution is called for in digging, processing and storing the crop.

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DIFFICULTIES, PROBLEMS OF NATIONAL ECONOMY EXAMINED

Budapest VALOSAG in Hungarian No 5, May 80 pp 13-21

[Article by Janos Kornai, scientific adviser, MTA Institute of Economic Sciences: "Efficiency and Socialist Morality--a Few Dilemmas of the Hungarian Economy"]

[Text] Two Different Value Systems

The 1968 economic management reform brought tangible results.[1] Production has dramatically increased in the first decade since the reform. There is total employment. Since labor resources have become depleted, the production increase reflects mainly an increase in efficiency.

Although it would be worthwhile to analyze in more detail the achievements of the reform, I would like now to deal instead with a few difficulties and problems of the Hungarian economy. The Hungarian economist is in a special position for he is able to observe a great--and historically unique--experiment. I feel it is our duty to report the experiences of this experiment--not only the spectacular achievements, which can be followed even in the daily press, but also the less apparent concerns.

One of the objectives of the reform was to make the Hungarian economy more efficient. I will list below a few necessary conditions for economic efficiency.[2] I am not aiming at completeness; undoubtedly, there are several other important conditions that are missing. Also, I am not willing to reduce the conditions of efficiency to a small number of final conditions, that is, to deal with the question in an axiomatic form. I know only five conditions which were often mentioned in the debates on the Hungarian reform.

1. There is a need for a system of material and moral incentives that encourages the economy's participants--both the leaders and the workers--to perform better.

2. Thorough calculations must be made which take both profits and expenses into account. Our limited resources must be used economically. Inefficient productive activity must be stopped.

3. We must adapt rapidly and flexibly to the existing situation and external circumstances.

4. We need the enterprise of those who make the decisions: we need their initiative and willingness to introduce reforms and to take risks.

5. Every administrator and every decisionmaker must be held personally responsible for his or her work.

The five conditions above do not have any characteristically "socialist" content. On the other hand, they cannot be considered "capitalist" either. They are the general principles of efficient management. The official economic views of the East European socialist countries have always--not only since the reforms, but earlier as well--identified themselves with these requirements as the necessary conditions for the development of the economy and increased work efficiency.

Let us turn to another group of values which we will call in summation: the ethical principles of socialist management. Again, I am not aiming at completeness. There is a whole line of principles which were not included in the list. Just as before, when we talked about efficiency, I do not seek to formulate axiomatically and to arrive at a few final ethical postulates. I will be satisfied to deal with four principles. They may even partially overlap one another. At any rate, their position in the foreground is justified by the fact that they play an important practical role in the economy. All four principles appeared as early as the beginning of the labor movement, and within the capitalist system, but were redefined later when socialist economy was established. My article refers exclusively to the definition that is accepted in Hungary today.

A. The well-known principle of socialist waging is: "to everyone according to his performance."[3] This includes, among other things, the other well-known principle of distribution: "equal wages for equal work." Although the latter was originally formulated to help women, ethnic minorities and other disadvantaged groups get equal wages, its definition has been expanded in the socialist economy. It is evident that distribution according to performance should go hand-in-hand with the equal waging of the same work.

B. The principle of solidarity. Socialism abolishes the cruelness of capitalist competition which weeds out the weaker. The weaker must not be punished for his weakness. On the contrary, he must be helped to rise.

C. The principle of security: every member of the society should feel secure. This principle is closely connected with principle B above. Some of its more important implications are: the individual or a smaller community can feel secure in the knowledge that the larger community will come to help him in case of trouble. Society guarantees total employment--not just at the present, but once and for all. The fear of unemployment is a thing of the past. This can be said not only of total employment, but also,

in a more general form, of every achievement. The sense of security is strengthened by the fact that a standard once reached will be guaranteed by society in the future as well.

D. General interest comes before partial interest--regardless of whether the latter concerns the individual or a smaller community. This principle includes the priority of long-range interests concerning many generations over short-range interests, benefiting only the present generation.

The view has been established among economists of socialist principles that there is no contradiction between the two value systems, namely, that of efficiency and socialist ethical values. Perhaps it was Oscar Lange, the great Polish economist, who had the most illustrative formulation of this thought in his classic study of the theory of socialism, written in the 1930's.[4] Lange demonstrates a decentralized market economy, after Walras' concept, which is efficient and at the same time fits nicely into a social system built on socialist principles.

Experience does not corroborate this traditional view. It seems that clashes cannot be avoided between the conditions of efficiency 1 to 5 on the one hand, and the ethical principles A to D of socialist management on the other. The numerous dilemmas of decision in a socialist economy are created precisely by clashes of these two different value systems.[5]

Let me make a personal note here. Although I am striving to be as objective as possible in the analysis of the Hungarian economy's problems, my subjective view will emerge nonetheless. I am, on the one hand, an economist. And my other work involves mathematical economy. No wonder if my thinking has been "spoiled" by principles such as "rationality," "efficiency," and theories on the favorable effects of the decentralized market. On the other hand, my thinking has been deeply influenced by socialist social and ethical ideals. Thus, I also experience the dilemmas which every economist must face in the given characteristics of the Hungarian economy.

We will examine three problem areas, namely, incentives connected to profits, the survival of the enterprise, and, finally, the growth of the enterprise. In these three areas, the conflicts between the two value systems--the efficiency requirements and the socialist ethical principles--are especially apparent.

Let me begin by saying that this study will not delve into casual analysis. It would be a mistake to believe that the intention to enforce the ethical principles will violate the efficiency requirements, or vice versa. The actions of institutions or of decisionmaking individuals will be somewhat influenced, of course, by ethical considerations. But the roots of society's regularities of fundamental economic activity go much deeper. The topic of this article is thus much more limited. The article does not come up with any explanatory theory, but only attempts to analyze the theoretical possibility of bringing the two different value systems into harmony with one another.

Incentive Connected with Profit

One of the most characteristic endeavors of the Hungarian reform was to boost material interest connected with enterprise profits. This would serve the implementation of all five conditions of efficiency, especially the first two. (As a reminder: condition no 1 is to develop the system of incentives, and no 2 is thorough calculation and a strict balancing of incomes and expenditures.)

According to experience, however, interest in profits clashes with ethical principle A according to which everyone should have a share of the material goods "according to his performance" and receive "equal wages for equal work."

The Hungarian enterprises introduced profitsharing. This alone is a violation of principle A. The total income of two workers whose performance and wages are the same may be different if one has a larger share in profits than the other. In addition, the Hungarian enterprises acquired more autonomy in determining wages. A more profitable enterprise can pay not only higher shares of profits, but also higher wages, than a less profitable one. Because of all this, the income of workers with identical performance may differ widely.

Let us look at an example. Enterprise G is more profitable than enterprise H. It is possible that this reflects a better performance of enterprise G's management and workers. There is a better work discipline, more attention is paid to the quality of the products, and there is more flexibility in adapting to the circumstances. These might be the reasons for the higher profits. On the other hand, it is possible that they cannot take the credit for the increase in profits. There may be various factors at play that are outside of their control. For example, enterprise G inherited a better machine inventory from the period before profit-sharing than the less lucky enterprise H. Or the producer prices of both enterprises' products are centrally fixed and it just happens that enterprise G's prices have a high profit margin, and enterprise H's prices have a low one. Or both are exporting, and world market prices had benefited enterprise G, but not enterprise H.

The enterprise's management and workers consider the new income ranges "unjust." It is not they who are responsible for a small profit, or no profit at all. So why should they be the ones to be punished? They thus try to put pressure on the high authorities to level off the differences in incomes. And the higher organs themselves often feel that it is not right to allow excessively extreme differences, because that would contradict the egalitarian traditions of the socialist movement and the accepted principle of "equal wages for equal work."

There are many ways for the tendency of levelling-off to manifest itself. There are, on the one hand, general measures which prescribe how the

enterprise's gross profits must be divided between central and local taxes and other payments, the enterprise's investment and welfare funds, and the funds for profit-sharing and wage increases. Led by various considerations--among others, the intention to level off incomes--they prescribe quite complex formulas. This makes it more difficult to gain an overview of the system of interest, and this in itself decreases the incentive effect. But this is not enough. There are frequent ad hoc interferences with the finances of the enterprises to cream off "excessive" profits and to compensate for losses arising from "objective difficulties." In the final analysis, almost two-thirds of the enterprises' gross profits was taken away and redistributed in past years.

The often unforeseeable and incalculable redistribution, going through a hundred different channels, makes interest in profits illusory from many aspects. In microeconomy, the enterprise with high profits is suppose to limit its expenditures by the so-called budget limit. But under the circumstances mentioned above, the enterprise budget limit "softens up," that is, it does not really limit enterprise decisions.[6] The budget may be exceeded without any serious consequences. If the enterprise has financial losses because of uncovered expenses, the state will, sooner or later, pay them.

If an enterprise is in a difficult situation--because of outside factors that are beyond its control, for instance--it can react in two ways. One is that it can try to cope with the difficulties. The effort may be unsuccessful and the enterprise may go under. And even if the effort were successful, it would require sacrifices and self-denial. As long as the problems are not solved and the losses are not eliminated, the incomes remain lower than those at more fortunate enterprises. This way's objective is to adapt to the situation as flexibly as possible. The other way is to seek help from the high authorities: to send deputations, to complain and "to cry." "Lobbying" begins: the enterprise tries to find benefactors in the political and social organizations and high state offices who would use their influence on the enterprise's behalf. They would also use their personal connections. The second way's objective is to get financial assistance: as much state subsidy, tax relief, and "soft" credit as possible, and as soon as possible.

As a consequence of the second way, the enterprise, which acquired through the reform a greater autonomy to make short-range plans, almost voluntarily accepts tutelage. By seeking help, it continues or even increases its dependence on financial organs, banks and price authorities--in other words, on those central institutions which have an effect on its financial situation.

I would mention here the effect of the tendency to level-off the incomes based on undertakings involving risk, which is condition no 4 of efficiency.

Reform--be it the introduction of a new product, technology or organization or the exploration of a new market--entails risks. The unsuccessful are going to lose. It is worth the try, then, when success brings high profits.

In post-reform Hungary, the economic manager cannot lose, but he cannot win much either. There is no possibility for a "great advance." The conspicuously and exceptionally profitable enterprise will sooner or later be "tapped." The levelling-off of incomes more or less goes together with a levelling-off of performances as well.

These are, then, the first examples for the conflicts between conditions of efficiency and the ethical principles of socialist economy. The more the budget--and thus both the managers' and the workers' pay--reflects actual profits, the more it may be separated from waging principles that are based exclusively on individual performance and the more it becomes possible to "unjustly" differentiate between incomes. And, the other way around: the more consistently the principle of "equal wages for the equal work" is applied, the more the incentive effect of profit-interest will weaken.

The Survival of the Enterprise

The earlier topics are closely connected with the next topic of our analysis, namely, the survival of the enterprise. We have said in condition no 2 of efficiency that if the comparison of expenses with incomes indicates that a certain activity is inefficient, then that activity must be stopped. If an enterprise is much in the red for a long time, then it must be abolished in the interest of the economy as a whole, even if this means a big loss of prestige for the enterprise's management and a temporary lack of employment for its workers.

This requirement may contradict ethical principles B and C. The principle of solidarity means that the weaker community must not be allowed to fall. On the contrary, it must be helped so that it can continue with its activity and stand up. And the principle of security proclaims that no member of society should be afraid of falling and being set-back. He should be confident that his individual achievements--the possibility of uninterrupted work and guaranteed employment--will continue to be guaranteed for him in the future as well, especially when--and here is where this subject is relevant to the topic of the previous chapter--his problems are not caused by himself, but by external circumstances that were perhaps unrelated to him.

In the Hungarian economy, enterprises almost never went bankrupt--and ailing enterprises were never entirely liquidated--in the first decade that followed the reform. Not only the possibility of employment in general, but the actual job held previously, is guaranteed equally for everyone. After the world market price explosion, which caused tens of thousands of companies around the world to perish, not one single Hungarian enterprise went under. To use an extensively used term, the state treasury "shouldered" the losses. The "natural selection," resulting from economic competition, did not take place: the strong and the weak, the active and the passive, the initiator and the impotent, they all survived the storm.

There are many ways the state can assist enterprises that are in trouble. It gives special grants; in case of a product that has a fixed price, it allows a special price increase, it reduces the enterprise's taxes or tariffs, or the bank gives easier credit or allows the postponement of repayment, and so on.

There is no way to unequivocally evaluate the situation thus arising. Solidarity and security are in themselves a big asset in a man's life. The life of the enterprise--and its workers--becomes more relaxed, for the fear of life-and-death struggle has been eliminated. But this will in most cases induce leisurely and torpid behavior. If the survival of the enterprise is automatically guaranteed, then the management's individual responsibility will also be weakened--and the fourth condition of efficiency will be violated.

The guarantee of individual employment is a related problem and thus I will mention it here. The Hungarian economic system freed the workers from the fear of unemployment, which not only causes great losses for both society and the individual, but also humiliates human dignity and makes the worker cringe before employers. The abolition of unemployment is a historic achievement. We must face the fact, however, that guaranteed total employment--and its outgrowth, a chronic labor shortage--also has its dark side. People are not the same: there are conscientious and less conscientious, hard-working and lazy, thorough and superficial people. The fact that the labor market is a "sellers' market" puts both kinds of people in a favorable position. The chief of a shop or plant will think twice before firing a careless worker, because he might not find anyone to replace him. And if he does indeed fire him the fired person will not find this a punitive measure for he will in most cases easily find another job.

Both of these closely related phenomena--the guaranteed survival of the enterprise and the guarantee of individual employment or total employment--lead to very difficult and deep problems. Is a society capable of achieving high efficiency exclusively through positive financial and moral incentives and rewards for efficient work? Is a negative economic incentive--the effect of a fear of collapse and of individual financial and moral losses--dispensable? I myself am not sure what the answer is.

But this much seems to be sure, however. We are facing, here too, great dilemmas and conflicts between various value systems.

There is a contradiction between the requirements of efficiency, on the one hand, and the ethical principles of solidarity and security on the other.

The Growth of the Enterprise

Our next topic is the growth of the enterprise and, in this connection, the allocation of investments. The manifestations of the clash between the various efficiency requirements and the ethical principles are perhaps even more complex here than in the two previous areas.

Let us begin with a hypothetical system in which investment decisions are totally decentralized. This system would, no doubt, have some advantages with regard to efficiency. Conditions 3, 4 and 5 would be implemented more and more: risk, initiative and readiness for reforms would increase. Individual responsibility for investment decisions would become more flexible.

However--putting the ethical aspect aside for the time being--total decentralization would be in conflict also with some of the conditions of efficiency, first of all with condition no 2 which refers to the calculations of profits and expenses--when these categories are broadly defined. We would be facing the well-known problem of the welfare economy, namely, that the totally decentralized market does not, in the absence of any state or social interference, reckon with the external effects of local decisions that are not reflected in the market prices, including both the external profits and external expenses. This consideration leads us to ethical principle D, i.e., to the priority of social interest. If every enterprise makes investment decisions exclusively on the basis of its own interests in profits, then the danger exists that actions, which have primarily an external effect, will be pushed to the background.

Seeing this dilemma, the 1968 Hungarian reform set the objective of sharing investment decisions between the upper and lower levels of management. The reform laid down a significant decentralization when compared with the pre-reform period, but left considerable power, nonetheless, in the hands of the central institutions. Thus, for instance, almost half of the national economy's total investment was allocated in 1976 on the basis of central decisions. A little over a half of that is considered "enterprise investment," for it is the enterprise that announces the investment decision. But only half of the so-called enterprise investments are financed exclusively with the enterprise's own savings, in other words, about one-fourth of the total investments may be considered totally decentralized. For the other fourth, the enterprise must apply for state subsidy or long-term credit, that is, the central planning and financial organs, the bank and the enterprise will decide jointly.[7]

The new situation (the combination of centralization and decentralization) has many beneficial aspects. It makes it possible for the central organs to adequately balance the totally decentralized investments with centrally decided investments if the former's proportion is socially unfavorable. The allocation of the total investment may thus be adequately adapted to the central plans without making it necessary for the central office itself to divide all investment resources to the last penny.

The central office thus has the means by which it can guarantee the priority of society's interest over local and enterprise interests in case there is a conflict between them; it can serve the long-range interests of society (which are not always possible to express in terms of money) against the enterprise's short-range interests in profits. This combination of the power of decision makes it possible to use many different sources of

information to prepare individual concrete decisions. The enterprises supply the concrete and detailed information, and the higher authorities that take part in the decision supply the overall view of national economic relations and long-range plans.

The advantages are accompanied, however, by disadvantages. Since the majority of investments require central financial support or credit, decisions are preceded by lengthy bureaucratic processes. This diminishes the flexibility of adaptation. (Violation of the third condition of efficiency.)

The enterprises and lower-level authorities which have an interest in investments try to influence the higher organs. They try to present arguments, but they also use personal connections when they feel that this will promote an investment case initiated or supported by them. The economists and planners in the central organs are not impersonal representatives of the entire society's rationality; they are not philosophers of Plato's ideal state who embody a comprehensive wisdom of society. They are live people, living in the midst of society, connected by a thousand threads to their colleagues active in economic life. It is impossible to separate in their decisions the role of the strictly rational recommendations of economic calculations and personal intuitions that are subsequently "rationalized." Those who decide on investments in the higher organs should always pay special attention to the external effects of the actions that do not show up in the books of the enterprise concerned. However, this consideration is sometimes obscured by views reflecting the internal interests of the enterprise which recommends the investment action.

We must understand the sociology and sociopsychology of the decision process that precedes the investment in order to find an explanation of what happens if the investment is unsuccessful. It is simply impossible to determine who is responsible for the faulty decision. Since the decision was preceded by a multilevel, iterative informational and decision-preparing process, every organ and every person taking part in it is responsible. They are responsible--and yet they are not, for they can say that they did not want the investment this way, it was the negotiating partners who forced this compromise on them. In the final analysis, then, personal responsibility for investment decisions disappears. (Violation of the fifth condition of efficiency.)

Here we come to the explanation of the phenomenon mentioned earlier, namely, that the state gives a hand to the enterprise having serious losses in coming out of the trouble. It is not simply the "State" that helps but by virtue of using the state's money, all of those officials who--in the framework of the collective decision--took part themselves in the preparation of the action. Let us suppose that the losses were caused precisely by a faulty investment decision. Construction was delayed, the cost of buildings and machines were higher than expected, the new export product cannot be sold at the price hoped for, and so forth. Who pays for the bad deal? Everyone who took part in the preparation of the decision has an interest

in not letting the question of responsibility become critical. This in itself provides impetus to help the enterprise in trouble.

It must be added to the above that the situation in investment allocations is closely connected to the two problem areas discussed earlier. As I have mentioned, only a small proportion of the investments is implemented on the basis of self-financing or credit which is given by the bank exclusively on the basis of profitability. State subsidy or long-term credit may be given also to an enterprise which is in a bad financial situation. Thus the view has been established at the enterprise that its profitability is not closely connected with either its survival or even its growth. This is the main explanation for the phenomenon called the softening of the limits of enterprise budget. In the course of the investment action, the enterprise may, without any undue risk, overstep the financial resources at its disposal at the present or in the near future. The loss will, sooner or later, be covered by the state. This can, then, lead to irresponsible initiatives in investment actions and to squandering during implementation, both of which are detrimental to efficiency.

Let us summarize the above. On one side stands ethical principle D: social interest must have priority over partial interest. The implementation of this principle is not the only reason to limit the rights of the enterprise or local institution to decide on investment allocations, and social interest is represented by the extended authority of the central organs. However, the practical implementation of this principle clashes in many cases with the other side, namely, the conditions of efficiency. In addition to this, ethical principle D is not even implemented consistently: partial interest will prevail again and again, even when it is decisively contrary to society's common interest.

A Few Closing Remarks

We have outlined three problem areas that are connected with one another, namely, the questions of interest in profit and the survival and growth of the enterprise. We have seen how different conditions of efficiency and ethical principles can clash with one another. We wanted only to show the dilemmas which the Hungarian economy must face--not the solutions to these dilemmas. We especially did not want to do this so that the Hungarian experience would not be "advertised" as one that found a solution for eliminating all complex contradictions. Perhaps it is one of the most significant achievements of the past years' Hungarian practice that it does not want to create the illusion of completeness and settlement, but rather accepts the tasks of experimenting and pathfinding.

I do not wish to create the illusion either that I know the formulas to solve our problems. The "quack-economist" type is well-known. He is always ready to give advice and recommend a remedy for every economic illness. (Quite possibly, he recommends the same remedy for all illnesses...) Or another picture emerges, that of the "apostolic economist," with the

complete and detailed design of the ideal society, the realization of which he proclaims loudly and with self-confidence. I think I am far from these colleagues of mine. I belong to those who realize the limitedness of their science; we are still raising questions instead of giving answers. One or another comprehensive or more limited reform can only be recommended with caution. And even then, we must point out to those carrying out the reform that the change will entail both advantages and disadvantages, just like a medicine which has a healing power and, at the same time, an unwanted and sometimes extremely dangerous side effect.

There are no "clean" and perfectly "staunch" and "consistent" societies. Every real system is built on the practical compromise of contradictory principles and requirements. This is what characterizes the post-reform Hungarian situation as well. At best--and, fortunately, this is quite frequent in our country--the compromise is a "convex combination" of the benefits of the contradictory principles and requirements. At least in part, the beneficial effect of all principles that play a role in the given process will be apparent. At worst, however--and this is not infrequent either--there is no talk at all of "convexity." Two principles clash with one another where the total implementation of one to the exclusion of the other would entail both disadvantages and evident advantages. Their combination, however, accentuates the disadvantage of both and hides their advantages. Many times a kind of mixture of principles and requirements is created in which efficiency and ethics disappear simultaneously. Sometimes central intervention, as a repository of a decentralized market oriented toward efficiency and of socialist ethics, is a combination in which they mutually undermine each other's beneficial influence.

The reformers and the architects of economic institutions and mechanisms have a penchant for "perfectionism." In seeing the first weaknesses of the reform, they would like to reform the reform right away. For instance, more than 100 orders and statutory provisions have been created in the 11 years since 1968 to regulate enterprise profits and profit sharing. No matter how carefully thought out and smart some of them are, their effect is undermined precisely by their eternal improvement. The participants cannot really master the game if the rules of the game are constantly changed. Thus we reach a new dilemma here: the rigid institutional system, only partly suitable, stands in opposition to indecisiveness and the disadvantages of instability, caused by eternal improvement.

The traditions of economic science made us used to the view that everything can and must be "optimalized." It is thus understandable that the idea was born: an "optimal economic system," a set of the best "rules of the game," or the best regulatory mechanism must be designed. The person who strives to achieve this somehow thinks that he can visit a big supermarket where the various elements of the mechanism and the manifestations of the various beneficial attributes of the systems will be found on the shelves. On one shelf, there will be total employment as it has been realized in East Europe. On another, the high-level plant organization and discipline

as known in West Germany or Switzerland. The third shelf will display economic growth without recession; the fourth, price stability; the fifth, the fast adaptation of domestic production to the demands of the foreign market. The system designer has nothing else to do than to push the shopping cart in front of him, to collect these "optimal elements," then to go home and make an "optimal system" out of them.

This is, however, a naive pipedream. History does not maintain such a supermarket in which we can select what we want. Each real economic system makes up an organic whole. It may contain good and bad simultaneously, and in more or less set proportions. Anyone who wishes to take a stand in whatever system he would prefer can choose only from various prepackaged combination goods. There is no way to select from the various packages the elements we like and to leave there the ones we reject.

For me, it seems that it is impossible to create a closed and consistent socioeconomic normative theory which would implement without any contradiction a political and ethical value system and would, at the same time, guarantee management efficiency. It is impossible if it seeks to be realistic and wants to take into account the real nature of people, communities, organizations and social groups.

It is a more important and timelier task to study the existing societies and to explain the regularities of their operation. Our science must make it clear what compromises between the various normative principles the social forces create in the various social systems. We must strive to contribute to the goal of making the compromises' and contradictions' form of movement as sensible and beneficial as possible. This is a scientific activity which may yield social profits.

FOOTNOTES

This is the Hungarian text of the author's lecture in English, given in the Irish Economic and Social Research Institute of Dublin in honor of R.C. Geary, economist and statistician.

1. There is an extensive literature on the Hungarian reform. The following are of prime interest: Nyers (14), Friss (ed.)(5), Gado (ed.)(6), Gado (7) and Csikos-Nagy (3).

2. Economic science does not have an unequivocal definition of "efficiency." It is unnecessary here to get involved in the debate regarding the exact definition of this concept. It is sufficient if the reader clearly senses the association of ideas connected with the concept: efficient activity is the name of an activity which is done on the basis of useful results and the sacrifices made to achieve these results; an activity which makes a good use of the resources.

3. The classic definition of the principle was given by Marx (13) in his critique of the program of Gotha.

4. Vid. Lange, "On the Economic Theory of Socialism" (12).

5. The problems of harmony and contradictions between economic interests, productivity and the ethical requirements were discussed in numerous studies in the debates on the mechanism's reform, among others, the articles of Andras Hegedus (8), Tibor Huszar (9) and T. Ivan Berend (2).

6. On the softening of the budget limit and its effect on enterprise behavior, vid. the author's "Deficit" (11), to be published in the near future, and his article (10).

7. On the new spheres of authority in making decisions in investment allocations after the Hungarian reform, vid. Deak's study (4).

8. The problem area brought up in my lecture has a certain relationship with the questions of Arrow's famous "thesis of impossibility." Vid. Arrow (1).

   Two of Arrow's postulates define requirements of "rationality," and two other postulates define "political and ethical" requirements. The overlapping between Arrow's four postulates and the 5+4 requirements listed by me is, however, only partial. Arrow proves with perfect logic the impossibility of total reconciliation of his four postulates. I am attempting much less: I only illustrate with vivid examples the unavoidable conflicts between the two groups of values. According to my intuition, we could go further than that. A strict and axiomatic analysis of the contradiction, which I only mentioned, would also be possible.

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ESTABLISHMENT OF NEW FOREIGN TRADE ENTERPRISE DESCRIBED

Budapest MAGYAR HIREK in Hungarian 18 Jul 80 p 7

[Report by Istvan Matko: "The First Swallow: Why the Generalimpex Is Established--the Advantages of Competition"]

[Text] At a recent ministerial conference at the Ministry of Foreign Trade, a resolution was passed on the establishment of Generalimpex, a foreign trade enterprise.

This is actually an everyday news report: one of our big telecommunications factories is being separated from the foreign trade firm with which it worked for 20 years, doing so in order to sell its products with the aid of another concern. The background is full of suspense, however, and what is more, it contains a strange fact: Orion is going to be connected with a new foreign trade enterprise which was created from Universal Ltd--a sales enterprise--which will now function under the name of Generalimpex.

But before describing its establishment or the reasons for its creation, let us dwell on Orion's decision.

Orion's Views

"Why did Orion need to change its partner?" I asked Bela Band, director of trade.

"Earlier, we worked exclusively with Elektroimpex, that is, more precisely, we are still working with it today, because only a decision for the change was made. Our television sets and other appliances have been exported by Electroimpex for the last 20 years in the most traditional way, on a commission basis. This no longer meets present requirements, and we had to look for other ways to meet the demands of the foreign market more flexibly and more efficiently; in other words, to meet the demands created by the competition. We were glad to hear about the change in Universal Ltd. This was an opportunity to establish producer--foreign trade relations most suitable for the demands of the market, that is, to do everything jointly: market research, exploration and marketing, to make joint decisions on products and markets to be considered, and to have the producer and the foreign trade experts take care jointly of the foreign marketing of the Orion brand."

"This sounds very nice in such general terms. But what is the guarantee that all of this will be realized in this way?"

"To begin with, we sign a contract with Generalimpex--a so-called pool contract--in which we agree on our joint activity. It is in the interest of both parties to abide by the contract."

"Why don't you wish to export by yourself? This would seem to be simpler and more practical..."

"Only on the surface. Our enterprise is not ready for the establishment of an independent marketing department. Also, it would do no good to use our internal resources for this, to create a new organization when the conditions for it do not exist. Practicality and sensible business interests dictate cooperation with a foreign trade enterprise that works flexibly. First, we want to use Generalimpex to export our television sets, and we will see what the outcome will be. We have thoroughly examined the possibilities for independent exporting rights and, in considering the pros and cons, we decided to take this step."

Reckoning With Small and Medium-Sized Plants

The expectations of the industrial enterprise, and even more the motives for its decision, suggest many things. It suggests, among other things, what concrete and practical possibilities exist for updating methods of foreign trade which are hotly debated by producers and foreign traders. Let us now take a closer look at the enterprise which is openly viewed by Orion with great expectations.

"What, precisely will be the activity of Generalimpex?"

"Actually, it will include everything," says Laszlo Darvas, director, while he arranges on his desk the pile of orders and letters of interested parties recommending programs. "Look at this one, for example," he points at one, "in which the cooperative of Vecses, well-known for its pickled products, is asking us to export its sauerkraut. The other one wants to export apple sauce and would like us to find possible customers. This one is perhaps the most interesting: the municipal management enterprise of Gyor wants to sell its turf abroad."

"How are Orion's TV sets related to this? What will the profile of the enterprise actually be?"

"Its name also indicates that we trade everything. The objective was to create a lively small enterprise which, primarily through its exceptional flexibility, would help to find a customer for every Hungarian product that is trying to find its way abroad. I have been toying with the idea of establishing such an enterprise for 2 years because there is a great demand for it. The situation is ripe now: the small foreign trade firm, employing less than 100 people, was created from our sales enterprises."

"If I understand it right, Generalimpex will thus compete with several small and large foreign trade enterprises which have been around for a long time. Do you get enough orders?"

"I think so. The preliminary surveys also supported our expectations. We have to take care of many so-called "small deals" in which we are especially efficient. I think, with this we can even fill the gaps... Incidentally, I must note that we are not afraid of competition either. We believe that orders should be given to the foreign trade enterprise which offers the best deals and which can work less expensively and with greater profit."

"This work needs well-trained experts and adequate interest."

"The team is fresh, it was put together recently, and it will obviously expand. For, as it is formulated in our deed of foundation, we want to be the foreign trade enterprise primarily of small and medium-sized enterprises and cooperatives, and thus we must not grow to mammoth size either. As far as the conditions are concerned, the interest of business dealers and experts was determined in a new way, according to the demand of the work, i.e., incomes will depend on the business deals and on efficiency. It is possible to imagine that someone will get, according to his interest in results, 30 percent of his fixed basic wage as a bonus. But it is even more important for our enterprise to emphasize relations with its customers. The enterprise can be efficient only if our customers are integrated into the foreign trade organization; this is the way we mix the expertise of both trade and production. The joint work and this broad definition of cooperation will definitely help us do a little better professionally than would be possible in the traditional way."

On the Road to Revival

As is known, foreign trade has also been affected by the new regulatory system since January 1980, its system of financial conditions having been fundamentally changed. The first experiences are favorable. It is certain that the "tax collector" character of the foreign trade enterprises has been eliminated. However, the new regulations were not responsible alone for the "new winds"; several updating and developmental conceptions will be realized which are supposed to improve foreign trade. The portfolio's agenda includes the study of the enterprise proposals of possible exporting rights as well as updating the foreign trade organization. The new firm to be established is an interesting and new germination among these. It shows that the foreign trade organization is on the path of its own revival--as exemplified, for instance, by the fact that it gives special consideration to small and medium-sized enterprises.

It is also worth mentioning cautiously that, behold, foreign trade can accommodate modest competition--or at least a competitive situation. For this small enterprise sometimes invades the territory of even those enterprises which had a monopoly up to now. Hopefully, the new Generalimpex will not remain the only "first swallow" in the profession.

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ROLE, FUTURE OF AGROINDUSTRIAL ASSOCIATIONS WEIGHED

Budapest PARTELET in Hungarian No 8, 80, pp 30-35

[Article by Dr Gabor Soos, state secretary for Ministry of Agriculture and Food Industry: "The Role of Agroindustrial Associations"]

[Text] Since the development of the socialist large-farm system in agriculture, the producer cooperatives, state farms, food industry enterprises, and more recently forestry farms have been constantly striving to exploit the advantages of cooperation. In the course of this endeavor, the most varied forms developed, from the simple contractual system to economic associations of varying states of development.

In the middle of the 1970's a group of large farms in Hajdu megye initiated the development of an agroindustrial association on the basis of favorable results in domestic economic cooperation and the experiences of the socialist countries. Following a broad-scale analysis, the Political Committee shaped the basic principles for the organization and operation of agroindustrial associations, and then the government regulated in detail the organizational and managing order of operation.

The state decisions conceived as follows the goals of the new economic cooperation forms: "It is the goal of the agroindustrial association to coordinate more closely the economic activities and development plans of the participating state managing organizations and the agricultural producer cooperatives. With this they should contribute, to an extent exceeding the dimensions of their farms, to accelerating the development of production relations and to increasing the efficiency of management through a more comprehensive organization of production, processing and marketing. It is, moreover, the task of the association organization to promote an improvement in the living conditions of the producer cooperative members, employees and enterprise workers, their occupation, political and cultural development."

The agroindustrial associations represented a new form in the system of economic associations. Since we had not had experience with this form, it seemed reasonable to set up only several such associations in order to acquire our experience. Accordingly, the Council of Ministers set up the rules for licensing the development and the procedure of state supervision.

Up to now four agroindustrial associations have been formed. In 1976, the large farms of Hajdu megye which took the initiative were licensed to set up the Hajudusag Agroindustrial Association. Then in 1977, the Szigetkoz, Bekescaba and environs, and the Kalocsa environs agroindustrial associations were established. Forty-five producer cooperatives, 5 state farms, 12 processing or sales enterprises, and 3 associations joined the 4 agroindustrial associations. The area covered 260,000 agricultural hectares, with 46,000 workers.

Development of the Conditions

The operation of the agroindustrial associations extends back only 3 to 4 years. This period is characterized primarily by the search for and development of serviceable methods for organization and management, and thus--despite the results already attained--it is not possible to arrive at final deductions. It can be stated that political positions and state measures on the agroindustrial associations have turned out to be correct, there is no need to make basic changes, but on the basis of practical experience there is justification for further development of the management rules and the strengthening of material incentive.

The agroindustrial association operates as a legal person. Its highest leading organ is the council, whose members are the representatives of the participants. The managing organizations participating in the association keep their enterprise independence, and their legal entity.

The democratism of the leadership is being realized in increasingly broader scale. Association councils have been formed, and in basic questions--property contribution, development plans, the use of material means and funds, the balance, etc.--they are the decisionmakers. The working method of these councils is characterized by broad-scale discussions of the problems, and in making of decisions the realization of a simple majority on the basis of "one member, one vote."

The associations have developed their order of internal control and have set up the control committees. Experience shows that the control activities are well planned and suitable to the goal; their findings and recommendations guard the common property appropriately and help in the development of management.

The system of special committees for helping the work of the associations and giving a professional basis to the decisions has been successful. The members of these committees are the best experts from the member enterprises. They help establish the foundation of development plans with professional opinions and recommendations. They strengthen the common work and promote the development of a unified outlook.

The organization of the independent apparatus of agroindustrial associations, their working method and manpower have developed according to basic principles.

It is the task of the administration and its leader--the director--to prepare decisions, organize their realization, establish the objective conditions, and supervise the execution. The administrative bodies, consist of 9 to 25 persons, the number being appropriate to the task. The members are well trained in theory, and are experts in practical experience.

In the sense of the government's resolution, the agroindustrial association creates common property from the starting property provided by the participating organizations, from the transmitted funds, the amortization of common fixed assets, credits available for common developments, and state support. To pay its debts, it uses first of all its common property. In case of a deficit, the participating managing organizations are guarantors of the association's debts in proportion to their property contribution.

The agroindustrial associations have established their material bases appropriately, At all four associations, the starting property and the paid-in property contributions assured an adequate source to begin managing. The property contribution of the farms consists of their full activity, whereas the food industry and commercial enterprises make their contribution in proportion to the value of the goods they receive from the participating farms. In the past 3 years, the farms of the four associations have given almost 446 million forints as development contributions, almost 10 times as much as their 46 million forints in founding property. The food industry and commercial enterprises contributed 139 million forints in property, about five times their founding property of 29 million forints. On the basis of the experience, the further development of the contributions is justified in such a way that instead of the realtively rigid annual contributions, the development programs of the associations should be better adjusted to the material possibilities of the participating managing organizations.

In the framework of the associations following their formation, a broad-scale economic activity has developed. In comparison with other forms of economic association, their activities are more proliferating and embrace the entire production organization and managing area of the participating managing organs.

For the development of production and more favorable area distribution, they worked out a branch development program based on the use of propagation plants and technology, and worked on their realization in an organized way. The initial results of this process, which will last a number of years, are encouraging. In accordance with area features, at the Bekescsaba association the areas for oleaginous plants and corn were rearranged; in the cattle branch at the Szigetkoz association, dairy and meat production were divided by specialization on four farms each; the Hajdusag association located its sugar beet production immediately in the area of a newly built sugar mill; important specialization work was also carried out in the vegetable production and livestock breeding branches.

Economic Activity

The associations regularly analyze by branches the development of natural indexes and costs of production, the factors influencing these, and the

causes for the differences. They give help to their farms, which have the same resources, but varying results, in developing an efficient operational and leadership organization. They follow with constant attention the financial situation of the farms. the development of the managing conditions, prepare analyses based thereon, and on the basis of the evaluation made at council sessions they accept proposals for the improvement of management.

In recent years the agroindustrial associations have developed manifold, common services. Nine to 15 kinds of services are available, performed by various associations, to assist in the work of the member farms. Accelerated promotion in the preparation of investments is served by the establishment of planning divisions, which meet the planning requirements of the associations and the farms, and on the basis of experience thus far they do so very successfully. To implement investments more rapidly, they have established new construction industry capacities at the Szigetkoz association, and they have regrouped and coordinated the construction industry divisions at the Hajdusag association. Each association is developing a common agrochemical center and working to establish a standardized motor pool and improve it by specialization for combined parts supply. They have worked out common fodder management programs. Despite the results achieved in developing a common service activity, much care must be devoted to this area in the future.

The common planning, production organization and service activities have contributed significantly to an increase in the production of the farms participating in the associations, and to a reduction in existing differences in yields. On the average for the four associations between 1976 and 1979 the production value of total operations--calculated at current prices--increased by 33 percent, which exceeds by 5 percent the average growth rate of state farms for the same period. Average production on large farms in the association in the past year exceeded the national average for wheat by 780 kilograms, corn by 1,550 kilograms, and sugar beet by 5,240 kilograms. Differences among the member farms declined, primarily as a result of more rational fertilizer management, the use of better stocks, and more efficient technology. In poultry breeding, laying hens more than doubled, sheep stocks increased by 110 percent, and milk production per cow grew from 2,458 to 3,839 liters.

The four agroindustrial associations have devoted a great deal of attention to the realization of common investments. Up to now, 21 different kinds of investments have been finished with a total value of 800 million forints. As a result the four poultry breeding sites are producing annually 7,000 tons of broiler chickens, and the three potato storage bins assure storage and handling for 27,000 tons of potatoes. A new poultry incubator is operating as well as a sheep and cattle pen, a vegetable storage facility, a site for drying paprika, a sowing seed dresser, and so forth. Four other important investments are under implementation: livestock breeding and industrial facilities, and agrochemical sites. It has been our favorable experience that all investments are realized more rapidly than average, in an organized way, and with good quality results. The natural production indexes are good,

and cost development is also satisfactory. Processing industries participating in the associations receive from the common production and from their own immediate environment raw materials in large quantity and of uniformly good quality. The significant reduction in transportation costs and the quality improvement extend economic advantages within the association both to agriculture and the processing industry.

As a result of the operation of the associations, the vertical relations of agriculture and the food industry have improved. According to experience, this relation develops most vigorously in those associations or branches where the large farms of the associations supply the food industry plants in greater part or at least to a significant degree with raw materials. From this point of view the relationship may be judged good of the Kalocsa Seasoning Paprika and Canning Industry Enterprise, the Debrecen Poultry Dressing Enterprise, the Hajdusag Sugar Factory, the Bekescsaba Canning Factory and the refrigeration unit, and the Bekescsaba and Gyor Zoldert Enterprise.

In addition to the production relations, the development of personal relations between the agricultural and industrial operations participating in the association is worthy of note. The leaders and specialists of the member units have come to know one another's work and problems even in this short period of time. A higher level of common thinking is in a state of development and growing constantly stronger, something which has a favorable influence everywhere.

Party Guidance and Political Work

The area guidance of agroindustrial associations belongs to the megye party committees. With the organization of the agroindustrial associations, and during their operation, these party committees have given complex assistance to the practical realization of the established guidelines. Their forums have discussed the work experiences of the association belonging to their sphere of authority and have given useful guidance to the solution of further tasks.

Within a short time the megye party committees established a council of party secretaries in all the associations. To unite them, they entrusted one of the working members of the megye party committee. The consultative committee, including all the party secretaries of the member organizations, receives information from time to time on the upcoming association tasks, the situation of the body and the specialized leadership, the more important subjects to be discussed, plan coordination and development ideas, and on their social and political effects.

Experience thus far shows that the council of party secretaries is a body which assists, gives opinions and promotes the realization of resolutions in their economic units and which orients the basic institutions on an up-to-date basis. Thus, it appropriately shapes the views of the party members and

mobilizes them for the tasks. They hold regular meetings, in general every half year. According to practice as it has developed, they put the more important problems on the agenda: The annual and the five-year plans, the common investments, the current production results, the final annual summaries, the effect on the living and working conditions of the members and the employees, and the social influences of the new cooperation form. With their observations and proposals thay are positively helpful in the successful solution of the tasks of the agroindustrial associations.

At the initiative of the council of party secretaries, a Council of KISZ [Hungarian Communist Youth League] Secretaries was established in each of the associations. This significantly helps in forming the view of the young people, and their love for their trade, and it also strengthens the youth movement. At the praiseworthy initiative of the members from the Hajdusag, the HAGE [Agroindustrial Association of the Hajdusag] sport days were arranged in 1978; and at the same place in the summer of 1979, agroindustrial youth days were held at the initiative of the KISZ Central Committee. On this occasion they arranged lectures with discussions, exchanges of experience, and plant visits. This summer they are planning a similar program at Bekescsaba.

Semiannually, the Ministry of Agriculture and Food Industry holds a national conference of leaders of the agroindustrial associations. The megye party leaders and council leaders participate and they give appropriate orientation to the council of party secretaries and to the youth on the situation of the associations, broad-scale information on their common tasks for the formation of a common outlook and action.

Consistent party guidance and manifold political work will be indispensable in the future as well in order for the role of the agroindustrial associations to be realized adequately.

The Future Tasks

Agroindustrial associations--which do not enjoy the benefit of supports different from those in general--changed the production structure in a favorable direction within a relatively short time. Work distribution among the participating operations is developing appropriately, the production level is more even, and they were able to realize common investments well serving management development. All this shows that the basic concept of the agroindustrial association has proved successful, it has worthily helped in given places in concentrating intellectual and material resources, developing production, and making management more efficient. At the same time, it can be stated that the associations still do not adequately exploit their ecological features; they still do not coordinate in a planned way the development programs of the member enterprises with common activities; and there are still tasks regarding the procedure of property contributions, and the organization of vertical relations.

On this basis the Political Committee and the Council of Ministers, in recognition of the results, made the evaluation that the experiences thus far are still insufficient for final judgment of the economic association form, and do not as yet give an adequate basis for the organization of newer associations.

The major tasks in the development of agroindustrial associations may be summarized as follows:

--Even better exploitation of production conditions, natural features and material means;

--a more balanced development of the member farms and enterprises, development of a more efficient management;

--the working out and circulation of new, more economic and less material- and energy-intensive, less expensive technologies;

--rapid conclusion of common investments and putting these into operation;

--strengthening of the vertical relations among the raw-material producing and processing or marketing member enterprises;

--more effective use of intellectual and material resources and their concentration on the most important tasks serving development.

On the basis of experience there is also reason for examining certain provisions of the basic documents. These include membership relations, and resignation and acceptance of new members. There is also reason to analyze whether the area of operation by agroindustrial associations does not require a minor amplification from the viewpoint of strengthening their regional character.

We wish to inform public opinion more factually and broadly than before regarding the goals, results and problems of the associations.

Exploiting Advantages of Economic Associations

In addition to further developing the activities of the agroindustrial associations, it is justified for the agricultural, forestry and food industry operations to exploit more intensively in the future the possibilities latent in the various forms of economic associations. A basis for this is given by the fact that variegated forms of economic cooperation have developed among the operations, and in recent times we have acquired manifold experiences.

The most general of enterprise relations is the contractual system based on equal rights and mutual interest. To develop this further it is most important that contractual discipline be strengthened, as well as partnership relations enjoying mutual advantages, and the sharing of risks.

The system of cooperation between economic associations and the farms has been strengthened by the production systems which have developed on a broad scale over the past 10 years and have become the carriers for organization and circulation of industrial-type production in agriculture. At present, 73 production systems are operating, and about 90 percent of the farms are members of one of these systems. The production systems bring the biological, technological and technical-scientific factors of production into the framework of plant and work organization, and make production more and more economic.

The most differentiated forms of cooperation for production and service have developed among the farms in the framework of associations. Of the 800 associations operating in the whole area of the economy, approximately 700 represent the economic cooperation of agricultural, food industrial and forestry operations. The economic associations concern themselves with highly varied tasks and perform activities which an individual farm would find it difficult to organize by itself. Therefore, in addition to the farm-enterprise magnitudes that have developed, the managing organizations --realizing the principle of voluntarism and mutual interest--have used, in increasingly broader scale, the advantages latent in the various kinds of association. The economic association should not harm the independence of the cooperating enterprises, and democratism should be realized in leaders and in decisions.

All these cooperation forms and associations are important managing forms of our agrarian economy. Their purposeful organization and efficient operation helps, to a great extent, the successful realization of our economic tasks, and the carrying out of the party's agrarian policy.

6691
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PRIVATE PLOTS, FARMS NEED AID DESPITE ADDED BURDEN

Budapest PARTELET in Hungarian No 8, 80, pp 36-40

[Article by Gyula Poden: "Tasks in Development of Private Plots and Auxiliary Farms."]

[Text] A party and government resolution was passed in 1976 providing for the promotion and organization of this work. The Secretariat of the Central Committee recently reviewed the implementation of this resolution. On the basis of overall experiences it could establish that production inclination grew on private plots and auxiliary farms in response to manifold measures, the improving level of material and technical supply, and appropriate economic conditions.

Production on private plots and household farms in recent years has increased in accordance with the goals of the Fifth Five-Year Plan. The gross production value of this sector last year--at unchanged prices--was 61 billion forints, that is, 11 percent over that in 1976. As a consequence, the sector's share in gross agricultural production hardly changed. While the number of producers declined significantly, their production became at the same time more specialized, and particularly the number of those equipped for commodity production increased among the young.

Livestock breeding continues to be of definitive importance in their activity, making up as it does 63 percent of the total production of auxiliary farms. Within this, slaughter pig production is the most important: more than 50 percent of the pig stocks are in this sector, and in addition to self-supply, about one-half of the marketed fattening pigs come from this sector. Small farmers produce one-fifth of the slaughter cattle, one-third of the dressing poultry and rabbit meat, and the entire output of honey. On the capitalist markets these are marketable at good prices. Annually they bring more than $50 million in receipts to Hungary. There are also some problems in addition to the good results. We have not succeeded in permanently reducing the decline in cow stocks, and over a 7-year period about 100,000 small producers gave up cattle breeding. In some cases, fodder supply problems have also played a role.

The role of small producers in arable-land crop production has declined, but in the production of several special crops like poppyseed, dry beans, and potatoes they continue to be important. In response to demands, vegetable production has also developed dynamically. More than 1 million families are engaged in their production. It is particularly noteworthy that these farms have increased foil-covered production from 13 million square meters in 1976 to 40 million square-meters--which is 70 percent of the total foil-covered area.

In grape and fruit production the development has not been even. Grape planting areas declined by 25 percent, whereas garden and fruit areas increased one and one-half times. Unfavorable weather, the difficulties in obtaining propagation plants (sweet and sour cherries, nuts, etc.) are limiting production. Despite this, the role of the small producer continues to be of definitive importance in the production of plum, raspberry, strawberry, and peach.

The Condition System of Production

Small-farm production is based on family labor, and outside manpower is used only to a negligible extent. Its production continues to be characterized by fragmentary manpower which does not hinder the work of large farms, and does not develop at their cost. The number of active agricultural earners among small producers is declining, while at the same time the ratio of non-agricultural earners and pensioners is increasing. The judgment of this activity is very important both from the viewpoint of their further development and assistance.

From year to year, the biological base of private plots and auxiliary farms--sowing seeds, propagation materials, breeding animals and fattening primary materials--is available at a rising level. Sowing seed supplies for vegetable production are constantly improving. The feed-grain fodder supply is also constantly expanding. Fodder stores are operating at all settlements in the country. Fertilizer and herbicide consumption has increased. In the past year, there were 130,000 tons of fertilizer to meet demand. Herbicide purchases increased by 30 percent within 4 years. However, we were unable to meet demand for several fungus and insecticidal agents of capitalist origin. By far the greatest share of the chemicals in shortage can be replaced by domestically manufactured products or by imports from socialist countries.

Small machinery, as compared with the goods base in 1976, doubled, and the value exceeded 1 billion forints. The shortage in the quantity of agricultural implements has been ended, but the purchase of special or less expansive domestic tools is still difficult. The import products, on the other hand, are more expensive than the comparable domestic goods. In most of the traditional hand-driven small machinery and in livestock breeding equipment, the supply is adjusting to demand. An adequate supply of milking machines for small household farms became available only at the end of last year.

The increasing demand for small, internal combustion garden machinery has been met only partly because of the slow development of domestic manufacture and despite considerable capitalist imports--$4.6 million in 1979. The start of broader scale production of small tractors in domestic cooperation may bring a substantial improvement in the situation. There is a great need for this because, with the younger people who have joined in production and the urban population there is a strong effort at easing labor and modernizing agricultural small farming. It is only with such satisfaction of their demands that we can assure they will be permanently engaged in private-plot activity.

A continuing problem is the satisfaction of delivery demands, although the value of such services on the large farms and the afeszes [general consumer and marketing cooperatives] increased by 30 percent as compared with 1976. A general problem is that we have too few small-capacity delivery vehicles. The solution is primarily the task of the large farms that organize small production, but the situation could also be eased by privately licensed acquisitions of tractors, trailers and small trucks.

The development achieved in the past 4 years has been contributed to by the incentive effect of the economic regulatory system, as well as by the many-sided economic-political and production organizational measures. Owners of private plots and auxiliary farms may buy fertilizers and herbicides at the same--state subsidized--price that the large farms pay. For certain materials they receive preferential support: foil and foil frames, and for certain activities which are particularly important from the economic point of view, like cattle breeding and grape and other fruit production.

The tax system has become unified and easily reviewable, and this has been favorably received by the small producers. The number who pay taxes on receipts over 150,000 forints has increased fourfold within 3 years, but even so last year this meant only 1,638 persons, or 0.1 percent of the taxpayers.

In the development of production, loans play an important role. In the past 4 years a total of 526,000 small producers have taken out production loans of 4.8 billion forints from the National Savings Bank, or from the savings cooperatives. The extent of the average loan rose from 8,000 forints in 1976 to over 10,000 forints in the past year.

It is necessary for the small producers also to be aware of the economy's situation and of the change in energy prices. In response to the economic regulators in effect since 1 January 1980, certain cost elements will increase, and it is expected that these will stimulate the producers to economy. It serves the maintenance of material incentive and the inclination to produce that the rise in buying prices, all in all, counter the increase in costs. It is true that this does not mean an automatic counterbalancing in every area: where the cost increase is greater than average because of the character of the production--heated production under foil--or the

specific results are less, a transformation is necessary in such a case of the "product structure" to a more economic management. This must be promoted with circulation of information and expert advice for if the small producers do not adjust flexibly to the altered circumstances the profitability of their work will decline and it may happen that many will abandon production. In this area we must observe with particular attention, pig and poultry breeding and vegetable production under the cover of foil, which is high in energy demand.

It is a nationwide problem that frequently the large farms do not recover their costs relating to private-plot production. They generally reckon the materials and services as overhead. In addition, their preoccupation with the private-plot operation branches requires a great deal of time and energy, which is also a burden on the managers. This problem cannot be neglected because in 1978 the value of produce and animals marketed through common farms exceeded 15 billion forints. Now, because of their more difficult material situation, the large farms are trying to reduce their costs and increase their receipts. For this reason profitability may decrease for the small producers, which may cause stresses in production.

In recent years supplementary income has operated as an important incentive and driving force, and there were many who wanted to compensate in this area for the effect of the 1979-1980 consumer price change. Since the owners of private plots and auxiliary farms are doing this increasingly difficult and specialized production work in order to increase their income, their market or income sensitivity has grown. In this situation the strengthening of the organizational level based on mutual interests is of great importance.

With Greater Organization

The organization of production has constantly improved in recent years, and small producers find their security in relation with the large state farms and the afeszes. Nowadays the number of private plots and auxiliary farms organized by large farms is near a half million. For the independent organization of small production, the tsz's [agricultural producer cooperatives] established independent private-plot branches in which 2,900 specialists are working, including 1,560 who were released to help in this activity. The private-plot branch works on the basis of a separate accounting, organizes the activities of the small producers, gives advice, and cooperates in assuring the conditions of production, in marketing, etc.

In the past 4 years the afeszes increased the number of specialized groups to nearly 2,600, the manpower in which exceeds 200,000. Aside from a few exceptions, the specialized groups operate in the framework of the afeszes. The great majority of them are occupied with rabbit, pigeon, and pig breeding, with vegetable production and bee-keeping. Parallel with the rise in production, the afeszes strengthened their guiding and buying apparatuses

and increased the number of engineers and technicians. They have advanced a great deal in the material-technical supply of production, in broadening the specialized store network and in expanding the giving of expert advice.

The forms of relationship are wide in scope; from multiyear contracts through fattening of pigs on a contract basis and the joint buying of basic materials to the operation of specialized groups, every different kind of version can be found. But despite the development, producer confidence and security is not complete. The reason is, on one hand, that the buying enterprises have not as yet joined adequately in this integration and, on the other hand, that there are disputes and tensions because of the marketing cost distribution and bureaucratic organization. The state of organization is the highest in pork production and buying. Ninety-eight percent of the fattened pigs are bought by designated organizations. The remaining buying and food industry enterprises are still only at the initial step.

For the improvement of technical supplies, the setting up of about 70 machinery loan establishments proved to be a correct initiative. Also favorable is the fact that 380 large farms, as well as a number of afeszes, have begun the repair of small machinery and equipment.

The coordinated activity of the councils--to create harmony among the farms, afeszes and buying enterprises--was more lively at the beginning phase, and the effects of their measures were better felt in the broadening of production, establishing conditions, and handling nonproducer cooperative members with equal judgment. Their attention has dropped in recent times, they do not follow now with such critical eyes the whole process of production, and thus they do not notice the lesser or greater deficiencies and distortions that may appear from time to time.

The social organs--the Patriotic People's Front and the interest representational organs--also help in the development of a correct outlook. They cooperate in the organization of the work and in recognizing good results: every year they decorate about 1,000 persons, or award them plaques in recognition of their outstanding achievements.

Better Exploitation of Resources

In this year when the Fifth Five-Year Plan is being concluded and the Sixth Five-Year Plan is being prepared, a realistic accounting is taking place in every area to enable the targets for the future to be exactly defined. In designating agricultural tasks, a great deal of attention must also be devoted to the development of private-plot and auxiliary farm production development. The goal in this sector, too, is the increasing of production at a higher level. To this end, it is necessary to improve the guiding and organizing work, and assure the condition system for this purpose. This is no small task and requires the more consistent realization of the 1976 party and government resolution. For this reason, the party organs should continue to pay attention to see that the work starts or continues with an upswing

at every level and in every area. Existing errors should be corrected, and distortions eliminated. They should press forward with development production by taking into account the new requirements.

The work is made more difficult by the fact that modifications from time to time in the regulator system affect the activities of this sector as well. Here too we must press forward with more economic, efficient management. On small farms also the reserves of profitable management are to be found in the better use of local resources and possibilities.

While the party organizations are working on discovering the reserves, they must not forget to see to it that the producer meets his calculation, but not at the cost of the integrating operation. Everyone should realize a fair income because otherwise there will be damage to the individual, the large operation, and the national economy. Therefore, they should observe with care the entire process of production and buying so that they will be able to eliminate the tensions with speed and timeliness.

We need an economic regulator system which will stimulate private-plot production and establish incentive for the organizers as well. It is no less important that the material-technical conditions of production should continue to improve. In addition to the latter, it is necessary to devote care to intensifying the certainty of buying, particularly marketing. In the recent period there have been many weaknesses in this field in addition to the fine results. The work of flexible, well-functioning organizations helps small production, while disorganization sets it back.

It is necessary to develop an organization form which will assure a better state of organization. This means the small producers should receive timely information on the goals and production demands of the economy, and the organizers of production should be informed of the intentions of the small producers. We must take this into account also in preparing for the Sixth Five-Year Plan, but we cannot neglect it either in preparing the annual plans. We must not ruin respect for stable, multiyear contracts. In annual contracts, however, it is advisable to organize the producers flexibly and in accordance with demands, for example, in vegetable production in making contracts for vegetables that can be substituted for one another.

It is an indispensable condition that appropriate harmony should exist also among the integrators of production. In this the councils also have a role in addition to the large farms, and the buying and marketing organizations. As their part in guiding agriculture it is the task of the community councils to observe small production carefully, prorote it, and supervise the observance of orders.

The results achieved in private-plot and auxiliary farm production are important, but it must be developed further in the effort for the development of fully organized small production. It is also necessary that more and more people understand this, that they interpret the tasks uniformly, and that they help in private-plot production.

In agitation and propaganda work, the party organizations approach these problems from the aspect of helping and developing production. They should call attention to the fact that in addition to modern procedures, means and varieties, the traditional and inexpensive solutions should not be forgotten because in many instances their profitability is greater. This is in the collective interest of not only the small producers, but also the economy, because nowadays the utilization of byproducts and increased economy is a primary economic political task.

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WHEAT GRADING SYSTEM, QUALITY OF HIGH-YIELD FOREIGN WHEAT EXPLAINED

Budapest MAGYAR NEMZET in Hungarian 10 Aug 80 p 7

[Report by Sandor Illes: "What Kind of Flour Is Used for This Year's Bread"]

[Text] The harvest is coming to an end; there is hardly any cereal still standing in Baranya, Csongrad and Bacs-Kiskun megyes, and work is progressing well in Pest, Bekes and Szolnok megyes; Tolna Megye reported that 80 percent of the crop had been harvested by the end of the week; Zala Megye also made up the arrears and harvesting is being done at full capacity in the other megyes as well. Harvesting in Nograd Megye is being made easier by the fact that the crop was not lodged.

The size of the crop cannot yet be estimated but experience shows that this was a good year as far as quantity is concerned. The ears are full, there are many grains. But what kind are these grains?

It is well-known that even wheat is being purchased this year according to quality. More is paid for better-quality wheat which has a higher gluten content. The better wheat will go to the mills and that is what the bread will be made from. Thus the bread will also be better.

Three Categories

In the old times, Hungarian wheat was famous for its quality, especially that which was grown alongside the Risza and at Bankut, the type improved by Rudolf Fleischmann, but even the later species. Older people still remember the articles in the papers which reported that the bakers of London put a sign in their windows that their pastry was made from Hungarian flour.

Today, however--let us face it--we often complain about the bad-quality, gluey bread. Did the bakers forget how to bake bread? It is not always they who are at fault. Often the quality of the flour is bad. Where is the legendary hard wheat of Bankut now?

Quality is worse, quantity is larger--this is how the present situation can be described. New species of wheat were domesticated in recent years. These species yield large crops and are suitable for combine harvesting. Only

they are not as suitable for bread. This is why it was necessary to take delivery of the crops according to quality in order to give better wheat to the mills.

We talked about this with Dr Jozsef Bagi, vice director general of the Grain Trust and nationally renowned expert in this area. He informs us that good-quality species of wheat were still being grown in Hungary in the 1950's. Essentially only two species were grown in those years.

"Undoubtedly, the inner quality of the wheats grown then was better than that of the present species," he says. "Generally, it met the quality requirements. For this reason, we usually examined the storage and milling characteristics of the wheat instead. Less attention was paid to the inner quality. At present we have larger crops and the quality of wheat has deteriorated accordingly."

About 20 species of wheat are grown on the farms in Hungary today. There are three categories of quality: Improving wheat, miller's wheat and fodder wheat. The improving wheat is eating wheat, having the highest gluten content; the second category is standard wheat and the third is the poorest, used only for animal feed.

Gluten That Is Good

"The new standard differentiates between these three kinds of wheat," continues the vice director general. "The improving wheat's raw gluten content is 35 percent. These wheats yield smaller crops. This category includes five species of wheat, some of which are new Hungarian species such as the MV-4 and MV-5, both from Martonvasar.

"The mass wheats yield 50-60 quintals but their gluten content is lower. Wheat with an ideal gluten content, such as the GK Tiszataj, does not yield more than 45-46 quintals. We have also domesticated some Yugoslav wheat, such as the Pertizanka or the Rana. But several areas have problems in growing these.

"Categories AI and AII are the most suitable for the baking industry, having the highest gluten content. Miller's wheat does not have as much gluten, it belongs to categories BI and BII. Quality wheat is used to improve these. That is what improving wheat is. With regard to the third category, the mass crop, it would be suitable only for baking flat cakes. Such is the Libelulla and many other Italian species. They yield a large crop but their quality is low."

The preparation of the new delivery system was preceded by a 2 year series of experiments: In 1978 and 1979 a thorough comparative examination was conducted at numerous delivery stations, and the best-quality species were determined on the basis of the experiments.

There are, of course, local characteristics as well which must be considered in the future. It happened that the gluten content of the high-quality GK Tiszataj was over 35 percent in the country's good wheat-growing regions but reached only 32 percent in Zalaegerszeg and the surrounding area. The gluten content of this specie varied between 21 and 43 percent. Of course, this percentage is affected by the weather, the time of harvesting and many other external factors.

One Hundred-Two Laboratories

"We are purchasing wheat this year at 2,000 delivery stations," continues Dr Bagi, vice director general. "Wheat quality control is done in 102 laboratories."

"What method do they use?"

"At delivery, the basis is generally the weight per hektoliter, this is the old measure. We also use an instrument called the Valoriograph. The 102 laboratories mentioned above use a mill and a bakery jointly. The wheat is milled with small stones, the flour is then kneaded, with salt, yeast and all other materials, and then leavened. The small baking oven then bakes the dough. This way we can also taste the quality of the bread. Is the flour good or unsuitable for baking bread?"

"What is the difference in the delivery price?"

"This year's official delivery price is 280 forints for each quintal of fodder wheat, 310 forints for miller's wheat and 325 forints for eating and improving wheat."

"And what will be the quality of this year's wheat? Can the bakeries make good bread from it?"

"The quality of this year's wheat varies. For the time being, the overall quality cannot yet be determined; this can be done only when all crops will be delivered. However, harvesting will last another 2 weeks or so. The experts say that the quality of this year's crop, because of the bad weather, is expected to be lower than required. On the other hand, there will be a larger crop of high-quality improving wheat. By mixing this with miller's wheat, it will become possible to make the flour used for baking bread more stable."

"Which means that the quality of the bread will improve?"

"Yes, it will, but to achieve this it is necessary to mix the flour and to introduce and employ processes that improve its quality. The conditions for this do exist and thus we can hope that the bakeries will be able to make better-tasting bread from this year's crop..."

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DEPUTY MINISTER INTERVIEWED ON CLOTHING INDUSTRY PLANS

Budapest MAGYAR HIRLAP in Hungarian 17 Aug 80 p 5

[Interview with Imre Szabo, deputy minister of light industry, by Gyongyi Cseszak]

[Text] Light industry, including the textile clothing industry, has had many problems in recent years. The world market changes, the effects of the price explosion, over a broad area, have influenced profits and sales possibilities unfavorably. Primarily, structural change and modernization may help in these problems--and quite a number of programs have been prepared to this end.

Gyongyi Cseszak discussed with Imre Szabo, the deputy minister of light industry, how the textile clothing industry is preparing for the Sixth Five-Year Plan.

Imre Szabo was born in 1930 in Vasvar. He completed a technical university education. He has had various positions in the textile industry: in 1963 he became deputy department chief in the Ministry of Light Industry and subsequently department chief; in 1977 he was appointed deputy minister. His area of work is the textile clothing industry, as well as technical development and industrial policy.

[Question] It is our impression that within light industry it was the textile industry that made the best recovery from the shock caused by the slump. Despite this, many open problems are still waiting for solutions. What are those areas and enterprises where the Sixth Five-Year Plan must be started with inevitable changes?

[Answer] There is not a single clothing enterprise manager who is not bothered by the eternal question: am I manufacturing a good product at a good price and selling it in a good market. The government and party resolutions on the modernization of the product structure, as well as the stricter norms, require us to give equal importance to all three of these questions. But in medium-term planning it is still the development of the product structure that is the most important. And since all planning work

is built on the basis of the preceding period, I would like to say a word or two first about the Fifth Five-Year Plan.

The development of the clothing industry in the Fifth Five-Year Plan period can be divided into two phases. In the first 3 years we were still increasing quantity of production. In the past 2 years, we have restrained this process, and selection has been emphasized in order that we might prevent a greater worsening in the terms of trade and improve profitability. We sell domestically one-half of the products of the clothing industry, and one-half we export. Our products are bought by 80 different countries, and the world market influence can be sensed in both enterprise and industry management. In the first half of this year we overfulfilled our plans for exports to nonsocialist countries; and our domestic sales were also greater than planned. In this year--the base year of the Sixth Five-Year Plan--we have strengthened our market situation and the position of our enterprises, but we know that we can maintain this only with further efforts.

It is a fact that in the Fifth Five-Year Plan we wanted significantly to increase the production of wool and silk fabrics, and shoes. We kept modifying our ideas for 2 years, because in this field the commodity relations with regard to materials and finished products are not favorable. We will not be able to change this in the Sixth Five-Year Plan either. And let me draw attention to the fact that in the Sixth Five-Year Plan we will not limit the branch, but only the production of inefficiently made goods. It is a basic change: that in order to meet the plan goals we will not make use of investments but of cost-saving development methods (for example, organization and cooperation). We estimate that for the production of the same quantity of goods we will have less manpower available, but because of the efficiency requirements themselves we will be hiring fewer workers, and we will also be reducing the number of nonworker positions.

[Question] How will the sub-branch manage with the product change? How will the earlier programs be graded, that is, what ideas will have to be changed, and what areas will these affect?

[Answer] The work of the clothing industry is dictated by style; in adjusting to the seasons, it alters the product structure twice, and every 3 or 4 years it changes it completely. It is an economic disadvantage that we must import 80 percent of our materials, but in the rapid change of products this is an advantage. We can more freely and readily select raw materials for a given altered product structure than countries that are self-sufficient. Of course, this does not mean that all old products are unmodern or all new products are modern. There is still much to do in this area. In the Sixth Five-Year Plan it will remain a central task to speed up the modernization of products.

In 1979 our enterprises prepared strategic plans for the modernization of the product structure. In accordance with the new prices, the new price mechanism, the market situation, and our efficiency, we have developed new

priorities. We shall examine in turn also the concepts of our more important industrial branches. That is, the enterprises and ministries will primarily correct the market, production and production development goals from the viewpoint of economy. For example, in previous years the Hungarian silk industry was not export-oriented. This situation has changed. Since the reconstruction, 63 percent of our fabrics are made on modern machinery. In 1979 it developed only half as many new products as in 1977, but much more successful ones. With a Swiss license we introduced five new goods in 40 new patterns and solved the problem of finishing nonshrinkable lining. We have begun making moisture-absorbent blouse material from synthetic materials, and light weight curtain and drapery materials, which for a long time were in short supply, are now available in stores. On the other hand, we looked in vain for stylish corduroy and velvet. Imports have declined and the customers are complaining. To meet the demand, the manufacturing firm, the Cotton Textile Works, has modernized, and the corduroy supply has improved. But demand has grown faster than our development possibilities--this year, for example, the furniture industry alone uses as much corduroy as the domestic trade puts on sale--and therefore the supply is still not free of disruption. We ease the shortage to an extent with less expensive, stitched corduroy.

In the Sixth Five-Year Plan we can and we must overtake the modern manufacturers. To do this, we have asked the enterprises to broaden their selection, pay closer attention to the demands of the buyers, and carry out product developments more rapidly. It is not necessary for us to act in isolation, for we are stimulating the production development of the fabric-producing enterprises, the ready-to-wear, the knitwear, and the thread manufacturing, shoe manufacturing and leather industrial enterprises. In this collaboration there are many possibilities and important potential reserves.

[Question] How do the profits of the sub-branch stand as we approach the threshold of the Sixth Five-Year Plan? Will there be elimination procedures, and in which enterprises, despite all intervention attempts, has it not been possible to put management in order from the financial point of view?

[Answer] The five-year plans have always been accompanied by changes in the economic regulators. This is how it stands now too. It is an advantage that we have already introduced in 1980 the regulators for the Sixth Five-Year Plan. After the trial year, we shall see where it needs correction and in what respect when the medium-term plan is started. It is well known that the regulation introduced in 1980 substantially altered the profit situation of the individual industrial branches and enterprises. For example, the profits of the home textile enterprises declined by about one-tenth, while those of the leather factories increased several fold.

But lower profits as a whole have put into a difficult situation a number of enterprises and industrial groups (for example, the wool industry enterprises) the exports of which were not efficient enough, and which must now also balance their large-scale development debts incurred in the past years.

On the basis of 1979 results, we have found, together with the Ministry of Finance, 12 low-efficiency enterprises, and recent investigations show that six of these have successfully carried out the plan measures; they have assured management conditions for 1980, and there is no need for central measures. We are continuing to examine the management of the six remaining enterprises, because it is expected that in 1980 they will have fund-shortages or deficits. We will not permit the consequences of weak management to be prolonged for years and deficits to be repeated--for this reason it may be expected that the affected enterprises will be eliminated.

And still we may say that the vast majority of the enterprises not only understand the requirements of the new regulators very well, but adjust to them better all the time. This is shown by the fact that the results of the first half year are better than we estimated on the basis of the first quarter.

[Question] Finally, outline for us the perspectives of the sub-branch, with particular regard to the changing world market conditions system which is sometimes favorable. Is the plan for the branch's Sixth Five-Year Plan period ready? And in its main outlines, what does it include?

[Answer] The most important fact is that in the next decade the population will expect at least as many goods as nowadays. But they will ask for better quality and more style. Basically, this defines the future of the clothing industry. We can rest assured about the contracts as well: the international agreements for the Sixth Five-Year Plan period have already been signed with the socialist countries, and according to these our shipments will not be decreased. We are planning an increase in our nonsocialist exports, counting on a world market situation that will make this possible.

The development of the knitwear, ready-to-wear, dry goods and leather goods industry will be faster than average, although we will decrease somewhat our cotton thread production. We shall try to produce a better, finer thread than now. Meanwhile, the knitting and weaving industry that uses 25 to 30 percent of the wool fibers. In the wool fiber industry we are creating the conditions for the spinning of special pattern fibers and the full processing of Hungarian wool; we are producing more and better carded fabrics; and we are seeking to bring about--on the basis of the resolution by the Council of Ministers--a significant improvement of quality in the shoe industry.

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CSO: 2500

BRIEFS

NATURAL GAS IMPORTS--Though Poland, with a production of 18.5 billion cubic meters of gas, occupies 15th place on the list of the world's largest producers, the foreign deliveries of that raw material grow from year to year. At present, we import nearly 4 billion cubic meters of natural gas, which consumes 860 million foreign exchange zlotys, and this is the seventh item, from the standpoint of expenditures, in our imports. Whether or not the economy will feel the marked progression of expenditures for this purpose depends on the development of our own production of the native gas deposits exploration, and also on the further cooperation in the development of the extraction support base of the chief supplier of gas in our country. [Excerpt] [Warsaw SLOWO POWSZECHNE in Polish 22-23-24 Aug 80 p 9]

CSO: 2600

LOW PRICE REDUCES SUGAR BEET ACREAGE, PRODUCTION

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 30 Aug-1 Sep 80 p]

[Excerpt] This year the sugar beet harvest will soon begin under slightly unusual circumstances. There are no longer the problems that existed for several years of large reserves of sugar and inadequate storage space. Now it is a question of insufficient acreage having been planted in sugar beets at a time when the Yugoslav sugar industry has increased its production capacity.

This year, in addition to the 18 existing sugar mills, new sugar mills in Ormoz and Bijeljina will begin operating, and test production will begin at the sugar mill in Virovitica. Repairs in sugar mills have been completed, so that all 20 are fully ready for the coming campaign. At present the market situation at home and abroad is also very good.

But sugar beet production is stagnating. According to the "Jugosecer" business association, only 128,000 hectares were planted in sugar beets this year but some of this was destroyed by bad weather, so 126,495 hectares remained.

The situation is especially bad in Macedonia and Kosovo and this has been the case for several years. As a result, the mills in Bitolja and Pec will not be able to meet even one-half of the need.

At the moment the status of the sugar beet crop is satisfactory. Thanks to favorable weather conditions, a good sugar content is expected. If the weather continues to be favorable and a sugar content of 13.2 percent is attained (as last year), 5.6 million tons of sugar beets could be produced (compared to 5.8 million tons last year), which would yield about 740,000 tons of sugar, or the amount needed to meet domestic market demand. (In addition to the lack of sugar beets, sugar mills still are in need of sugar bags for packing.)

The cause of all this misfortune is the price disparity between sugar beets and grain, primarily wheat. This year's price of 0.70 dinars per kilogram

has obviously not been an incentive for increasing production. During the planting period itself, the price was seen to be so low that sugar factories were forced to raise it to 0.90 dinars per kilogram. Even so, 1,300 hectares less were planted than last year.

In 1976 the price ratio of wheat compared to sugar beets was 1:3.8, while this year 4.60 dinars were paid for a kilogram of wheat and 0.70 dinars for a kilogram of sugar beets, bringing the ratio to 1:6.6. "Jugosecer" considers it necessary to return to the ratio of 1976 in order for installed capacities to be utilized.

CSO: 2800

CROP CHANGES PLANNED IN MACEDONIA UP TO 1985

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 23-25 Aug 80 p 6

[Article by G. Dimovska: "Optimum Guidance"]

[Text] In every development program to date of the Socialist Republic of Macedonia considerable attention has been devoted to agriculture, which is no accident, since more than a third of the total population derives its living from farming. Moreover, the climatic conditions for a particular product signify an advantage over other parts of the country, and the time has passed when Macedonian farmers were by and large producing in an unorganized way to meet their own needs. Today their basic production orientation is to produce for the market, taking advantage thereby of comparative advantages and giving preference to products on the basis of the income they bring. That is why there is the steady switchover from grain to vegetable and industrial crops in terms of area planted.

Industrial crops offer Macedonian agriculture a good future, especially because over the last several years so to speak all the necessary prerequisites have been provided for their intensive development. Irrigation systems cover 130,000 hectares of arable land. The private and socialized sectors of agriculture already possess about 15,000 tractors, and the climatic conditions, assuming intensive irrigation, are better than favorable to these crops.

Over the last 5 years agricultural combines and private farmers have been paying the greatest attention in their development plans to industrial crops. According to their estimates, procentual increases in output between 1979 and 1985 would be about 140 percent for sugar beets, 91.3 percent for sunflowers, 259 percent for poppy seed, and 110 percent for cotton.

We should emphasize that results of this kind would be achieved by increasing the area planted to these crops, but also by raising yields, assuming better collection of seed material, more intensive application of scientific soil and crop practices, mechanization, etc. It is also very important that the food processing industry expects a great deal from the development

of industrial crops; at present, because of the lack of sugar beets and sunflowers, it is compelled either to use only half of the existing production capacities or to make up the shortages to some extent by importing related crops. Soybeans are an example of this.

The Promise of Cotton

As for cotton, the situation is specific. In spite of the expected and obvious increase in its production over coming years, the textile industry in the country cannot count on any sizable substitution of imported cotton by domestic cotton, since the analyses made to date have established that we cannot expect any major increase in cotton production, and the reasons are objective.

The region of Macedonia has a geographic position which allows for this crop to be raised successfully. In the well-known regions where cotton is raised, such as Pakistan, India, Egypt, Sudan, the southern portion of the USSR and certain other countries, as many as three harvests are taken annually. There the average annual yields are between 2,800 and 3,000 kg per hectare, while in the socialized sector in Macedonia they rarely exceed from 1,200 to 1,500 kg. In the private sector the average yields range about 800 kg.

Given this situation, the producers have calculated that their cost price is about 21 dinars per kilogram, and everything below that would in practical terms signify a loss. Today the support price per kilogram of first-class cotton is 13 dinars, and 14.30 dinars is paid on the market. In practice, however, second-grade cotton is the most common, and its price is 2 dinars less per kilogram than the first grade, so that the question is how to increase production over the next 5 years.

The producers are counting on higher yields and also rises in both world and domestic cotton prices. That is why they plan an increase from the present 1,579 hectares, producing 1,420 tons of cotton annually, to 3,000 hectares planted to this crop in 1985, and an annual output of 3,000 tons. Yet this amount is enough to meet the needs of one medium-sized spinning mill.

A More Favorable Situation for Sunflowers and Sugar Beets

The prospects for sunflowers are considerably better. Today they are being raised on 20,942 hectares, and another 11,000 hectares will be added over the next 5 years. If we take into account the planned rise of the yield per hectare from the present 12 quintals to 15.6 quintals per hectare, then we see why a total annual sunflower output of about 50,000 tons is expected in 1985. This is actually the amount needed by the Blagoj Djorev Mill in Titov Veles if it is to produce vegetable oil and margarine at full capacity.

A definite guarantee to fulfillment of the plan is that firmer cooperation has recently been established between this mill and sunflower producers. They are undertaking relations based on shared income and sufficient incentives for the production of this crop. Macedonian sunflower producers judge that production could increase still more dynamically than called for in the development plan, since the potential in terms of yields is very great, especially since the region with the greatest capability for sunflower production, the Pelagonian Basin, will in a few years have the Strezevo, the largest irrigation and drainage system in the republic.

The situation is similar with sugar beets. In 1979 it was planted on 3,454 hectares with average yields of 354.4 quintals per hectare, and the harvest was 115,575 tons. Five years later the area planted to this crop should be 6,500 hectares, the yield should rise to about 420 quintals per hectare, and the annual harvest should be more than 250,000 tons of sugar beets. This production would give the 4 November Sugar Mill in Bitol a full guarantee to operate at full capacity. Which accounts for its all-out effort to encourage the farmers to produce more through additional incentives in the purchasing of beets, favorable credit terms, free seed, technical assistance, machinery and so on.

The development plan for the republic's agroindustrial complex also shows that private farmers will be devoting more attention to the production of poppy seed. In 1985 poppies are to be raised on 6,500 hectares, which is 3.5-fold more than in 1979. Of the total area planned together with the socialized sector, which is 8,000 hectares, the annual harvest should be about 5,600 tons of poppy seed. This will be a sizable base for the food processing and pharmaceutical industries.

7045
CSO: 2800

BRIEFS

HARD CURRENCY TO RAILROADS--All organizations of associated work which use the services of foreign railroads to export or import goods will have to pay for these services in foreign exchange beginning on 1 September. This is as stated at a 25 August press conference held at the Yugoslav Railroads, in accord with a FEC (Federal Executive Council) decision issued in July. Danilo Fogel, member of the business council of the Yugoslav Railroad Association, said that this decision means that he who creates foreign exchange obligations must also pay for them. It has been different up to now. The Yugoslav Railroads have paid for the obligations of others. Up to 1979 the railroads earned more foreign exchange than it spent, but last year because of the sudden increase in the number of users of these services it got into a difficult situation. Now when we are starting to apply the FEC decisions, users themselves will directly pay their foreign exchange obligations; this will contribute toward reducing imports, since up to now importers could import more goods because the transport costs were paid by others. Last year importers could import about $100 million more in this way. This [new ruling] will have little effect on [train] passengers who will continue to pay for their tickets out of the country in dinars, while the republic and provincial self-management interest communities for economic relations with foreign countries will provide the foreign exchange funds. Although the new system of settling foreign exchange obligations began to be applied on 1 July, only a few began to transfer foreign exchange to the railroad transportation organizations. Now everyone will have to do this, and sanctions are planned for those who fail to comply. [Excerpt] [Belgrade BORBA in Serbo-Croatian 26 Aug 80 p 14]

EXCESSIVE BUREAUCRACY--Where and how can one economize? In seeking the answer to this question one most often arrives at the problem of administration. In the estimate of many, administration has multiplied to such a degree that it goes beyond the possibilities of associated work and has become one of the limiting factors to further development of labor productivity, efficiency, and rational economic operation. Let us mention only the self-management interest communities where more than 41,000 are employed. No one complained that the number of persons employed in secretariats and professional services in sociopolitical communities [Federation, republics, provinces, opstinas] be reduced by this number as was proposed when the self-management interest communities were formed. Of course this is not the only

place where there is an overpopulation of administrators. At present 5,082 functionaries and other professionals are employed in the LCY, i.e. for every 300 members approximately, there is one "administrator." This number is growing from year to year; last year the number increased 5.4 percent over 1978 when there were 5,389 people employed in the professional apparat of the LCY. [Excerpt] [Pristina JEDINSTVO in Serbo-Croatian 19 Aug 80 p 4]

U.S. BANK CREDIT TO SPLIT--An agreement was signed in Split with one of the ten largest American banks, the Marine Midland Bank of New York, granting a $10 million credit to the Bank of Split for a period of 7 years (plus a 30 month moratorium). The credit will be used to finance investments already underway of account-holders at the Bank of Split. In the last 2 years this U.S. bank has granted over $25 million in long-term credits to pay for imported equipment. The bank in Split is also using $12.5 million in short-term credits which the New York bank granted to import producer goods and various consumer goods. The agreement was signed by C. Norman Hansen, vice president of the New York bank, and Jovica Kunac, director of the Bank of Split. [Text] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 27 Aug 80 p 12]

CSO: 2800 END

JPRS 76500

25 September 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2045

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EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2045

CONTENTS

POLAND

National Energy Situation, Development Described
(Lechoslaw Gruszczynski; PRZEGLAD BUDOWLANY, Jun 80) 1

YUGOSLAVIA

Final Account of 1979 Federal Budget
(SLUZBENI LIST SFRJ, 25 Jul 80) 6

Political Science Professor Discusses Economic System
(Zivojin Rakocevic Interview; RAD, 22 Aug 80) 108

Role, Growth of Pension System Survived
(EKONOMSKA POLITIKA, 4 Aug 80) 115

Disadvantages of Importing Foreign Technology Cited
(Dragisa M. Pavlovic; KOMUNIST, 15 Aug 80) 121

[III - EE - 64]

NATIONAL ENERGY SITUATION, DEVELOPMENT DESCRIBED

Warsaw PRZEGLAD BUDOWLANY in Polish No 6, Jun 80 pp 323-325

[Article by Lechoslaw Gruszczynski, Undersecretary of State in the Ministry of Power Industry and Atomic Energy]

[Text] Past development of Poland's power industry

During the 35-year history of the Polish People's Republic electric power production increased 20-fold, which has put our country in second place among the CEMA countries, in sixth place in Europe, and tenth in the world.

Important qualitative changes have been made, indicated by substantial technical progress, reduction in unit fuel consumption and public resources for construction and operation of power facilities, and decreased negative impact of power plants and electric power and heat generating plants on the environment.

National growth in generating capacity and electric power production during 1970-1980 is reflected in the following figures:

	1970	1980 (planned)
-- generating capacity, MW [megawatts]	13,890	26,000
-- capacity increase, percent	100	187
-- electric power production, GW·h [gigawatt hours]	64,500	125,000
-- production increase, percent	100	191

The centralized heating-plant system also expanded rapidly and is now one of the largest in Europe.

Growth in public-utility power industry capacity for thermal energy production during 1970-1980 was as follows:

	1970	1980 (planned)
-- attainable thermal capacity, MW	7,670	21,000
-- capacity increase, percent	100	273
-- thermal power production, GJ [gigajoules]	$75,882 \cdot 10^3$	$215,600 \cdot 10^3$
-- production increase, percent	100	284

Consumption of basic fuels by the public-utility power industry during 1970-1980 was as follows:

	1970	1980 (planned)
-- hard coal, thousand tons	24,385	58,240
-- consumption increase, percent	100	239
-- brown coal, thousand tons	26,636	35,200
-- consumption increase, percent	100	132

The public-utility power industry is the country's largest coal consumer. In 1979 it used 54,432 thousand tons of hard coal, or 27 percent of the national output.

Brown coal, as an energy-producing raw material, in 1979 supplied about 20 percent of the heat contained in fuels consumed by the public-utility power industry.

Liquid fuel consumption, allowing for world market difficulties, accounted for three percent of the heat contained in fuels used by the public-utility power industry.

During the 1970's, the public-utility power industry made great strides in improving the efficiency of electrical and thermal power production. This is illustrated below:

	1970	1979
-- standard fuel unit consumption rate for gross electric power production kJ/kW·h [kilojoules per kilowatt hour]	10,959	10,580
-- electric power consumption rate for own needs, percent	7.39	7.17
-- standard fuel unit consumption rate for thermal power production, MJ/GJ [megajoules per gigajoule]	300.6	292.3

Reduction in standard fuel unit consumption was achieved by start-up of more efficient generating units, particularly 120 and 200 MW power units rated at 10,000-10,500 kJ/kW·h; converting old power plants into electric power and heat generating plants; and building new electric power and heat generating plants producing electric power at 4,840-4,980 kJ/kW·h.

Generating capacity is now provided by 120, 200 and 500 MW power units, in which about 70 percent of total public-utility power capacity is concentrated.

Poland has one of the best standard fuel unit consumption rates in Europe.

The present national energy situation and future developments.

Thorough examination has revealed that recent energy problems in our country are traceable to the following causes:

-- recent disproportion between available capacity of power plants and the gradually growing consumer demand for electric power,

-- inadequate technical progress in the field of efficient and economical energy consumption.

It should be emphasized that during the 1970's there were significant developments in all areas of the national economy, causing a large increase in demand for power. But this increased demand was not accompanied by equivalent increases in indispensable power generating capacity, and due to lack of preventive maintenance, the availability rate of existing generating equipment dropped. This was attributed to insufficient spare parts manufacturing potential and lack of conversion capacity during repairs. As a result the imbalances in electric power availability increased, which made it necessary to restrict supplies of power to consumers.

The energy situation became particularly bad in 1979. After serious problems during the first quarter, caused by unfavorable weather conditions, it became necessary to restrict power deliveries to consumers until October 1979.

A number of measures were taken to control this difficult situation. They included issuing a decision to integrate the production of power machinery and equipment with power industry construction in order to make the investment process more efficient and to improve the repair service.

The first positive results of the reorganization and other actions appeared at the end of the fourth quarter of 1979 and in the first quarter of 1980. Restrictions on power supplies to consumers were greatly reduced and the energy situation was finally alleviated.

But the power industry must undergo further systematic comprehensive improvement if it is to supply the country with adequate electrical energy.

To ensure a fuel-energy base to 1985, we must:

-- allocate 73 million tons of hard coal, out of an increased extraction of 232-235 million tons annually, to the public-utility power industry,

-- increase extraction of brown coal to 80-90 million tons annually (a more than 100 percent increase in extraction over 1980),

-- increase electric energy production to 160-168 GW·h,

-- raise attainable generating capacity to a level of 37,000-38,000 MW.

In Poland the main source of energy is, and will continue to be, coal.

Recoverable reserves of coal in Poland can provide hard coal for a long time, but the difficult accessibility of deposits increases technological problems in mining and extraction costs.

Because of this, hard coal mining will require greater outlays for modernization of existing mines and construction of new ones. Thus it is essential that hard coal be used efficiently and economically.

Given these circumstances, intensive development of brown coal extraction is one of the main courses of action. It is envisaged that brown coal's share in satisfying the public-utility power industry's fuel requirements will increase from 20 percent in 1980 to 30 percent in 1985. Extraction will increase from a planned 40 million tons in 1980 to 80-90 million tons in 1985, to be realized mainly in the Belchatow mine now under construction.

Construction of brown coal mines in Szczercow and Legnica in the next few years is anticipated. This should, by 1990, triple 1980 extraction figures.

Such a rapid rate of brown coal extraction will require very large outlays for construction of machinery and equipment for strip mining.

Construction of the first nuclear power plant in Poland, within the framework of CEMA-country agreements, will take place during 1981-1985. The power plant will have an ultimate generating capacity of 1,880 MW (2 x 440 MW + 1,000 MW).

The construction of the next nuclear power plant will also begin; these power plants will initiate the development of Poland's atomic power industry.

Needless to say, the introduction of nuclear energy will require much new technology dealing with production of equipment and power plant construction and operation.

The rate of increase of electric power production by nuclear power plants during the next decade will necessarily be limited by the need to gradually introduce new techniques.

Only two percent of the country's electrical energy in 1979 was produced in hydroelectric power plants. Although water resources are being utilized to a very large degree and a doubling of production by 1990 is envisaged, improvements in hydroelectric power plant are limited.

In examining plants for future development in the national energy situation, problems involved in balancing all types of energy must be considered, including consumption of energy contained in raw materials as well as generated power, i.e., electrical and thermal.

Efficient utilization of energy is predicated on determining the optimum level of consumption of all types of energy. In making this determination it should be recognized that the efficiency of generating electrical energy in steam generated power plants is very low, about 33 percent, and the feasibility of increasing this efficiency is very limited due to the thermodynamics of the process. Therefore, the selection of energy used in each industry should be thoroughly examined.

To achieve the national energy balance projected to 1990 and future years, certain courses of action for specific groups of energy consumers have already been defined.

For example, in the Ministry of Construction and Construction Materials Industry, plans for using different energy sources will unquestionably produce considerable reductions in energy consumption. This Ministry's basic courses of action will be to improve the thermal insulation rating of buildings and accommodations and to introduce new, more efficient technologies in the production of construction materials.

Conclusions

1. Our present state of energy management requires, besides expansion of the fuel base by increased brown coal extraction and higher power plant generating capacity, more efficient use of fuel and energy.

2. Supply and demand for electric energy can be balanced in 1985 if:

-- fuel and energy utilization efficiency improves substantially,
-- brown coal extraction increases by more than 100 percent over 1980, and
-- generating capacity in power plants and electric power and heat generating plants increases by 11,000 MW.

9295
CSO: 2600

FINAL ACCOUNT OF 1979 FEDERAL BUDGET

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 42, 25 Jul 80 pp 1365-1412

[Final account of the federal budget adopted by the SFRY Assembly in a session of the Federal Chamber on 17 July 1980]

[Text] I. General Section

Article 1

Revenues collected and the distribution of revenues in 1979 are as follows:

1) sum total of revenues collected according to the balance sheet of the federal budget	102,028,525,245.25 dinars
2) sum total of distribution of revenues according to the balance sheet of the federal budget	101,984,334,094.10 dinars
3) difference between total revenues collected and total distribution of revenues according to the balance sheet of the federal budget	44,191,151.15 dinars
4) total surplus of revenues over distribution	44,191,151.15 dinars

Article 2

The surplus shown in Article 1 of this final account, amounting to 44,191,151.15 dinars, shall be transferred to the permanent federal budgetary reserve.

Article 3

Following are given a tabulation of anticipated and actual revenues and a tabulation of anticipated and actual distribution of revenues in the Balance Sheet of the Federal Budget for 1979:

I. Revenues

Revenue Form 1	Revenue Sub-form 2	Revenues 3	Anticipated by Budget 4	Anticipated Adjusted Budget 5	Actual 6
		Type 03. Turnover Tax on Products and on Fees for the Rendering of Services			
03-1		Turnover tax on products	38,203,900,000	38,203,900,000	37,699,592,616.00
	03-1-1	Portion of the basic turnover tax on products	38,203,900,000	38,203,900,000	37,699,592,616.00
		Total Type 03. Turnover Tax on Products and on Fees for the Rendering of Services	38,203,900,000	38,203,900,000	37,699,592,616.00
		Type 05. Fees			
05-1		Administrative fees	129,000,000	129,000,000	167,705,146.27
	05-1-1	Consular fees	66,000,000	66,000,000	115,899,795.45
	05-1-2	Customs fees	57,000,000	57,000,000	48,298,251.62
	05-1-3	Other federal administrative fees	6,000,000	6,000,000	3,507,099.20
05-3		Court fees	1,000,000	1,000,000	1,004,428.50
		Total Type 05. Fees	130,000,000	130,000,000	168,709,574.77

I. Revenues (continued)

1	2	3	4	5	6
		Type 06. Customs Duties and Special Charges			
06-1		Duties	9,367,860,000	11,587,460,000	10,512,182,232.72
06-2		Special import fees and charges	12,513,540,000	12,513,540,000	14,078,837,491.02
	06-2-2	Special charge to equalize the tax burden	4,435,740,000	4,435,740,000	5,032,419,997.10
	06-2-3	Charge for customs record-keeping	813,220,000	813,220,000	896,584,649.73
	06-2-4	Special fee on imported commodities	7,243,460,000	7,243,460,000	8,147,857,917.06
	06-2-5	Storage charges on goods kept in bonded warehouses	21,120,000	21,120,000	1,974,927.13
		Total Type 06. Customs Duties and Special Charges	21,881,400,000	24,101,000,000	24,591,019,723.74
		Type 07. Revenues Under Special Federal Statutes, Revenues of Administrative Agencies and Miscellaneous Revenues			
07-2		Revenues of administrative agencies	1,539,000,000	2,119,000,000	2,076,468,786.43
	07-2-1	Revenues of federal bodies, agencies and organizations	1,539,000,000	2,119,000,000	2,076,468,786.43
07-4		Miscellaneous revenues	767,900,000	767,900,000	605,034,544.31

I. Revenues (continued)

1	2	3	4	5	6
		Total Type 07. Revenues Under Special Federal Statutes, Revenues of Administrative Agencies and Miscellaneous Revenues	2,306,900,000	2,886,900,000	2,681,503,330.74
		Type 08. Revenues From Other Sociopolitical Communities			
08-1		Contributions of the republics and autonomous provinces	28,436,300,000	28,436,300,000	28,436,300,000.00
	08-1-1	Contribution of the Socialist Republic of Bosnia-Hercegovina	3,615,200,000	3,615,200,000	3,615,200,000.00
	08-1-2	Contribution of the Socialist Republic of Macedonia	1,584,900,000	1,584,900,000	1,584,900,000.00
	08-1-3	Contribution of the Socialist Republic of Slovenia	4,636,200,000	4,636,200,000	4,636,200,000.00
	08-1-4	Contribution of the Socialist Republic of Serbia, not including autonomous provinces	7,013,600,000	7,013,600,000	7,013,600,000.00
	08-1-5	Contribution of the Socialist Republic of Croatia	7,667,200,000	7,667,200,000	7,667,200,000.00
	08-1-6	Contribution of the Socialist Republic of Montenegro	558,200,000	558,200,000	558,200,000.00
	08-1-7	Contribution of the Socialist Autonomous Province of Vojvodina	3,242,100,000	3,242,100,000	3,242,100,000.00
	08-1-8	Contribution of the Socialist Autonomous Province of Kosovo	118,900,000	118,900,000	118,900,000.00

I. Revenues (continued)

1	2	3	4	5	6
		Total Type 08. Revenues From Other Sociopolitical Communitie	28,436,300,000	28,436,300,000	28,436,300,000.00
		Type 09. Loans, Credits and Funds Made Available			
09-5		Credits received	8,451,400,000	8,451,400,000	8,451,400,000.00
	09-5-1	Funds of the Yugoslav National Bank	8,451,400,000	8,451,400,000	8,451,400,000.00
		Total Type 09. Loans, Credits and Funds Made Available	8,451,400,000	8,451,400,000	8,451,400,000.00
		Total Revenues for Distribution	99,409,900,000	102,209,500,000	102,028,525,245.25

II. Distribution of Revenues

Classification Number: Distribution Group 1	Classification Number: Distribution Sub-group 2	Distribution of Revenues 3	Total: Anticipated by Budget 4	Total: Anticipated by Adjusted Budget and Subsequent Amendments 5	Total: Actual 6
		Basic Purpose 01. Activity of Federal Bodies, Agencies and Organizations			
01-1		Funds for the work community			
	01-1-1	Funds for personal incomes of workers	2,399,296,230	2,741,672,273.45	2,735,396,398.25
01-2		Funds for functional expenditures of federal bodies, agencies and organizations	5,851,803,770	5,566,910,631.55	5,379,038,027.95
	01-2-1	Funds for material costs	224,680,850	255,491,563.75	251,374,328.10
	01-2-2	Funds for special purposes	2,146,271,540	2,092,729,437.70	2,026,533,545.85
	01-2-3	Funds for general public purposes	2,224,451,380	2,262,289,630.10	2,171,516,268.40
	01-2-4	Current financing of federal directorates for commodity reserves	1,056,400,000	956,400,000.00	929,613,885.60
		Total Basic Purpose 01. Activity of Federal Bodies, Agencies and Organizations	8,051,100,000	8,308,582,905.00	8,114,434,426.20

II. Distribution of Revenues (continued)

1	2	3	4	5	6
		Basic Purpose 02. National Defense and Social Self-Protection			
02-1		Funds for the Yugoslav People's Army			
	02-1-1	Funds for the Yugoslav People's Army in the current year	49,244,000,000	49,244,000,000.00	49,244,000,000.00
	02-1-2	Funds to cover expenditures incurred in rendering services to users outside the YPA	920,000,000	1,500,000,000.00	1,499,401,106.75
	02-2-2	Funds for the Yugoslav People's Army according to the account for the past year	2,307,000,000	4,340,260,000.00	4,340,260,000.00
		Total Basic Purpose 02. National Defense and Social Self-Protection	52,471,000,000	55,084,260,000.00	55,083,661,106.75
		Basic Purpose 03. Noneconomic Investments			
03-1		Funds for noneconomic investments	2,177,000,000	2,369,976,040.00	2,369,685,177.55
		Total Basic Purpose 03. Noneconomic Investments	2,177,000,000	2,369,976,040.00	2,369,685,177.55

II. Distribution of Revenues (continued)

1	2	3	4	5	6
		Basic Purpose 05. Contributions and Supplemental Funds to Budgets of Other Sociopolitical Communities			
05-2		Supplemental funds to budgets of sociopolitical communities			
	05-2-1	Supplemental funds to budgets of republics and autonomous provinces	7,823,200,000	8,099,000,000.00	8,099,000,000.00
	05-2-2	Special supplemental funds to budgets of republics and autonomous provinces	1,008,000,000	2,403,300,000.00	2,403,300,000.00
		Total Basic Purpose 05. Contributions and Supplemental Funds to Budgets of Other Sociopolitical Communities	8,831,200,000	10,502,300,000.00	10,502,300,000.00
		Basic Purpose 06. Funds Transferred to the Social Services			
06-9		Earmarked funds transferred to self-managed special-interest communities for old-age and disability insurance	15,124,000,000	15,188,000,000.00	15,187,639,988.40

II. Distribution of Revenues (continued)

1	2	3	4	5	6
		Total Basic Purpose 06. Funds Transferred to the Social Services	15,124,000,000	15,188,000,000.00	15,187,639,988.40
		Basic Purpose 07. Other Earmarked Funds			
07-3		For sociopolitical organizations	502,300,000	502,300,000.00	502,300,000.00
07-4		Other earmarked funds not mentioned			
	07-4-1	Welfare of disabled veterans	4,303,400,000	4,240,762,662.95	4,240,762,662.95
	07-4-2	Subsidy to the Fund of Solidarity With the Nonaligned Countries and Developing Countries	130,000,000	130,000,000.00	130,000,000.00
		Total Basic Purpose 07. Other Earmarked Funds	4,935,700,000	4,873,062,662.95	4,873,062,662.95
		Basic Purpose 08. Budgetary Reserve			
08-1		Permanent budgetary reserve	200,000,000	200,000,000.00	200,000,000.00
08-2		Current budgetary reserve	206,400,000	317,095,702.00	303,981,773.41
		Total Basic Purpose 07. Other Earmarked Funds	406,400,000	517,095,702.00	503,981,771.41

II. Distribution of Revenues (continued)

1	2	3	4	5	6
		Basic Purpose 09. Funds Deposited in Time Accounts, Funds Set Aside and Obligations From Past Years			
09-4		Obligations under credits and other obligations from past years			
	09-4-2	Obligations under other credits and other obligations from past years	7,273,500,000	5,226,222,690.05	5,209,568,958.84
		Total Basic Purpose 09. Funds Deposited in Time Accounts, Funds Set Aside and Obligations From Past Years	7,273,500,000	5,226,222,690.05	5,209,568,958.84
		Basic Purpose 10. Other Miscellaneous Expenditures			
10-1		Compensation to the Social Accounting Service	140,000,000	140,000,000.00	140,000,000.00
		Total Basic Purpose 10. Other Miscellaneous Expenditures	140,000,000	140,000,000.00	140,000,000.00
		Total Distributed and Undistributed Revenue	99,409,900,000	102,209,500,000.00	101,984,334,094.10

II. Detailed Section

Article 4

The anticipated and actual revenues of the Federal Budget for 1979 are as follows:

1) total anticipated revenues	102,209,500,000.00 dinars
2) total revenues collected	102,028,525,245.25 dinars

Article 5

A survey of the anticipated and actual distribution by those disbursing and using the funds, by purposes and by distribution groups and distribution subgroups is given below:

Item No 1	Distribution Group or Subgroup 2	Basic and Detailed Purpose 3	Anticipated by Budget 4	Anticipated by Adjusted Budget and Subsequent Amendments and Transfers From One Budget Item to Another 5	Actual 6
		Section 1. State Presidency of the Socialist Federal Republic of Yugoslavia			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
1	01-1-1	Personal incomes of personnel	13,799,500	14,231,120.00	14,231,038.00
2	01-2-1	Material outlays	200,000	200,000.00	193,654.65
3	01-2-2	Compensation for personal income and other benefits of officials	15,933,480	16,371,381.00	16,371,298.60

Article 5 (continued)

1	2	3	4	5	6
4	01-2-2	Personal income of other personnel	1,959,660	1,870,000.00	1,861,884.70
5	01-2-2	Compensation for separation from family	380,000	406,780.00	406,780.00
6	01-2-2	Traveling expenses	1,100,000	1,100,000.00	1,099,483.70
7	01-2-2	Office supplies	250,000	250,000.00	250,000.00
8	01-2-2	Postage and telegraph and telephone service	430,000	468,140.00	468,140.00
9	01-2-2	Public relations	700,000	700,000.00	691,013.20
10	01-2-2	Trips and visits	13,600,000	15,600,000.00	15,600,000.00
11	01-2-2	Remuneration of nonstaff personnel	88,000	88,000.00	53,840.30
12	01-2-2	Subscription to official gazettes, journals and newspapers	360,000	420,000.00	419,864.15
13	01-2-2	Costs of manufacturing medals and decorations	7,700,000	11,900,000.00	11,898,738.60
14	01-2-2	Costs of services	40,000	40,000.00	15,369.10
15	01-2-2	Lump-sum payment to chauffeurs for irregular working hours	470,260	435,000.00	420,156.90
16	01-2-2	Purchase of uniforms and work clothing	40,000	40,000.00	39,911.85
17	01-2-2	Addition to equipment and inventory	330,000	330,000.00	314,205.60
18	01-2-2	Expenses of the Federal Council for Protection of the Constitutional Order	66,000	66,000.00	55,107.90
19	01-2-2	Expenses of the National Defense Council	50,000	50,000.00	44,313.00
		Total Basic Purpose 01	57,496,950	64,566,421.00	64,434,800.25
		Total Section 1 (Items 1-19)	57,496,950	64,566,421.00	64,434,800.25

Article 5 (continued)

1	2	3	4	5	6
		Section 2. SFRY Assembly			
		Title 1. SFRY Assembly			
		Basic Purpose 01—Activity of Federal Bodies, Agencies and Organizations			
20	01-1-1	Personal incomes of personnel	87,265,000	98,118,126.00	98,118,028.00
21	01-2-1	Material outlays	240,000	240,000.00	100,000.00
22	01-2-2	Compensation for personal income and other benefits of officials	65,573,710	93,143,664.00	92,120,587.55
23	01-2-2	Postage and telegraph and telephone service	3,770,000	4,420,000.00	4,414,966.75
24	01-2-2	Compensation for overtime	4,600,000	8,100,000.00	7,951,380.50
25	01-2-2	Remuneration of nonstaff personnel	3,000,000	2,350,000.00	2,184,458.35
26	01-2-2	Operating expenses of delegates and parliamentary bodies	27,000,000	26,000,000.00	24,053,405.95
27	01-2-2	Purchase of domestic and foreign books	330,000	330,000.00	323,732.80
28	01-2-2	Subscription to official gazettes, bulletins and journals	1,026,000	1,376,000.00	1,375,252.95
29	01-2-2	Publication of transcripts	11,000,000	5,400,000.00	5,392,748.95
30	01-2-2	Preparation of publications of the SFRY Assembly, topic reports, bulletins and other assembly materials	7,455,600	6,155,600.00	6,155,589.15
31	01-2-2	Expenses of the parliamentary delegation	10,175,000	5,175,000.00	5,129,572.95
32	01-2-2	Public relations	726,000	726,000.00	715,451.75
33	01-2-2	Purchase of clothing and footwear	720,000	720,000.00	714,478.75

Article 5 (continued)

1	2	3	4	5	6
34	01-2-2	Membership dues in the Interparliamentary Union	385,000	385,000.00	362,091.50
35	01-2-2	Services rendered by others	400,000	400,000.00	261,925.90
36	01-2-2	Expenses of maintaining the motor pool	4,500,000	4,800,000.00	4,791,283.90
37	01-2-2	Print shop costs	3,300,000	3,300,000.00	3,299,888.35
38	01-2-2	Purchase of equipment	10,000,000	26,600,000.00	26,600,000.00
39	01-2-2	Share in preserving the main exhibit layout of the Museum of the First and Second Meetings of AVNOJ [Antifascist Council for the National Liberation of Yugoslavia]	1,500,000	1,500,000.00	1,500,000.00
40	01-2-2	Preparation of topic reports, analyses and studies	3,000,000	1,000,000.00	1,000,000.00
41	01-2-2	Office materials, small stock items, paper and other expendables	7,700,000	7,700,000.00	7,541,283.25
42	01-2-2	Expenses of the Commission of the Federal Chamber of the SFRY Assembly for preparation of the Law on Basic Rights Under Old-Age and Disability Insurance	5,150,000	700,000.00	492,797.00
43	01-2-2	Expenses of the Commission for Monitoring Implementation of the Law on Associated Labor	2,400,000	500,000.00	481,190.05
		Total Basic Purpose 01	261,216,310	299,139,390.00	295,080,114.35
		Total Title 1	261,216,310	299,139,390.00	295,080,114.35

Article 5 (continued)

1	2	3	4	5	6
		Title 2. Bureau for Petitions and Grievances			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
44	01-1-1	Personal incomes of personnel	6,569,800	7,455,261.00	6,887,451.00
45	01-2-1	Material outlays	230,000	230,000.00	201,894.60
46	01-2-2	Compensation for personal income and other benefit of officials	649,450	757,090.00	702,922.45
47	01-2-2	Assistance to petitioners	44,000	44,000.00	40,000.00
48	01-2-2	Addition to equipment and inventory	55,000	55,000.00	22,873.40
		Total Basic Purpose 01	7,548,250	8,541,351.00	7,855,141.45
		Total Title 2	7,548,250	8,541,351.00	7,855,141.45
		Title 3. Secretariat for Legislation of the SFRY Assembly			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
49	01-1-1	Personal incomes of personnel	3,861,790	4,412,300.00	4,412,300.00
50	01-2-1	Material outlays	147,400	147,400.00	105,827.65
51	01-2-2	Compensation for personal income and other benefits of officials	644,280	1,066,628.00	988,876.40

Article 5 (continued)

1	2	3	4	5	6
		Total Basic Purpose 01	4,653,470	5,626,528.00	5,507,004.05
		Total Title 3	4,653,470	5,626,528.00	5,507,004.05
		Total Section 2 (Items 20-51)	273,418,030	313,307,269.00	308,442,259.85
		Section 3. Council of the Federation			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
52	01-1-1	Personal incomes of personnel	8,640,150	9,191,714.00	9,191,659.00
53	01-2-1	Material outlays	160,000	160,000.00	155,917.65
54	01-2-2	Compensation for personal income and other benefits of officials and individuals with special status	32,945,540	36,591,530.00	36,542,072.75
55	01-2-2	Lump-sum payment to chauffeurs for irregular working hours	565,000	526,000.00	515,251.60
56	01-2-2	Traveling and moving expenses in Yugoslavia	500,000	560,000.00	560,000.00
57	01-2-2	Traveling expenses abroad	90,000	--	--
58	01-2-2	Postage and telegraph and telephone service	320,000	376,500.00	376,500.00
59	01-2-2	Subscription to informative publications and miscellaneous	600,000	560,000.00	462,056.70
60	01-2-2	Public relations	98,000	98,000.00	92,720.40
61	01-2-2	Compensation of expenses of members of the Council of the Federation for using a portion of their dwelling for official business	585,000	637,500.00	637,500.00

Article 5 (continued)

1	2	3	4	5	6
62	01-2-2	Purchase of clothing and footwear	70,000	70,000.00	68,373.20
63	01-2-2	Purchase of equipment	60,000	60,000.00	55,960.00
		Total Basic Purpose 01	44,633,690	48,831,244.00	48,658,011.30
		Total Section 3 (Items 52-63)	44,633,690	48,831,244.00	48,658,011.30
		Section 4. Office of the President of the Republic			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
64	01-1-1	Personal incomes of personnel	17,546,690	19,126,752.00	19,126,750.00
65	01-2-1	Material outlays	12,800,000	12,800,000.00	12,800,000.00
66	01-2-2	Compensation for personal income and other benefits of officials	3,318,300	3,568,486.00	3,568,439.70
67	01-2-2	Sponsorship and aid	100,000	60,000.00	58,500.00
68	01-2-2	Expenses of purchasing gifts related to trips and visits	8,000,000	10,000,000.00	10,000,000.00
69	01-2-2	Traveling expenses in Yugoslavia and abroad	1,200,000	2,084,432.00	2,084,432.00
70	01-2-2	Addition to inventory	2,000,000	2,000,000.00	1,999,343.75
71	01-2-2	Expenses of maintaining structures and furnishings	6,650,000	6,650,000.00	6,650,000.00
72	01-2-2	Personal incomes of seasonal personnel	300,000	165,568.00	165,568.00
73	01-2-2	Compensation for overtime	1,400,000	690,000.00	690,000.00
74	01-2-2	Remuneration of nonstaff personnel	1,600,000	1,600,000.00	1,600,000.00

Article 5 (continued)

1	2	3	4	5	6
		Total Basic Purpose 01	54,914,990	58,745,238.00	58,743,033.45
		Basic Purpose 03. Noneconomic Investments			
75	03-1	Repair and adaptation of Stari Dvor (Old Palace)	50,000,000	50,000,000.00	50,000,000.00
		Total Basic Purpose 03	50,000,000	50,000,000.00	50,000,000.00
		Total Section 4 (Items 64-75)	104,914,990	108,745,238.00	108,743,033.55
		Section 5. Federal Executive Council			
		Title 1. Federal Executive Council			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
76	01-1-1	Personal incomes of personnel	38,706,100	43,221,465.00	43,221,461.00
77	01-2-1	Material outlays	1,150,000	1 450,000.00	1,450,000.00
78	01-2-2	Compensation for personal income and other benefits of officials	24,941,730	26,695,369.00	24,700,378.70
79	01-2-2	Compensation for separation from family	821,760	938,480.00	938,480.00
80	01-2-2	Remuneration of nonstaff personnel	330,000	330,000.00	330,000.00
81	01-2-2	Office supplies	228,000	228,000.00	228,000.00

Article 5 (continued)

1	2	3	4	5	6
82	01-2-2	Subscription to newspapers, journals and other publications	500,000	1,050,000.00	1,050,000.00
83	01-2-2	Postage and telegraph and telephone service	1,000,000	1,900,000.00	1,900,000.00
84	01-2-2	Traveling and moving expenses in Yugoslavia	2,300,000	2,300,000.00	2,300,000.00
85	01-2-2	Costs of reserving compartmerts on the Yugoslav Railroads	1,700,000	1,986,000.00	1,986,000.00
86	01-2-2	Traveling expenses abroad	16,500,000	18,000,000.00	18,000,000.00
87	01-2-2	Expendable supplies and stock items	80,000	80,000.00	80,000.00
88	01-2-2	Printing and duplicating materials for meetings	1,880,000	2,980,000.00	2,980,000.00
89	01-2-2	Purchase of equipment	10,000,000	10,000,000.00	10,000,000.00
90	01-2-2	Funds for operating expenses of the CEMA Commission	2,200,000	1,200,000.00	1,300,000.00
91	01-2-2	Public relations	3,000,000	3,700,000.00	3,700,000.00
92	01-2-2	Expenses of international cooperation	14,000,000	11,800,000.00	11,800,000.00
93	01-2-2	Operating expenses of the Federal Legal Council	370,000	370,000.00	370,000.00
94	01-2-2	Operating expenses of the Federal Economic Council	370,000	370,000.00	370,000.00
95	01-2-2	Expenses of the supporting services of the Federal Executive Council	250,000	250,000.00	250,000.00
96	01-2-2	Operating expenses of the Council for Matters Related to the Social Order	2,850,000	2,850,000.00	2,850,000.00
97	01-2-2	Operating expenses of the Federal Council for International Relations	2,650,000	764,000.00	764,000.00

Article 5 (continued)

1	2	3	4	5	6
98	01-2-2	Operating expenses of the Council for Economic Development and Economic Policy	2,700,000	2,350,000.00	2,350,000.00
99	01-2-2	Operating expenses of the Council for Environmental Protection and Land Use Planning	4,620,000	4,620,000.00	4,620,000.00
100	01-2-2	Operating expenses of the Commission of the Federal Executive Council for Relations With Religious Communities	444,430	444,430.00	150,000.00
101	01-2-2	Operating expenses of the Commission for Nuclear Energy	750,000	750,000.00	100,000.00
102	01-2-2	Operating expenses of the Yugoslav Commission for Cooperation With UNESCO	5,500,000	5,500,000.00	5,500,000.00
103	01-2-2	Membership dues in international organizations	10,103,010	10,103,010.00	10,103,010.00
104	01-2-2	Scholarships	276,000	276,000.00	276,000.00
105	01-2-2	Preparing and equipping dwellings of officials	1,000,000	1,000,000.00	1,000,000.00
106	01-2-2	Expenses of vacant dwellings	370,000	370,000.00	370,000.00
107	01-2-2	Moving expenses	30,000	30,000.00	30,000.00
		Total Basic Purpose 01	151,621,030	158,006,754.00	155,067,329.70
		Basic Purpose 03--Noneconomic Investments			
108	03-1	Payments on aircraft	80,000,000	80,000,000.00	80,000,000.00
109	03-1	Construction of Phase II of the International Center for Management of Publicly Owned Enterprises in Developing Countries	55,591,000	55,591,000.00	55,591,000.00

Article 5 (continued)

1	2	3	4	5	6
110	03-1	Preparation of Phase II of the Congress Center in New Belgrade	100,000,000	100,000,000.00	100,000,000.00
		Total Basic Purpose 03	235,591,000	235,591,000.00	235,591,000.00
		Basic Purpose 07--Other Earmarked Funds			
	07-4	Other earmarked funds not mentioned			
111	07-4-2	Subsidy of the Fund of Solidarity With the Nonaligned Countries and Developing Countries	130,000,000	130,000,000.00	130,000,000.00
		Total Basic Purpose 07	130,000,000	130,000,000.00	130,000,000.00
		Total Title 1	517,212,030	523,597,754.00	520,658,329.70
		Title 2. Protocol Department of the Federal Executive Council			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
112	01-1-1	Personal incomes of personnel	575,720	687,502.00	634,560.00
113	01-2-1	Material outlays	88,000	88,000.00	21,481.50
114	01-2-2	Compensation for personal income and other benefits of officials	616,080	713,490.00	351,958.35
115	01-2-2	Compensation for overtime	91,200	91,200.00	90,722.00

Article 5 (continued)

1	2	3	4	5	6
116	01-2-2	Public relations	6,000	6,000.00	1,437.80
117	01-2-2	Purchase of uniforms	12,000	12,000.00	9,600.00
		Total Basic Purpose 01	1,389,000	1,598,192.00	1,109,759.65
		Total Title 2	1,389,000	1,598,192.00	1,109,759.65
		Title 3. Service of the Federal Executive Council for Defense Preparations			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
118	01-1-1	Personal incomes of personnel	3,931,820	4,510,635.00	4,119,435.00
119	01-2-1	Material outlays	275,880	275,880.00	269,902.40
120	01-2-2	Compensation for personal income and other benefits of officials	374,000	403,842.00	370,388.70
121	01-2-3	Defense-related projects	12,700,000	12,700,000.00	12,692,776.35
		Total Basic Purpose 01	17,281,700	17,890,357.00	17,452,502.45
		Basic Purpose 03--Noneconomic Investments			
122	03-1	Financing the program of Phase I of shelter construction and adaptation	56,465,000	61,828,000.00	61,828,000.00
		Total Basic Purpose 03	56,465,000	61,828,000.00	61,828,000.00

Article 5 (continued)

1	2	3	4	5	6
		Total Title 3	73,746,700	79,718,357.00	79,280,502.45
		Total Section 5 (Items 76-122)	592,347,730	604,914,303.00	601,048,591.80
		Section 6. Yugoslav Constitutional Court			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
123	01-1-1	Personal incomes of personnel	7,746,590	8,385,622.00	8,243,471.00
124	01-2-1	Material outlays	684,000	823,300.00	819,067.20
125	01-2-1	Compensation for personal income and other benefits of officials	6,511,110	7,555,901.00	7,119,728.70
126	01-2-2	Compensation for separation from family	154,080	203,560.00	203,560.00
127	01-2-2	Costs of proceedings	150,000	150,000.00	108,615.10
128	01-2-2	Publication of reports of decisions and opinions of the Yugoslav Constitutional Court	700,000	850,000.00	841,705.00
129	01-2-2	Traveling expenses abroad	70,300	46,000.00	35,591.00
130	01-2-2	Per diems of chauffeurs	60,000	25,000.00	14,500.00
131	01-2-2	Lump-sum payment to chauffeurs for irregular working hours	177,660	255,530.00	236,753.10
132	01-2-2	Purchase of clothing and footwear	11,750	11,750.00	11,750.00
133	01-2-2	Purchase of and addition to equipment	100,000	100,000.00	93,515.65
134	01-2-2	Expenses of visiting delegation	200,000	50,000.00	50,000.00

Article 5 (continued)

1	2	3	4	5	6
135	01-2-2	Expenses of arranging materials from the 2d, 3d and 4th International European Conferences in 1974, 1976 and 1978	100,000	170,000.00	161,868.75
		Total Basic Purpose 01	16,665,490	18,626,663.00	18,040,125.50
		Total Section 6 (Items 123-135)	16,665,490	18,626,663.00	18,040,125.50
		Section 7. Federal Court			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
136	01-1-1	Personal incomes of personnel	11,222,880	10,810,821.00	10,801,855.00
137	01-2-2	Material outlays	1,235,000	1,235,000.00	1,126,343.40
138	01-2-2	Compensation for personal income and other benefits of officials	5,769,230	5,971,426.00	5,958,144.40
139	01-2-2	Compensation for separation from family	154,080	177,840.00	177,840.00
140	01-2-2	Publication of the Review of Court Decisions	300,000	300,000.00	200,000.00
141	01-2-2	Traveling expenses in Yugoslavia	130,000	130,000.00	87,768.90
142	01-2-2	Traveling expenses abroad	65,000	65,000.00	43,435.90
143	01-2-2	Translation into the languages of the nationalities and ethnic minorities	20,000	20,000.00	--
144	01-2-2	Expenses of court proceedings	20,000	20,000.00	--
145	01-2-2	Purchase of and addition to equipment	180,000	180,000.00	126,608.45

Article 5 (continued)

1	2	3	4	5	6
146	01-2-2	Current maintenance of buildings and furnishings	260,000	260,000.00	121,346.05
147	01-2-2	Expenses of visiting foreign delegations	80,000	80,000.00	--
148	01-2-2	Public relations	80,000	80,000.00	59,426.30
149	01-2-2	Awards and compensation of lay judges	20,000	20,000.00	14,624.80
150	01-2-3	Defense-related projects	40,000	40,000.00	5,043.50
		Total Basic Purpose 01	19,576,190	19,390,087.00	18,722,436.70
		Basic Purpose 03--Noneconomic Investments			
151	03-1	Preparation of the design and estimated cost of adapting the attic of the courthouse	60,000	60,000.00	60,000.00
		Total Basic Purpose 03	60,000	60,000.00	60,000.00
		Total Section 7 (Items 136-151)	19,636,190	19,450,087.00	18,782,436.70
		Section 8. Federal Public Prosecutor's Office			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
152	01-1-1	Personal incomes of personnel	5,073,820	4,743,929.00	4,356,907.05
153	01-2-1	Material outlays	390,000	390,000.00	389,594.45
154	01-2-2	Compensation for personal income and other benefits of officials	2,546,630	3,037,741.00	3,022,172.50

Article 5 (continued)

1	2	3	4	5	6
155	01-2-2	Compensation for separation from family	51,360	51,360.00	51,360.00
156	01-2-2	Traveling expenses abroad	100,000	100,000.00	97,238.10
157	01-2-2	Translation of court documents from and into foreign languages	120,000	120,000.00	66,858.90
158	01-2-2	Expenses of conferences and of monitoring and studying social relations and developments	120,000	120,000.00	108,801.80
159	01-2-2	Traveling expenses in Yugoslavia	75,000	75,000.00	57,959.00
160	01-2-2	Expenses of visiting foreign delegations	150,000	150,000.00	149,813.00
161	01-2-2	Public relations	40,000	40,000.00	34,246.80
162	01-2-3	Defense-related projects	20,000	20,000.00	--
		Total Basic Purpose 01	8,686,810	8,848,030.00	8,334,951.60
		Total Section 8 (Items 152-162)	8,686,810	8,848,030.00	8,334,951.60
		Section 9. Federal Solicitor General's Office			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
163	01-1-1	Personal incomes of personnel	2,356,320	2,519,616.00	2,519,589.00
164	01-2-1	Material outlays	260,000	260,000.00	260,000.00
165	01-2-2	Compensation for personal income and other benefits of officials	1,030,340	1,091,671.00	1,091,647.00

Article 5 (continued)

1	2	3	4	5	6
166	01-2-2	Expenses of trial and executive proceedings and of representation in Yugoslavia	15,000	15,000.00	15,000.00
167	01-2-2	Expenses of conducting cases abroad and traveling expenses	152,000	152,000.00	152,000.00
168	01-2-2	Public relations	8,000	8,000.00	8,000.00
169	01-2-2	Expenses of visiting foreign delegations	20,000	20,000.00	--
170	01-2-3	Defense-related projects	10,000	10,000.00	--
		Total Basic Purpose 01	3,851,660	4,076,287.00	4,046,236.00
		Total Section 9 (Items 163-170)	3,851,660	4,076,287.00	4,046,236.00
		Section 10. Federal Public Defender of Self-Management Law			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
171	01-1-1	Personal incomes of personnel	1,503,400	1,752,291.00	1,747,194.20
172	01-2-1	Material outlays	370,000	370,000.00	366,008.45
173	01-2-2	Compensation for personal income and other benefits of officials	1,336,170	1,432,175.00	1,432,090.00
174	01-2-2	Traveling expenses abroad	86,000	86,000.00	--
175	01-2-2	Purchase of equipment	150,000	150,000.00	--
176	01-2-2	Public relations	30,000	30,000.00	28,852.30
177	01-2-2	Costs of conferences and seminars	60,000	60,000.00	60,000.00
178	01-2-2	Expenses of visiting foreign delegations	30,000	30,000.00	--

Article 5 (continued)

1	2	3	4	5	6
179	01-2-3	Defense-related projects	15,000	15,000.00	--
		Total Basic Purpose 01	3,580,570	3,925,466.00	3,634,144.95
		Total Section 10 (Items 171-179)	3,580,570	3,925,466.00	3,634,144.95
		Section 11. Federal Court for Misdemeanors			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
180	01-1-1	Personal incomes of personnel	1,598,830	2,281,817.00	2,278,593.65
181	01-2-1	Material outlays	310,000	310,000.00	184,357.20
182	01-2-2	Compensation for personal income and other benefits of officials	1,909,470	2,150,472.00	2,116,087.50
183	01-2-2	Traveling expenses in Yugoslavia	30,000	30,000.00	29,948.00
184	01-2-2	Purchase of equipment	30,000	30,000.00	--
185	01-2-2	Financing the program for advanced training of personnel	15,000	15,000.00	--
186	01-2-2	Expenses of translation from and into foreign languages	20,000	20,000.00	--
187	01-2-2	Operating expenses of occasional members of the court	30,000	30,000.00	28,900.00
		Total Basic Purpose 01	3,943,300	4,867,289.00	4,637,886.35
		Total Section 11 (Items 180-187)	3,943,300	4,867,289.00	4,637,886.35

Article 5 (continued)

1	2	3	4	5	6
		Section 12. Federal Secretariat for Foreign Affairs			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
188	01-1-1	Personal incomes of personnel	204,582,860	237,902,605.10	237,902,605.10
189	01-2-1	Material outlays	26,000,000	34,001,021.75	34,001,021.75
190	01-2-2	Compensation for personal income and other benefits of officials	10,514,280	10,803,310.00	10,470,334.70
191	01-2-2	Remuneration of nonstaff personnel	1,000,000	1,500,000.00	1,378,819.95
192	01-2-2	Compensation for work at night, on Sunday and on holidays	2,200,000	2,617,362.25	2,617,362.25
193	01-2-2	Public relations	1,000,000	1,000,000.00	931,766.55
194	01-2-2	Expenses of the delegation	10,000,000	10,000,000.00	9,722,996.70
195	01-2-2	Expenses of boundary determination with neighboring countries and of the Commission for Codification of International Law	2,860,000	2,300,000.00	2,169,294.72
196	01-2-2	Expenses of consultation and of meetings of the group of nonaligned countries	8,285,000	4,014,300.05	4,014,800.05
197	01-2-2	Expenses of the host delegation's participation in the Conference on Security and Cooperation in Europe	800,000	650,000.00	650,000.00
198	01-2-2	Operation of radio equipment	8,000,000	8,000,000.00	7,998,847.40
199	01-2-2	Expenses of temporary housing	3,000,000	3,450,000.00	2,726,992.85

Article 5 (continued)

1	2	3	4	5	6
200	01-2-2	Compensation for separation from family	1,300,000	1,300,000.00	1,295,675.50
201	01-2-2	Translation of international treaties into the languages of the nationalities and ethnic minorities of Yugoslavia and other expenses	1,500,000	1,875,185.00	1,875,185.00
202	01-2-2	Collecting and sorting archive materials	1,600,000	1,100,000.00	627,350.20
203	01-2-2	Membership dues in international organizations	36,650,000	36,650,000.00	36,649,994.25
204	01-2-2	For purposes of documentation	6,450,000	5,596,544.00	5,596,544.00
205	01-2-2	Addition to and replacement of equipment	2,000,000	3,000,000.00	2,826,931.50
206	01-2-2	Scientific research projects, studies and analyses	16,000,000	16,134,377.85	16,134,377.85
207	01-2-2	Specialized training of personnel for the communications service	500,000	400,000.00	400,000.00
208	01-2-2	Rent and maintenance of the office space of the protocol department	720,000	828,441.00	828,441.00
209	01-2-2	Expenditures for personnel and materials of diplomatic and consular missions abroad	1,180,000,000	1,251,529,600.00	1,251,529,599.70
210	01-2-3	Obligations to meet payments for buildings purchased on credit to meet the needs of diplomatic and consular missions abroad	48,693,000	46,693,000.00	46,688,109.35
211	01-2-3	Replacement of the travel documents of Yugoslav citizens abroad	5,000,000	6,230,000.00	6,225,483.00

Article 5 (continued)

1	2	3	4	5	6
212	01-2-3	Physical and technical security	900,000	1,700,000.00	1,052,313.85
213	01-2-3	For information work among Yugoslav citizens working and residing abroad	4,500,000	3,250,000.00	2,447,265.45
214	01-2-3	Expenses of repatriation and deportation of Yugoslav citizens from foreign countries	2,200,000	1,730,000.00	1,329,653.50
215	01-2-3	Preparation of publications and documents on foreign policy	1,850,000	1,600,000.00	1,322,244.00
216	01-2-3	Miscellaneous grants in aid in accordance with the principles of international solidarity	3,000,000	--	--
217	01-2-3	Defense-related projects	8,000,000	8,000,000.00	8,000,000.00
		Total Basic Purpose 01	1,599,105,140	1,703,856,247.00	1,699,414,010.17
		Basic Purpose 03--Noneconomic Investments			
218	03-1	Financing the investment program of the Federal Secretariat for Foreign Affairs	223,000,000	278,180,000.00	278,180,000.00
219	03-1	Financing the investment program to build facilities for foreign diplomatic and consular missions in Belgrade	35,000,000	35,000,000.00	35,000,000.00
220	03-1	Construction of the building of the Canadian Embassy in Belgrade	11,000,000	11,000,000.00	11,000,000.00
		Total Basic Purpose 03	269,000,000	324,180,000.00	324,180,000.00

Article 5 (continued)

1	2	3	4	5	6
		Basic Purpose 08--Undistributed Funds			
221	08-2	Undistributed funds	6,400,000	6,400,000.00	6,311,196.71
		Total Basic Purpose 08	6,400,000	6,400,000.00	6,311,196.71
		Total Section 12 (Items 188-221)	1,874,505,140	2,034,436,247.00	2,029,905,206.88
		Section 13. Federal Secretariat for National Defense			
		Basic Purpose 02--National Defense			
222	02-1	Funds to finance, develop and modernize the Yugoslav People's Army	49,244,000,000	49,244,000,000.00	49,244,000,000.00
223	02-1-2	Funds to cover expenditures incurred in rendering services to beneficiaries outside the Yugoslav People's Army	920,000,000	1,500,000,000.00	1,499,401,106.75
224	02-2-2	Funds to cover obligations from past years	2,307,000,000	4,340,260,000.00	4,340,260,000.00
		Total Basic Purpose 02	52,471,000,000	55,084,260,000.00	55,083,661,106.75
		Total Section 13 (Items 222-224)	52,471,000,000	55,084,260,000.00	55,083,661,106.75

Article 5 (continued)

1	2	3	4	5	6
		Section 14. Federal Secretariat for Internal Affairs			
		Basic Purpose 01--Activity of Bodies, Agencies and Organizations			
225	01-1-1	Personal incomes of personnel	388,994,820	459,686,186.00	459,686,100.00
226	01-2-1	Material outlays	40,000,000	48,000,000.00	47,999,808.60
227	01-2-2	Compensation for personal income and other benefits of officials	3,449,040	4,398,644.00	3,855,669.00
228	01-2-2	For designated purposes	100,000,000	221,862,470.00	221,862,470.00
229	01-2-2	Purchase of clothing and footwear	8,000,000	12,000,000.00	12,000,000.00
230	01-2-2	Education of personnel	7,000,000	9,000,000.00	9,000,000.00
231	01-2-2	Preventive medicine, insurance of personnel and one-time assistance under Article 37 of the Law on Conduct of Law Enforcement in the Jurisdiction of Federal Administrative Agencies	1,500,000	1,500,000.00	1,369,898.90
232	01-2-2	Costs of building maintenance	4,500,000	4,500,000.00	4,493,100.55
233	01-2-2	Moving and shipping expenses	3,200,000	200,000.00	200,000.00
234	01-2-2	Compensation for separation from family	1,000,000	1,040,000.00	1,027,940.00
235	01-2-2	Remuneration for occasional, temporary and other work	1,700,000	3,100,000.00	3,076,058.55
236	01-2-2	Purchase of athletic equipment	200,000	660,000.00	644,895.00
237	01-2-2	Expenses of the Personnel Training Center	2,800,000	800,000.00	706,553.00

Article 5 (continued)

1	2	3	4	5	6
238	01-2-2	Compensation for overtime and nighttime work	1,000,000	2,200,000.00	2,200,000.00
239	01-2-2	Obligations to law enforcement agencies in the republics and autonomous provinces under Article 43 of the Law on Conduct of Law Enforcement in the Jurisdiction of Federal Administrative Agencies	17,000,000	34,830,171.00	34,830,171.00
240	01-2-3	Compensation for personal income and other expenses of personnel and to insure individuals employed in Yugoslav diplomatic and consular missions abroad	31,000,000	35,267,070.00	35,171,445.25
241	01-2-3	Expenses of the transit-reception center for refugees	1,500,000	1,000,000.00	1,000,000.00
242	01-2-3	Defense-related projects	5,000,000	8,000,000.00	8,000,000.00
243	01-2-3	Operating expenses of institutes	8,000,000	8,000,000.00	7,999,990.55
244	01-2-3	Funds for expenses of institutes related to rendering services to foreign services and third parties in Yugoslavia	89,000,000	35,000,000.00	27,503,705.75
		Total Basic Purpose 01	714,843,860	891,044,541.00	882,627,806.15
		Basic Purpose 03--Noneconomic Investments			
245	03-1	Financing under the modernization program	99,000,000	120,354,000.00	120,354,000.00

Article 5 (continued)

1	2	3	4	5	6
246	03-1	Purchase of vehicles and helicopters	28,000,000	28,000,000.00	28,000,000.00
247	03-1	Construction of reception centers for foreigners	8,900,000	900,000.00	900,000.00
248	03-1	Construction of the special facility of the Center for Servicing Equipment of Security Services	56,000,000	56,000,000.00	56,000,000.00
		Total Basic Purpose 03	191,900,000	205,254,000.00	205,254,000.00
		Total Section 14 (Items 225-248)	906,743,860	1,096,298,541.00	1,087,881,806.15
		Section 15. Federal Secretariat for Finance			
		Title 1. Secretariat			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
249	01-1-1	Personal incomes of personnel	34,603,670	38,837,114.35	38,837,114.35
250	01-2-1	Material outlays	2,200,000	2,252,000.00	2,012,094.85
251	01-2-2	Compensation for personal income and other benefits of officials	3,840,000	4,349,442.00	4,339,003.05
252	01-2-2	Compensation for separation from family	210,000	210,000.00	128,560.00
253	01-2-2	Assembly of evidence on Yugoslav property abroad	13,200	13,200.00	8,814.00
254	01-2-2	Operating expenses of the customs commission	75,000	138,224.65	138,224.65

Article 5 (continued)

1	2	3	4	5	6
255	01-2-2	Translation from and into foreign languages	50,000	82,172.65	43,177.35
256	01-2-2	Traveling expenses abroad	1,150,000	1,640,949.30	1,640,949.30
257	01-2-2	Remuneration of nonstaff personnel	70,000	340,648.90	340,648.90
258	01-2-2	Compensation for overtime	280,000	280,000.00	229,422.25
259	01-2-2	Cooperation with international financial organizations	290,000	290,000.00	249,105.85
260	01-2-2	Financing the program for advanced training of personnel	170,000	170,000.00	--
261	01-2-2	Purchase of and addition to equipment	450,000	450,000.00	450,000.00
262	01-2-2	Printing the budget and final account	46,000	46,000.00	1,076.10
263	01-2-2	Preparation of financial publications	65,000	65,000.00	55,000.00
264	01-2-2	Expenses of the Commission for Preparing Changes in the System	500,000	500,000.00	424,375.50
265	01-2-2	For designated purposes	190,000	190,000.00	94,950.00
266	01-2-2	New jobs in federal bodies and agencies	94,000,000	296,184.00	—
267	01-2-2	Funds for alignment of personal incomes in federal bodies and agencies	300,000,000	1,280,569.05	—
268	01-2-2	Funds for community consumption	106,000,000	164,000,000.00	162,684,164.00
269	01-2-2	Funds to finance scientific research projects and scientific studies	40,000,000	50,000,000.00	47,440,000.00
270	01-2-2	Costs of maintaining the CEMA Commission in Yugoslavia	700,000	700,000.00	426,375.90
271	01-2-3	Compensation for property nationalized in Yugoslavia	2,100,000	2,100,000.00	710,473.00

Article 5 (continued)

1	2	3	4	5	6
272	01-2-3	Compensation and commission of the Social Accounting Service	9,593,590	9,593,590.00	9,593,590.00
273	01-2-3	Rent on the Ethiopian Embassy	40,000	40,000.00	36,000.00
274	01-2-3	Expenses of the Commission for Revaluation of Fixed Capital	100,000	100,000.00	--
275	01-2-3	Defense-related projects	30,000	30,000.00	854.00
276	01-2-3	Funds for operation of the Fund of Solidarity With Nonaligned Countries and Developing Countries for 1979	1,384,290	1,384,290.00	115,874.95
277	01-2-3	Obligations to the African Development Fund	21,698,000	21,106,995.85	21,106,995.85
278	01-2-3	Member's assessment for the Inter-American Bank	40,062,620	39,744,628.30	2,096,701.00
279	01-2-3	Supplemental assessment of Yugoslavia for selective augmentation of the capital of the International Bank for Reconstruction and Development	35,937,000	53,461,890.00	53,461,890.00
280	01-2-3	Contribution to the International Development Association IDA	49,664,880	50,206,769.95	50,206,769.95
		Total Basic Purpose 01	745,513,250	443,899,669.00	396,872,204.80
		Basic Purpose 03--Noneconomic Investments			
281	03-1	Share of the Federation in financing preparation of the Staro Selo (Old Village) section of Kumrovec	15,000,000	15,000,000.00	15,000,000.00

Article 5 (continued)

1	2	3	4	5	6
282	03-1	Funds for adjustment envisaged by laws for noneconomic investments	68,000,000	--	--
		Total Basic Purpose 03	83,000,000	15,000,000.00	15,000,000.00
		Basic Purpose 05--Contributions and Supplemental Funds to the Budgets of Other Sociopolitical Communities			
283	05-2	Supplemental funds to the Socialist Republic of Bosnia-Hercegovina	3,121,700,000	3,232,400,000.00	3,232,400,000.00
284	05-2	Supplemental funds to the Socialist Republic of Macedonia	1,422,600,000	1,473,100,000.00	1,473,100,000.00
285	05-2	Supplemental funds to the Socialist Republic of Montenegro	1,080,200,000	1,730,700,000.00	1,730,700,000.00
286	05-2	Supplemental funds to the Socialist Autonomous Province of Kosovo	3,206,700,000	4,066,100,000.00	4,066,100,000.00
		Total Basic Purpose 05	8,831,200,000	10,502,300,000.00	10,502,300,000.00
		Basic Purpose 06--Funds Transferred to Social Services			
287	06-9	Supplemental earmarked funds transferred to the Old-Age and Disability Insurance Community of the Socialist Republic of Montenegro to cover the deficit in the Old-Age and Disability Insurance Fund	330,000,000	394,000,000.00	394,000,000.00

Article 5 (continued)

1	2	3	4	5	6
288	06-9	Funds for special-benefit pensions of military personnel in the context of the provisions of the Law on Federal Obligations for Veterans' Pensions	1,354,000,000	1,354,000,000.00	1,354,000,000.00
289	06-9	Funds for adjustment of military pensions	783,000,000	783,000,000.00	783,000,000.00
290	06-9	Supplemental earmarked funds to cover the deficit in the Fund for Old-Age Insurance of Military Personnel	3,200,000,000	3,200,000,000.00	3,200,000,000.00
		Total Basic Purpose 06	5,667,000,000	5,731,000,000.00	5,731,000,000.00
		Basic Purpose 08--Budgetary Reserve			
291	08-1	Permanent budgetary reserve	200,000,000	200,000,000.00	200,000,000.00
292	08-2	Current budgetary reserve	200,000,000	310,695,702.00	297,670,576.70
		Total Basic Purpose 08	400,000,000	510,695,702.00	497,670,576.70
		Basic Purpose 09--Funds Placed in Time Deposits and Set Aside in Other Obligations From Past Years			
293	09-4-2	Obligations under foreign loans and for nationalized property	22,000,000	22,000,000.00	6,774,615.75
294	09-4-2	Obligations on the basis of credits of the Socialist Republic of Montenegro to repair earthquake damage	8,000,000	8,066,903.00	8,066,903.00

Article 5 (continued)

1	2	3	4	5	6
295	09-4-2	For repayment of credits for agricultural surpluses used to finance the Federal Budget for 1965 and the Federal Budget for 1966	144,000,000	161,378,000.00	161,378,000.00
296	09-4-2	Funds to amortize bonds and absorb differences in rates of exchange from past years	3,807,800,000	2,857,533,536.89	2,857,533,536.89
297	09-4-2	Repayment of credit to the Yugoslav National Bank related to performance of the Program of Permanent Federal Commodity Reserves for 1975	236,000,000	336,000,000.00	336,000,000.00
298	09-4-2	Repayment of credit to the Yugoslav National Bank related to performance of the Program of Permanent Federal Commodity Reserves for 1976	470,000,000	770,000,000.00	770,000,000.00
299	09-4-2	Repayment of credit to the Yugoslav National Bank related to performance of the Program of Permanent Federal Commodity Reserves for 1977	155,000,000	296,356,270.80	296,356,270.80
300	09-4-2	Funds to repay international credits for improved transportation facilities in Montenegro	60,000,000	63,923,000.00	63,923,000.00

Article 5 (continued)

1	2	3	4	5	6
301	09-4-2	Funds to offset differences between dates of subscription of the loan and placement of the funds of the Federal Fund for Credit Financing the Economic Development of Economically Underdeveloped Republics and Autonomous Provinces	590,000,000	590,000,000.00	590,000,000.00
302	09-4-2	Obligations not met on the basis of the Federal Budget for 1978	1,680,700,000	84,700,000.00	84,262,653.05
303	09-4-2	Other obligations from past years and Ibar-Lepenac	100,000,000	991,000.01	--
303a		Obligations to the International Bank for Reconstruction and Development (Ibar-Lepenac)	--	35,273,979.35	35,273,979.35
		Total Basic Purpose 09	7,273,500,000	5,226,2-2,690.05	5,209,568,958.84
		Basic Purpose 10—Other Miscellaneous Expenditures			
304	10-1	Compensation to cover expenses of the Social Accounting Service for keeping records, monitoring tasks and information and analysis	140,000,000	140,000,000.00	140,000,000.00
		Total Basic Purpose 10	140,000,000	140,000,000.00	140,000,000.00
		Total Title 1	23,140,213,250	22,569,118,061.05	22,492,411,740.34

Article 5 (continued)

1	2	3	4	5	6
		Title 2. Federal Foreign Exchange Inspectorate			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
305	01-1-1	Personal incomes of personnel	30,648,910	31,482,128.00	31,482,128.00
306	01-2-1	Material outlays	1,375,000	1,575,000.00	1,574,518.90
307	01-2-2	Compensation for personal income and other benefits of officials	323,920	323,920.00	194,386.00
308	01-2-2	Remuneration of nonstaff personnel in foreign exchange inspectorates in the republics	45,500	35,500.00	31,579.80
309	01-2-2	Traveling expenses of foreign exchange inspectors in Yugoslavia	2,210,000	2,010,000.00	1,968,000.00
310	01-2-2	Rent and maintenance of office space	385,000	395,000.00	391,371.85
311	01-2-2	Traveling expenses abroad	500,000	600,000.00	544,199.00
312	01-2-2	Purchase of equipment	300,000	300,000.00	183,469.45
313	01-2-2	Public relations	5,400	5,400.00	2,697.75
		Total Basic Purpose 01	35,793,730	36,726,948.00	36,372,350.75
		Basic Purpose 03--Noneconomic Investments			
314	03-1	Purchase of office space	12,500,000	12,500,000.00	12,500,000.00
		Total Basic Purpose 03	12,500,000	12,500,000.00	12,500,000.00

Article 5 (continued)

1	2	3	4	5	6
		Total Title 2	48,293,730	49,226,948.00	48,872,350.75
		Total Section 15 (Items 249-314)	23,188,506,980	22,618,345,009.05	22,541,284,091.09
		Section 16. Federal Secretariat for Foreign Trade			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
315	01-1-1	Personal incomes of personnel	30,788,180	37,227,329.00	37,227,329.00
316	01-2-1	Material outlays	3,200,000	3,731,115.00	3,725,117.45
317	01-2-2	Compensation for personal income and other benefits of officials	4,105,410	4,990,628.00	4,960,930.30
318	01-2-2	Compensation for separation from family	205,440	311,400.00	311,400.00
319	01-2-2	Compensation for overtime of typists on the basis of the quota, remuneration of non-staff personnel and compensation of specialized commissions and work groups	460,000	460,000.00	261,277.20
320	01-2-2	Preparation of bulletins, other materials and forms for administering the foreign trade and foreign exchange systems	200,000	200,000.00	46,865.40
321	01-2-2	Scientific, information and documentary and advisory work of particular institutions	120,000	105,000.00	105,000.00
322	01-2-2	Expenses of foreign and Yugoslav delegations	2,550,000	2,350,000.00	1,457,483.08

Article 5 (continued)

1	2	3	4	5	6
323	01-2-2	Remuneration for translation of various specialized materials and foreign publications from foreign languages	50,000	50,000.00	--
324	01-2-2	Purchase of clothing and footwear	30,000	30,000.00	13,699.95
325	01-2-2	Current building maintenance	450,000	380,000.00	51,160.00
326	01-2-2	Membership dues in international organizations	6,822,000	7,694,000.00	6,940,928.90
327	01-2-2	Purchase of equipment	600,000	600,000.00	587,256.95
328	01-2-2	Expenses of the program for advanced training of personnel	42,000	112,000.00	100,342.55
329	01-2-3	Defense-related projects	120,000	120,000.00	93,594.75
		Total Basic Purpose 01	49,743,030	58,361,472.00	55,882,385.53
		Total Section 16 (Items 315-329)	49,743,030	58,361,472.00	55,882,385.53
		Section 17. Federal Secretariat for the Market and General Economic Affairs			
		Title 1. Secretariat			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
330	01-1-1	Personal incomes of personnel	14,085,810	16,545,986.00	16,545,986.00
331	01-2-1	Material outlays	1,911,190	2,341,190.00	2,341,190.00
332	01-2-2	Compensation for personal income and other benefits of officials	2,080,040	3,159,016.00	3,158,976.00

Article 5 (continued)

1	2	3	4	5	6
333	01-2-2	Compensation for overtime	300,000	180,000.00	80,000.00
334	01-2-2	Traveling expenses abroad	521,520	362,400.00	312,400.00
335	01-2-2	Expenses of international cooperation	280,000	110,000.00	80,000.00
336	01-2-2	Purchase of equipment	200,000	430,000.00	400,000.00
337	01-2-2	Traveling expenses in Yugoslavia	800,000	600,000.00	467,000.00
338	01-2-2	Expenses of data processing	100,000	30,000.00	30,000.00
339	01-2-2	Membership dues in international organizations	1,145,690	1,145,690.00	1,145,690.00
340	01-2-2	Remuneration of nonstaff personnel	57,100	44,400.00	28,100.00
341	01-2-2	Funds to finance costs related to analyzing and forecasting economic trends	5,587,780	2,927,980.00	2,927,980.00
342	01-2-2	Expenses of standardizing the methodology for monitoring economic trends	1,000,000	841,810.00	841,810.00
343	01-2-3	Defense-related projects	50,000	50,000.00	50,000.00
		Total Basic Purpose 01	28,119,130	28,768,472.00	28,409,132.00
		Total Title 1	28,119,130	28,768,472.00	28,409,132.00
		Title 2. Federal Market Inspectorate			
		Basic Purpose 01—Activity of Federal Bodies, Agencies and Organizations			
344	01-1-1	Personal incomes of personnel	16,209,850	18,736,052.00	18,138,955.55
345	01-2-1	Material outlays	1,750,000	1,750,000.00	1,187,320.10

Article 5 (continued)

1	2	3	4	5	6
346	01-2-2	Compensation for personal income and other benefits of officials	321,180	368,988.00	368,988.00
347	01-2-2	Compensation for overtime	200,000	200,000.00	79,407.30
348	01-2-2	Remuneration of authorized organizations and specialists for checking the quality of products being imported	2,000,000	800,000.00	590,283.05
349	01-2-2	Traveling expenses abroad	200,000	200,000.00	--
350	01-2-2	Expenses of monitoring quality	500,000	700,000.00	566,930.10
351	01-2-2	Rent	700,000	700,000.00	623,313.45
352	01-2-2	Costs of international cooperation	60,000	60,000.00	--
353	01-2-2	Expenses for specialized testimony and expert evaluation	700,000	700,000.00	85,822.75
354	01-2-2	Purchase of equipment	350,000	1,350,000.00	813,660.70
355	01-2-2	Purchase of specialized publications	80,000	80,000.00	79,187.00
356	01-2-2	Traveling expenses of market inspectors in Yugoslavia	3,000,000	3,000,000.00	2,037,621.00
357	01-2-2	Public relations	10,000	10,000.00	9,977.10
		Total Basic Purpose 01	26,081,030	28,655,040.00	24,581,465.10
		Total Title 2	26,081,030	28,655,040.00	24,581,465.10

Article 5 (continued)

1	2	3	4	5	6
		Title 3. Federal Directorate for Reserves of Industrial Products			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
358	01-2-4	Funds for operation of the work community	19,200,000	19,200,000.00	14,400,000.00
359	01-2-4	Funds for designated purposes	305,766,500	205,766,500.00	192,000,000.00
		Total Basic Purpose 01	324,966,500	224,966,500.00	206,400,000.00
		Total Title 3	324,966,500	224,966,500.00	206,400,000.00
		Title 4. Federal Directorate for Reserves of Foodstuffs			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
360	01-2-4	Funds for operation of the work community	28,968,500	28,968,500.00	20,748,885.60
361	01-2-4	Funds for designated purposes	702,465,000	702,465,000.00	702,465,000.00
		Total Basic Purpose 01	731,433,500	731,433,500.00	723,213,885.60
		Total Title 4	731,433,500	731,433,500.00	723,213,885.60
		Total Section 17 (Items 330-361)	1,110,600,160	1,013,828,512.00	982,604,482.70

Article 5 (continued)

1		3	4	5	6
		Section 18. Federal Secretariat for Jurisprudence and Organization of the Federal Administration			
		Title 1. Secretariat			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
362	01-1-1	Personal incomes of personnel	7,928,230	9,305,815.00	9,305,815.00
363	01-2-1	Material outlays	660,000	900,000.00	900,000.00
364	01-2-2	Compensation for personal income and other benefits of officials	2,206,620	3,239,503.00	3,239,503.00
365	01-2-2	Personal incomes of personnel with unassigned status	12,662,750	12,662,750.00	7,880,000.00
366	01-2-2	Compensation for separation from family	205,200	285,200.00	285,200.00
367	01-2-2	Extradition costs	700,000	700,000.00	700,000.00
368	01-2-2	Traveling expenses abroad	100,000	100,000.00	100,000.00
369	01-2-2	Translation of petitions and documents from foreign languages	20,000	20,000.00	20,000.00
370	01-2-2	Expenses of specialized testimony and costs of proceedings	50,000	50,000.00	50,000.00
371	01-2-2	Consultations related to preparation of legal statutes and traveling expenses incurred in connection with consultations	200,000	800,000.00	800,000.00

Article 5 (continued)

1	2	3	4	5	6
372	01-2-3	For carrying out the work program of the Institute for Comparative Law	2,500,000	2,500,000.00	2,500,000.00
373	01-2-3	Funds for operation of the Center for Improvement of the Federal Administration	3,000,000	3,053,796.00	2,453,796.00
374	01-2-3	Compensation of the Health Center of the Federal Secretariat for Internal Affairs for outpatient services	400,000	400,000.00	400,000.00
375	01-2-3	Funds for the AVNOJ award	2,215,000	2,215,000.00	2,215,000.00
376	01-2-3	Mosa Pijade fund for promotion of Pictorial Art	1,260,000	1,260,000.00	1,260,000.00
377	01-2-3	Funds for operation of the Commission for Articles Bearing the Image of the President of the Republic	120,000	120,000.00	120,000.00
378	01-2-3	Funds for carrying out the work program of the Museum of the Revolution of the Nationalities and Ethnic Minorities of Yugoslavia	7,600,000	8,299,342.00	8,299,342.00
379	01-2-3	Share in financing international meetings and other undertakings	1,800,000	320,000.00	--
380	01-2-3	Funds to pay for office space	16,403,000	16,403,000.00	10,555,403.25
381	01-2-3	Defense-related projects	3,000	3,000.00	--
		Total Basic Purpose 01	60,033,800	62,637,406.00	51,084,059.25

Article 5 (continued)

1	2	3	4	5	6
		Basic Purpose 03--Noneconomic Investments			
382	03-1	Construction of housing to support personnel changes and to improve the composition of personnel	28,000,000	74,016,980.00	74,016,980.00
383	03-1	Housing construction related to rotation of officials	54,500,000	1,000,000.00	1,000,000.00
384	03-1	Completion of construction of the office building of federal bodies and agencies at No 104 AVNOJ Boulevard in New Belgrade	250,000,000	278,258,040.00	278,258,040.00
385	03-1	Construction of dwellings for retired personnel of the Federal Secretariat for Internal Affairs	14,100,000	24,374,020.00	24,374,020.00
386	03-1	Investments for construction of the building and the permanent exhibit of the Museum of the Revolution of the Nationalities and Ethnic Minorities of Yugoslavia	48,582,000	51,038,000.00	51,038,000.00
		Total Basic Purpose 03	395,182,000	428,687,040.00	428,687,040.00
		Total Title 1	455,215,800	491,324,446.00	479,771,099.25

Article 5 (continued)

1	2	3	4	5	6
		Title 2. Center for Information and Documentation in the Federal Executive Council			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
387	01-1-1	Personal incomes of personnel	6,555,340	7,965,809.00	7,965,799.00
388	01-2-1	Material outlays	750,000	1,390,000.00	1,297,102.80
389	01-2-2	Compensation for personal income and other benefits of officials	301,180	599,991.00	595,786.55
390	01-2-2	Remuneration of nonstaff personnel	30,000	30,000.00	29,049.90
391	01-2-2	Traveling expenses abroad	60,000	60,000.00	43,642.60
392	01-2-2	Purchase of specialized literature	235,000	235,000.00	234,744.15
393	01-2-2	Material costs related to publishing and storing documentation and information	280,000	280,000.00	280,000.00
394	01-2-2	Expenses of operating the electronic computer	1,000,000	1,000,000.00	993,436.95
395	01-2-2	Expenses of preparing designs of the information system	500,000	--	--
396	01-2-2	Purchase of equipment	150,000	650,000.00	650,000.00
		Total Basic Purpose 01	9,861,520	12,210,800.00	12,089,561.95
		Total Title 2	9,861,520	12,210,800.00	12,089,561.95
		Total Section 18 (Items 362-396)	465,077,320	503,535,246.00	491,860,661.20

Article 5 (continued)

1	2	3	4	5	6
		Section 19. Federal Secretariat for Information			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
397	01-1-1	Personal incomes of personnel	16,722,400	18,390,637.00	18,390,637.00
398	01-2-1	Material outlays	674,800	674,800.00	674,445.60
399	01-2-2	Compensation for personal income and other benefits of officials	1,829,620	1,829,620.00	1,825,454.00
400	01-2-2	Subscription to newspapers, journals and publications	700,000	700,000.00	698,268.95
401	01-2-2	Expenses of visits by foreign guests and journalists	2,600,000	2,600,000.00	2,599,780.75
402	01-2-2	State visits--foreign newsmen escorting visiting heads of state	1,400,000	1,400,000.00	1,399,644.35
403	01-2-2	Publication of bulletins and expenses of holding press conferences and publishing activity related to the work of the Federal Executive Council	3,500,000	3,500,000.00	3,499,641.45
404	01-2-2	Carrying out the program of international relations of the Federation of Yugoslav Newsmen	845,000	845,000.00	845,000.00
405	01-2-2	Expenses of cooperation on a multilateral basis in the field of information among the nonaligned developing countries	234,000	234,000.00	233,755.55

Article 5 (continued)

1	2	3	4	5	6
406	01-2-2	Addition and replacement ...	309,000	309,000.00	229,454.10
407	01-2-3	Publishing activity, written press releases, purchase of publications about Yugoslavia in foreign language, news and documentary films, news photo displays, exhibitions, special events, operating fund of the secretariat and costs of shipping information and propaganda materials	20,000,000	20,000,000.00	19,991,922.80
408	01-2-3	Purchase of periodicals intended for foreign countries	37,000,000	37,000,000.00	37,000,000.00
409	01-2-3	Radio program for foreign countries, exchanges of radio and TV programs with foreign countries, news agency services and preparation of the weekly film journal	158,500,000	158,500,000.00	158,500,000.00
410	01-2-3	Information-and-propaganda and culture-and-entertainment activities directed toward Yugoslav workers and emigres abroad	14,000,000	14,000,000.00	13,999,978.85
411	01-2-3	International Press Center in Belgrade	5,500,000	5,500,000.00	5,500,000.00
412	01-2-3	Defense-related projects	12,000,000	12,000,000.00	11,704,742.95
413	01-2-3	Regular costs of maintaining the Service for Defense Preparations of Radio Yugoslavia	4,000,000	4,000,000.00	4,000,000.00
414	01-2-3	Regular expenses of maintaining the Service for Defense Preparations of the TANJUG News Agency	700,000	700,000.00	700,000.00

Article 5 (continued)

1	2	3	4	5	6
		Total Basic Purpose 01	280,514,820	282,183,057.00	281,792,726.35
		Basic Purpose 03--Noneconomic Investments			
415	03-1	Construction and modernization of the technical facility of Radio Yugoslavia	51,000,000	54,536,000.00	54,536,000.00
		Total Basic Purpose 03	51,000,000	54,536,000.00	54,536,000.00
		Total Section 19 (Items 397-415)	331,514,820	336,719,057.00	336,328,726.35
		Section 20. Federal Committee for Energy and Industry			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
416	01-1-1	Personal incomes of personnel	16,538,970	18,015,043.00	18,015,043.00
417	01-2-1	Material outlays	1,400,000	1,400,000.00	1,400,000.00
418	01-2-2	Compensation for personal income and other benefits of officials	2,617,960	3,021,133.00	3,021,133.00
419	01-2-2	Expenses of international cooperation in Yugoslavia	520,000	520,000.00	520,000.00
420	01-2-2	Traveling expenses abroad	1,200,000	1,200,000.00	1,200,000.00
421	01-2-2	Remuneration of members of commissions and nonstaff personnel	200,000	200,000.00	134,750.15
422	01-2-2	Costs of holding meetings of the committee	340,000	340,000.00	43,099.10

Article 5 (continued)

1	2	3	4	5	6
423	01-2-2	Membership dues in international organizations	5,140,000	5,140,000.00	5,042,003.15
424	01-2-2	Compensation for separation from family	70,000	70,000.00	25,000.00
425	01-2-2	Share of costs of the International Study of the INFCE in 1979	1,200,000	1,200,000.00	1,200,000.00
426	01-2-2	Compensation for overtime	80,000	80,000.00	--
427	01-2-2	Purchase of equipment	180,000	180,000.00	136,233.15
428	01-2-3	Defense-related projects	400,000	400,000.00	269,763.05
		Total Basic Purpose 01	29,886,930	31,766,176.00	31,007,024.60
		Total Section 20 (Items 416-428)	29,886,930	31,766,176.00	31,007,024.60
		Section 21. Federal Committee for Agriculture			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
429	01-1-1	Personal incomes of personnel	11,512,340	14,385,433.00	14,385,433.00
430	01-1-1	Personal incomes of personnel at border stations	25,603,480	29,101,161.00	28,358,906.00
431	01-2-1	Material outlays	1,800,000	2,400,000.00	2,400,000.00
432	01-2-2	Material outlays of border stations	9,000,000	8,500,000.00	8,500,000.00
433	01-2-2	Compensation for personal income and other benefits of officials	2,307,300	2,864,839.00	2,834,139.00
434	01-2-2	Contribution to the World Food Program WEP	3,700,000	3,700,000.00	3,700,000.00

Article 5 (continued)

1	2	3	4	5	6
435	01-2-2	Expenses of international cooperation in water management	580,000	630,000.00	630,000.00
436	01-2-2	Remuneration of members of special commissions	230,000	215,000.00	215,000.00
437	01-2-2	Expenses of monitoring chemicals for plant protection	100,000	100,000.00	91,800.00
438	01-2-2	Expenses of monitoring preparations for protection of livestock	40,000	40,000.00	40,000.00
439	01-2-2	Expenses of the Yugoslav Committee for the International Hydrological Program	3,000,000	2,950,000.00	2,950,000.00
440	01-2-2	Enforcement of measures in the border zone in the fields of veterinary science and plant protection	3,500,000	4,800,000.00	4,800,000.00
441	01-2-2	Expenses of international cooperation in agriculture and forestry	2,000,000	2,200,000.00	2,200,000.00
442	01-2-2	Expenses of holding meetings of the committee	300,000	200,000.00	200,000.00
443	01-2-2	For holding seminars, conducting courses and preparing regulations in the field of veterinary science and plant protection	1,300,000	1,300,000.00	1,300,000.00
444	01-2-2	Remuneration of nonstaff personnel in the field of plant protection at border crossings	300,000	300,000.00	300,000.00
445	01-2-2	To cover movements of plant diseases on the quarantine list and plant pests	400,000	400,000.00	400,000.00
446	01-2-2	Membership dues in international organizations (FAO)	9,662,500	11,462,500.00	11,414,126.65

Article 5 (continued)

1	2	3	4	5	6
447	01-2-2	Compensation for overtime in the field of veterinary science at border crossings	350,000	350,000.00	350,000.00
448	01-2-2	Compensation for overtime in the field of plant protection at border crossings	600,000	600,000.00	600,000.00
449	01-2-2	Recognition of newly created varieties and approval of production of seed and nursery stock	1,900,000	1,900,000.00	1,900,000.00
450	01-2-2	Remuneration of nonstaff personnel for veterinary inspection at the border	300,000	300,000.00	300,000.00
451	01-2-2	For verification and application of new technologies and techniques in agriculture and forestry in accordance with the policy governing economic development in 1978	2,000,000	350,000.00	260,000.00
452	01-2-2	Preparation and printing of instructions for enforcement of regulations and measures under federal jurisdiction	1,100,000	960,000.00	954,500.00
453	01-2-2	Holding of fairs, exhibitions, conferences, symposiums and congresses to promote agriculture	1,400,000	1,540,000.00	1,540,000.00
454	01-2-2	Monitoring, establishing and conducting cooperation with countries with which Yugoslavia has intergovernmental committees and commissions, especially with the developing countries	900,000	750,000.00	750,000.00

Article 5 (continued)

1	2	3	4	5	6
455	01-2-2	Purchase of and addition to equipment	1,250,000	1,250,000.00	1,229,386.55
456	01-2-2	Costs of ascertaining the behavior of active ingredients of pesticides	350,000	350,000.00	350,000.00
457	01-2-2	Operating expenses of the committee's commission and task forces	360,000	360,000.00	360,000.00
458	01-2-2	Compensation of officials for separation from family	51,360	66,360.00	58,520.45
459	01-2-2	Expenses of the Yugoslav Commission for Protection Against Pollution of the Sea and Water and Inland Waterways	230,000	30,000.00	12,784.90
460	01-2-2	Diagnosis of viral diseases	300,000	300,000.00	300,000.00
461	01-2-2	Contribution to the International Food Reserve for Crisis Situations	15,000,000	17,899,689.00	17,899,689.00
462	01-2-2	Preparation of the symposium entitled "Production, Technology and Use of Corn"	250,000	250,000.00	250,000.00
463	01-2-3	Defense-related projects	800,000	800,000.00	800,000.00
		Total Basic Purpose 01	102,476,980	113,604,982.00	112,634,285.55
		Total Section 21 (Items 429-463)	102,476,980	113,604,982.00	112,634,285.55

Article 5 (continued)

1	2	3	4	5	6
		Section 22. Federal Committee for Transportation and Communications			
		Title 1. Committee			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
464	01-1-1	Personal incomes of personnel	12,887,000	17,149,091.00	17,149,091.00
465	01-2-1	Material outlays	1,500,000	1,550,000.00	1,550,000.00
466	01-2-2	Compensation for personal income and other benefits of officials	2,383,000	3,217,992.00	3,217,992.00
467	01-2-2	Preparation of technical regulations	800,000	800,000.00	800,000.00
468	01-2-2	Expenses of international cooperation	2,160,000	2,160,000.00	2,160,000.00
469	01-2-2	Traveling expenses abroad	2,500,000	2,500,000.00	2,500,000.00
470	01-2-2	Remuneration of commission members	420,000	420,000.00	300,000.00
471	01-2-2	Printing of international traffic licenses	150,000	150,000.00	150,000.00
472	01-2-2	Purchase of and addition to equipment	214,000	164,000.00	164,000.00
473	01-2-2	Membership dues in international organizations	4,756,000	4,756,000.00	4,756,000.00
474	01-2-2	Expenses of the participation of specialists of Jugoregistar in matters of interest to the Federation	1,000,000	1,000,000.00	1,000,000.00

Article 5 (continued)

1	2	3	4	5	6
475	01-2-2	Compensation for separation from family	52,000	127,500.00	127,500.00
476	01-2-2	Costs of meetings of the committee	280,000	280,000.00	280,000.00
477	01-2-2	Expenses of representative offices abroad	1,050,000	1,050,000.00	1,050,000.00
478	01-2-2	Maintaining regular air service between Belgrade and Tirana	2,517,000	4,160,000.00	4,160,000.00
479	01-2-3	For safety of navigation in maritime shipping	41,030,000	48,527,160.00	48,527,160.00
480	01-2-3	For safety of navigation in river shipping	50,000,000	53,006,958.00	53,006,958.00
481	01-2-3	Defense-related projects	270,000	270,000.00	270,000.00
482	01-2-3	Funds for the work of the Geomagnetic Institute on matters of interest to the Federation	7,000,000	8,574,215.00	8,574,215.00
483	01-2-3	Funds to cover obligations for travel passes in passenger transportation	80,000,000	71,173,325.00	71,165,620.30
		Total Basic Purpose 01	210,969,000	221,036,241.00	220,908,536.30
		Basic Purpose 03--Noneconomic Investments			
484	03-1	Taking over the Rijeka Coastal Radio Station	12,952,000	12,952,000.00	12,952,000.00
485	03-1	Financing the program for modernization of the Institution for Maintaining Maritime Shipping Lanes and the Institution for Maintaining Inland Waterways	11,250,000	29,107,000.00	29,107,000.00

Article 5 (continued)

1	2	3	4	5	6
		Total Basic Purpose 03	24,202,000	42,059,000.00	42,059,000.00
		Total Title 1	235,171,000	263,095,241.00	262,967,536.30
		Title 2. Federal Administration for Flight Control			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
486	01-1-1	Personal incomes of personnel	225,745,400	209,372,456.00	206,055,918.00
487	01-2-1	Material outlays	2,200,000	3,019,810.00	2,818,302.70
488	01-2-2	Compensation for personal income and other benefits of officials	343,400	644,785.00	643,756.20
489	01-2-2	Operating expenses of facilities	30,000,000	51,430,026.00	45,263,553.70
490	01-2-2	Rent	1,451,700	1,451,700.00	1,008,636.60
491	01-2-2	Costs of aircraft use	3,300,000	5,249,800.00	5,249,229.35
492	01-2-2	Postage and telegraph and telephone service	20,000,000	22,732,744.00	17,172,827.20
493	01-2-2	Compensation for work at night and on holidays and for overtime	5,000,000	7,900,000.00	6,219,825.15
494	01-2-2	Remuneration of nonstaff personnel	500,000	1,074,800.00	932,520.23
495	01-2-2	Expenses of vehicle use	3,000,000	5,633,100.00	5,371,459.20
496	01-2-2	Insurance	1,660,000	2,120,000.00	1,647,231.60
497	01-2-2	Traveling expenses in Yugoslavia	4,400,000	7,654,270.00	5,907,696.30
498	01-2-2	Print shop expenses	560,000	710,000.00	708,974.20

Article 5 (continued)

1	2	3	4	5	6
499	01-2-2	Purchase of clothing and footwear	4,350,000	5,472,000.00	5,467,438.60
500	01-2-2	Bank commissions	1,200,000	1,200,000.00	879,113.40
501	01-2-2	Traveling expenses abroad	345,000	1,100,000.00	571,460.45
502	01-2-2	Membership dues in international and other organizations	144,200	152,200.00	66,243.15
503	01-2-2	Purchase of equipment for workplace safety	240,000	607,050.00	604,627.15
504	01-2-2	Expenses incurred from issuance of guarantees	65,000	65,000.00	194.00
505	01-2-2	Addition to inventory	580,000	2,119,900.00	2,089,158.25
506	01-2-2	Guarding and security of property	950,000	1,636,000.00	1,494,888.50
507	01-2-2	Medical examinations and check-ups of pilots and chauffeurs	850,000	850,000.00	835,003.85
508	01-2-2	Purchase of school supplies and textbooks for training	450,000	450,000.00	444,952.35
509	01-2-2	Public relations	100,000	100,000.00	49,011.35
510	01-2-3	Defense-related projects	220,000	220,000.00	108,561.35
		Total Basic Purpose 01	307,654,700	333,185,641.00	311,610,582.65
		Basic Purpose 03--Noneconomic Investments			
511	03-1	Financing the program for integration of joint services for guidance of civilian and military aircraft	157,400,000	137,400,000.00	137,400,000.00
512	03-1	Financing the program for modernization of the joint services for guidance of civilian and military aircraft	154,000,000	164,284,000.00	164,284,000.00

Article 5 (continued)

1	2	3	4	5	6
		Total Basic Purpose 03	311,400,000	301,684,000.00	301,684,000.00
		Total Title 2	619,054,700	634,869,641.00	613,294,582.85
		Title 3. Federal Administration for Radio Communications			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
513	01-1-1	Personal incomes of personnel	13,462,000	15,672,758.00	5,654,862.25
514	01-2-1	Material outlays	800,000	800,000.00	797,496.25
515	01-2-2	Compensation for personal income and other benefits of officials	607,300	698,014.00	672,690.60
516	01-2-2	Compensation for overtime	165,000	115,000.00	89,481.15
517	01-2-2	Maintenance of monitoring and measuring centers	1,000,000	1,000,000.00	978,038.70
518	01-2-2	Purchase of and addition to equipment	210,000	610,000.00	505,360.60
519	01-2-2	Expenses of the motor pool	260,000	260,000.00	259,645.50
520	01-2-2	Traveling expenses in Yugoslavia	400,000	400,000.00	377,945.30
521	01-2-2	Traveling expenses abroad	486,000	486,000.00	405,713.70
522	01-2-2	Purchase of clothing and footwear	25,000	25,000.00	23,975.00
523	01-2-2	Preparation of specialized technical regulations, instructions and studies	20,000	20,000.00	20,000.00
524	01-2-2	Data processing for purposes of information and documentation	620,000	560,000.00	557,672.00

Article 5 (continued)

1	2	3	4	5	6
525	01-2-3	Defense-related projects	330,000	40,000.00	32,048.15
		Total Basic Purpose 01	18,385,300	20,686,772.00	20,374,929.20
		Basic Purpose 03--Noneconomic Investments			
526	03-1	Financing the program for development and modernization of work to plan frequencies and monitor radio communications	17,500,000	21,084,000.00	21,084,000.00
		Total Basic Purpose 03	17,500,000	21,084,000.00	21,084,000.00
		Total Title 3	35,885,300	41,770,772.00	41,458,929.20
		Title 4. Federal Aviation Inspectorate			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
527	01-1-1	Personal incomes of personnel	7,318,600	8,989,619.00	8,989,619.00
528	01-2-1	Material outlays	544,000	944,000.00	944,000.00
529	01-2-2	Compensation for personal income and other benefits of officials	356,400	366,603.00	366,603.00
530	01-2-2	Expenses of aircraft and vehicle use	200,000	100,000.00	100,000.00
531	01-2-2	Purchase of clothing and footwear	140,000	140,000.00	140,000.00
532	01-2-2	Expenses of international cooperation	25,000	25,000.00	25,000.00

Article 5 (continued)

1	2	3	4	5	6
533	01-2-2	Traveling expenses abroad	925,000	725,000.00	725,000.00
534	01-2-2	Remuneration of nonstaff personnel	200,000	233,000.00	233,000.00
535	01-2-2	Traveling and moving expenses	900,000	900,000.00	900,000.00
536	01-2-2	Purchase of and addition to equipment	1,000,000	940,000.00	940,000.00
537	01-2-2	Costs of translation	40,000	40,000.00	40,000.00
538	01-2-2	Costs of organizing conferences	30,000	10,000.00	10,000.00
539	01-2-2	Costs of specialized education	80,000	45,000.00	38,000.00
540	01-2-2	Compensation for work at night and on holidays	20,000	20,000.00	20,000.00
541	01-2-2	Public relations	3,600	5,600.00	5,600.00
542	01-2-2	Compensation for workers' commuting to and from work	220,000	260,000.00	260,000.00
543	01-2-2	Studies and analyses	100,000	50,000.00	50,000.00
544	01-2-2	Membership dues and assessments	120,000	120,000.00	120,000.00
545	01-2-3	Defense-related projects	20,000	10,000.00	10,000.00
		Total Basic Purpose 01	12,242,600	13,923,822.00	13,916,822.00
		Total Title 4	12,242,600	13,923,822.00	13,916,822.00
		Total Section 22 (Items 464-545)	902,353,600	953,659,476.00	931,637,870.35

Article 5 (continued)

1	2	3	4	5	6
		Section 23. Federal Committee for Labor, Health and Social Welfare			
		Title 1. Committee			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
546	01-1-1	Personal incomes of personnel	22,164,140	26,251,772.00	26,251,772.00
547	01-2-1	Material outlays	776,000	776,000.00	776,000.00
548	01-2-2	Compensation for personal income and other benefits of officials	2,757,520	3,511,983.00	3,511,983.00
549	01-2-2	Traveling expenses abroad	2,000,000	2,000,000.00	2,000,000.00
550	01-2-2	Traveling expenses in Yugoslavia	600,000	450,000.00	450,000.00
551	01-2-2	Traveling expenses of foreign specialists and of Yugoslav specialists escorting them, costs related to meetings and talks with foreign delegations and diplomatic and other representatives	650,000	400,000.00	400,000.00
552	01-2-2	Remuneration of members of standing specialized commissions	300,000	250,000.00	250,000.00
553	01-2-2	Costs of holding meetings of the committee and its constituent bodies for preparation of the health service for nationwide defense	600,000	300,000.00	300,000.00

Article 5 (continued)

1	2	3	4	5	6
554	01-2-2	Costs of publishing reports of the labor inspectorate	160,000	160,000.00	160,000.00
555	01-2-2	Membership dues in international organizations	6,397,550	9,270,440.00	9,270,440.00
556	01-2-2	Certain projects in the domain of the pharmaceutical service and medical supply of interest to the Federation let out on contract to appropriate specialized institutions	700,000	700,000.00	700,000.00
557	01-2-2	Purchase of and addition to equipment	300,000	730,000.00	730,000.00
558	01-2-2	Translation of materials from foreign languages	70,000	70,000.00	70,000.00
559	01-2-2	Purchase of specialized literature	65,000	65,000.00	65,000.00
560	01-2-2	Remuneration of parttime personnel and nonstaff personnel related to public health inspection at the border	760,000	1,060,000.00	1,060,000.00
561	01-2-2	Compensation for overtime related to public health inspection at the border	250,000	185,000.00	185,000.00
562	01-2-2	Rent and maintenance of office space for border public health surveillance	350,000	500,000.00	500,000.00
563	01-2-2	Purchase of uniforms for border public health inspectors	120,000	120,000.00	120,000.00
564	01-2-2	Costs of protecting the country against the importation and spread of communicable diseases	1,900,000	2,600,000.00	2,600,000.00
565	01-2-2	Expenses of analyzing drugs	300,000	200,000.00	200,000.00

Article 5 (continued)

1	2	3	4	5	6
566	01-2-2	Costs related to conducting public health surveillance at the border	800,000	1,175,000.00	1,175,000.00
567	01-2-2	Costs of medical treatment of foreign nationals in Yugoslavia	1,000,000	500,000.00	500,000.00
568	01-2-2	Protection against ionizing radiation	240,000	200,000.00	200,000.00
569	01-2-2	Financial support and housing of refugees	3,200,000	3,770,000.00	3,770,000.00
570	01-2-2	Certain projects in the field of health care of immediate interest to performance of the functions of the Federation which will be let out on contract to the Federal Bureau for Health Care	6,289,990	6,289,990.00	6,289,990.00
571	01-2-2	Expenses of monitoring pollution of international and interrepublic waters	1,000,000	1,000,000.00	1,000,000.00
572	01-2-2	Purchase of equipment	2,000,000	--	--
573	01-2-2	Operating expenses of the interdepartmental task force for coordinating the work of federal agencies in carrying out the decisions of the World Conference of the International Woman's Year of the United Nations	150,000	1,750,000.00	1,750,000.00
574	01-2-3	Financing activity directed toward Yugoslavs employed abroad	16,000,000	16,000,000.00	16,000,000.00
575	01-2-3	Funds for May Day awards	1,212,000	1,212,000.00	1,212,000.00
576	01-2-3	Defense-related projects	120,000	120,000.00	106,000.00

Article 5 (continued)

1	2	3	4	5	6
		Total Basic Purpose 01	73,232,200	81,617,185.00	81,603,185.00
		Basic Purpose 03--Noneconomic Investments			
577	03-1	Share of the Federation in construction of the building for handicapped refugees in Pristina	9,300,000	9,300,000.00	9,300,000.00
		Total Basic Purpose 03	9,300,000	9,300,000.00	9,300,000.00
		Total Title 1	82,532,200	90,917,185.00	90,903,185.00
		Title 2. Federal Bureau for Employment Security			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
578	01-1-1	Personal incomes of personnel	12,890,200	13,802,256.00	13,802,256.00
579	01-2-1	Material outlays	2,046,120	2,046,120.00	1,817,424.00
580	01-2-2	Compensation for personal income and other benefits of officials	903,730	922,929.00	922,863.15
581	01-2-2	Material costs of standing commissions which Yugoslavia has with other countries	554,400	554,400.00	443,867.40
582	01-2-2	Compensation for separation from family of social workers abroad and costs of sending those workers abroad	5,500,000	5,500,000.00	3,813,837.40

Article 5 (continued)

1	2	3	4	5	6
583	01-2-2	Costs of printing and publishing bulletins and reports	240,000	240,000.00	65,443.80
584	01-2-2	Official travel in Yugoslavia	330,000	330,000.00	172,457.50
585	01-2-2	Compensation for overtime and nighttime work	15,000	15,000.00	--
586	01-2-2	Traveling expenses abroad	900,000	900,000.00	253,684.85
587	01-2-2	Purchase of specialized literature	40,000	40,000.00	24,540.50
588	01-2-2	Purchase of and addition to equipment	200,000	200,000.00	200,000.00
589	01-2-3	Defense-related projects	60,000	60,000.00	7,680.70
		Total Basic Purpose 01	23,679,450	24,610,705.00	21,524,145.30
		Total Title 2	23,679,450	24,610,705.00	21,524,145.30
		Total Section 23 (Items 546-589)	106,211,650	115,527,890.00	112,427,330.30
		Section 24. Federal Committee for Affairs of Veterans and Disabled Military Personnel			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
590	01-1-1	Personal incomes of personnel	3,862,020	4,157,307.00	4,157,287.00
591	01-2-1	Material outlays	366,160	581,160.00	278,590.05
592	01-2-2	Compensation for personal income and other benefits of officials	935,840	1,070,443.00	1,065,041.10
593	01-2-2	Traveling expenses abroad	390,000	390,000.00	193,818.80

Article 5 (continued)

1	2	3	4	5	6
594	01-2-2	Traveling expenses in Yugoslvia	200,000	200,000.00	159,357.00
595	01-2-2	Translation of disability and other documents and materials from foreign languages	42,500	42,500.00	42,500.00
596	01-2-2	Expenses of holding meetings of the committee	210,000	210,000.00	70,219.80
597	01-2-3	Care for the graves and cemeteries of Yugoslav soldiers	3,000,000	2,785,000.00	1,604,698.00
		Total Basic Purpose 01	9,006,540	9,436,410.00	7,571,511.75
		Basic Purpose 06--Funds Transferred to Social Services			
598	06-9	Funds for special-benefit pensions (not including military pensions) in the context of the provisions of the Law on Obligations of the Federation for Veterans' Pensions	9,457,000,000	9,457,000,000.00	9,456,639,988.40
		Total Basic Purpose 06	9,457,000,000	9,457,000,000.00	9,456,639,988.40
		Basic Purpose 07--Other Earmarked Funds			
599	07-4-1	Funds for disability benefits of disabled military personnel	3,192,000,000	3,090,598,757.20	3,090,598,757.20
600	07-4-1	Funds for health care of disabled military personnel	766,600,000	907,391,512.40	907,391,512.40

Article 5 (continued)

1	2	3	4	5	6
601	07-4-1	Funds for health care of disabled military personnel pertaining to fulfillment of the plan for cooperation with the People's Republic of Poland	400,000	263,760.10	263,760.10
602	07-4-1	Funds for the veteran's supplement	86,700,000	47,262,985.75	47,262,985.75
603	07-4-1	Compensation to holders of the 1941 Commemorative Partisan Medal and other decorations	225,700,000	177,749,668.80	177,749,668.80
604	07-4-1	Disability benefits of recipients abroad	32,000,000	17,495,978.70	17,495,978.70
		Total Basic Purpose 07	4,303,400,000	4,240,762,662.95	4,240,762,662.95
		Total Section 24 (Items 590-604)	17,769,406,520	13,707,199,072.95	13,704,974,163.10
		Section 25. Federal Committee for Legislation			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
605	01-1-1	Personal incomes of personnel	5,160,780	6,055,440.00	6,055,440.00
606	01-2-2	Material outlays	300,000	400,000.00	392,992.95
607	01-2-2	Compensation for personal income and other benefits of officials	2,066,120	2,155,610.00	2,101,078.70
608	01-2-2	Compensation for separation from family	51,360	188,560.00	173,560.00
609	01-2-2	Translation and copying of specialized material	33,600	33,600.00	--

Article 5 (continued)

1	2	3	4	5	6
610	01-2-2	Traveling expenses in Yugoslavia of members of the committee and its constituent bodies	752,400	652,400.00	146,909.20
611	01-2-2	Traveling expenses abroad	350,000	350,000.00	12,748.35
612	01-2-2	Public relations	25,000	25,000.00	10,894.40
613	01-2-2	Purchase of equipment	60,000	60,000.00	773.00
		Total Basic Purpose 01	8,799,260	9,920,610.00	8,894,396.60
		Total Section 25 (Items 605-613)	8,799,260	9,920,610.00	8,894,396.60
		Section 26. Federal Customs Administration			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
614	01-1-1	Personal incomes of personnel	605,611,010	688,788,325.00	688,788,325.00
615	01-2-1	Material outlays of the Federal Customs Administration	8,000,000	8,000,000.00	8,000,000.00
616	01-2-1	Material outlays of customs houses	48,000,000	51,300,000.00	51,300,000.00
617	01-2-2	Compensation for personal income and other benefits of officials	2,273,000	2,334,197.00	2,194,197.00
618	01-2-2	Rent	7,000,000	6,700,000.00	6,700,000.00
619	01-2-2	Compensation for damages under Articles 252, 283 and 356 of the Customs Law	250,000	150,000.00	150,000.00
620	01-2-2	Traveling expenses abroad	600,000	700,000.00	620,000.00
621	01-2-2	Compensation for work on Sunday, at night and on holidays	14,000,000	16,500,000.00	16,500,000.00

Article 5 (continued)

1	2	3	4	5	6
622	01-2-2	Compensation for conducting customs formalities outside the town where the customs house is located	2,500,000	2,300,000.00	2,050,000.00
623	01-2-2	Maintenance of buildings, platforms and other facilities	4,000,000	3,000,000.00	2,800,000.00
624	01-2-2	Expenses of the Council of the Customs Service	100,000	100,000.00	--
625	01-2-2	Purchase of clothing and footwear	16,000,000	13,000,000.00	13,000,000.00
626	01-2-2	Membership dues in international organizations	662,000	762,000.00	762,000.00
627	01-2-2	Purchase of passenger cars	1,500,000	1,500,000.00	1,200,000.00
628	01-2-2	Expenses of maintaining the Electronic Computer Center	8,000,000	10,000,000.00	10,000,000.00
629	01-2-2	Expenses of preventing customs crimes and of operating and maintaining equipment	11,000,000	8,800,000.00	7,450,000.00
630	01-2-2	Costs of the boarding school	900,000	900,000.00	850,000.00
631	01-2-2	Costs of regular examinations of personnel	1,500,000	1,300,000.00	1,150,000.00
632	01-2-2	Costs of insuring personnel	1,300,000	1,300,000.00	1,000,000.00
633	01-2-2	Compensation for overtime work in customs houses	1,500,000	500,000.00	220,000.00
634	01-2-2	Awards for detection of customs violations	1,500,000	1,500,000.00	1,500,000.00
635	01-2-3	Defense-related projects	2,000,000	2,000,000.00	2,000,000.00
		Total Basic Purpose 01	738,196,010	821,434,522.00	818,234,522.00

Article 5 (continued)

1	2	3	4	5	6
		Basic Purpose 03--Noneconomic Investments			
636	03-1	Financing the program for modernization of the customs service	208,000,000	321,426,000.00	321,426,000.00
		Total Basic Purpose 03	208,000,000	321,426,000.00	321,426,000.00
		Total Section 26 (Items 614-636)	946,196,010	1,142,860,522.00	1,139,660,522.00
		Section 27. Federal Bureau for Social Planning			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
637	01-1-1	Personal incomes of personnel	22,948,960	25,097,017.00	25,087,617.00
638	01-2-1	Material outlays in regular activity	3,500,000	4,269,000.00	4,269,000.00
639	01-2-2	Compensation for personal income and other benefits of officials	5,972,750	7,070,411.00	7,063,327.30
640	01-2-2	Traveling expenses abroad	380,000	579,120.00	481,072.55
641	01-2-2	Periodicals and other publications	600,000	60,000.00	60,000.00
642	01-2-2	Remuneration of nonstaff personnel and costs of conducting surveys	350,000	362,700.00	302,079.00
643	01-2-2	Purchase of and addition to equipment	2,100,000	2,355,000.00	2,355,000.00
644	01-2-2	Compensation for overtime	450,000	720,000.00	719,969.00

Article 5 (continued)

1	2	3	4	5	6
645	01-2-2	Preparation of expert analyses and other documents	900,000	300,000.00	296,239.00
646	01-2-3	Defense-related projects	150,000	150,000.00	135,105.70
		Total Basic Purpose 01	37,351,710	40,963,248.00	40,769,409.55
		Total Section 27 (Items 637-646)	37,351,710	40,963,248.00	40,769,409.55
		Section 28. Federal Bureau for Prices			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
647	01-1-1	Personal incomes of personnel	6,244,000	7,938,490.00	7,938,490.00
648	01-2-1	Material outlays in regular activity	700,000	963,000.00	963,000.00
649	01-2-2	Compensation for personal income and other benefits of officials	1,821,430	2,051,726.00	2,051,156.00
650	01-2-2	Costs of printing publications	50,000	10,000.00	10,000.00
651	01-2-2	Compensation for overtime	183,000	100,000.00	100,000.00
652	01-2-2	Purchase of equipment	165,000	165,000.00	165,000.00
653	01-2-2	Costs of holding meetings of the bureau's council	100,000	100,000.00	100,000.00
654	01-2-2	Costs of technical cooperation with organs of price bureaus of the provinces	70,000	30,000.00	30,000.00
655	01-2-2	Expenses of preparing materials to elaborate upcoming sublegal enactments	70,000	--	--
656	01-2-2	Traveling expenses abroad	80,000	80,000.00	80,000.00

Article 5 (continued)

1	2	3	4	5	6
657	01-2-2	Translation into the languages of the nationalities and ethnic minorities	30,000	--	--
658	01-2-3	Defense-related projectss	15,000	15,000.00	10,000.00
		Total Basic Purpose 01	9,528,430	11,453,216.00	11,447,646.00
		Total Section 28 (Items 647-658)	9,528,430	11,453,216.00	11,447,646.00
		Section 29. Federal Bureau for Statistics			
		Basic Purpose 01—Activity of Federal Bodies, Agencies and Organizations			
659	01-1-1	Personal incomes of personnel	76,475,100	81,883,020.00	81,883,020.00
660	01-2-1	Material outlays	7,500,000	8,351,000.00	8,302,309.45
661	01-2-2	Compensation for personal income and other benefits of officials	1,258,100	1,413,694.00	1,413,694.00
662	01-2-2	Fire prevention and workplace health and safety measures	70,000	70,000.00	14,362.65
663	01-2-2	Traveling expenses abroad	280,000	630,000.00	565,108.75
664	01-2-2	Membership dues in international organizations	9,200	9,200.00	9,200.00
665	01-2-2	Expenses of statistical research	4,800,000	4,800,000.00	4,480,685.65
666	01-2-2	Depreciation of automatic data processing machines	10,000,000	10,000,000.00	10,000,000.00
667	01-2-2	Expenses of the Automatic Data Processing Center	2,950,000	2,950,000.00	2,555,634.85
668	01-2-2	Leasing of machines for automatic data processing	2,151,000	1,300,000.00	1,253,870.05

Article 5 (continued)

1	2	3	4	5	6
669	01-2-2	Expenses related to realizing income from publishing activity	4,300,000	4,300,000.00	4,113,809.70
670	01-2-2	Costs of insuring the building	300,000	100,000.00	26,040.00
671	01-2-2	Maintenance of buildings and inventory	2,000,000	100,000.00	26,264.45
672	01-2-2	Expenses of postgraduate study in the field of statistics	840,000	490,000.00	290,898.65
673	01-2-3	Defense-related projects	150,000	150,000.00	37,910.60
		Total Basic Purpose 01	113,083,400	116,546,914.00	114,972,808.80
		Total Section 29 (Items 659-673)	113,083,400	116,546,914.00	114,972,808.80
		Section 30. Federal Bureau for International Health, Education-and-Cultural and Technical Cooperation			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
674	01-1-1	Personal incomes of personnel	16,758,290	18,330,274.00	18,330,274.00
675	01-2-1	Material outlays	1,100,000	1,100,000.00	897,616.35
676	01-2-2	Compensation for personal income and other benefits of officials	1,615,890	1,924,953.00	1,920,929.15
677	01-2-2	Addition to and replacement of equipment	700,000	700,000.00	151,378.45
678	01-2-2	Membership dues in international organizations	55,660,000	55,660,000.00	55,475,250.10

Article 5 (continued)

1	2	3	4	5	6
679	01-2-2	Contribution to the United Nations Mission in Yugoslavia	4,220,000	4,220,000.00	4,220,000.00
680	01-2-3	Costs of regular schooling, specialization and study trips of foreign nationals in Yugoslavia	60,000,000	48,000,000.00	31,654,802.15
681	01-2-3	Costs of preparing specialists for departure, share in the salary of Yugoslav specialists and aid in organizing the Center for Training Personnel in the Developing Countries	24,000,000	24,000,000.00	23,344,713.40
682	01-2-3	Preparation of studies, expert evaluations, technical documentation and publications, international seminars, special courses for the developing countries and the making of films	5,850,000	5,850,000.00	3,006,636.20
683	01-2-3	Cultural-and-educational cooperation with the developing countries	8,775,000	8,775,000.00	6,282,797.90
684	01-2-3	International seminar "University Today"--participation of representatives from the developing countries	100,000	100,000.00	100,000.00
685	01-2-3	International negotiations and meetings of joint commissions, traveling expenses in Yugoslavia and abroad	5,000,000	5,000,000.00	3,033,098.50

Article 5 (continued)

1	2	3	4	5	6
686	01-2-3	Share in the salaries of instructors teaching the children of Yugoslav workers temporarily employed in the countries of Western Europe	50,000,000	62,000,000.00	61,126,602.90
687	01-2-3	Translation and duplication of detailed studies, reports, analyses and other materials	700,000	700,000.00	436,927.75
688	01-2-3	Compensation for health services rendered to personnel of the United Nations Mission in Yugoslavia	50,000	50,000.00	573.60
689	01-2-3	Compensation for performing certain tasks in federal jurisdiction by the Yugoslav Bibliography Institute	970,000	970,000.00	969,893.60
690	01-2-3	Information program	1,280,000	1,280,000.00	899,235.45
691	01-2-3	Center for guidance and organization of mutual cooperation of the nonaligned countries in the field of science and technology	9,000,000	9,000,000.00	3,147,913.85
		Total Basic Purpose 01	245,779,180	247,660,227.00	214,998,643.35
		Total Section 30 (Items 674-691)	245,779,180	247,660,227.00	214,998,643.35

Article 5 (continued)

1	2	3	4	5	6
		Section 31. Federal Hydrometeorology Bureau			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
692	01-1-1	Personal incomes of personnel	59,322,060	66,093,093.00	66,093,093.00
693	01-2-1	Material outlays	5,500,000	5,003,086.00	5,003,086.00
694	01-2-2	Compensation for personal income and other benefits of officials	594,000	775,373.00	763,233.40
695	01-2-2	Compensation for work on Sunday, at night and on holidays	2,061,000	4,422,800.00	4,121,375.30
696	01-2-2	Compensation of Radio Belgrade for broadcasting water levels on the Danube	1,200,000	1,200,000.00	1,200,000.00
697	01-2-2	Costs of telecommunications	5,700,000	6,360,000.00	6,360,000.00
698	01-2-2	Traveling expenses abroad	300,000	405,200.00	405,107.10
699	01-2-2	Membership dues in international organizations	9,550,000	7,659,000.00	7,656,846.40
700	01-2-2	Expenses related to realizing income from publishing activity	50,000	50,000.00	49,906.25
701	01-2-2	Addition to equipment	300,000	300,000.00	288,491.50
702	01-2-2	Printing the yearbook of the climate atlas and other specialized publications	1,500,000	1,060,000.00	1,056,388.35
703	01-2-2	Maintaining buildings and furnishings	3,200,000	2,670,000.00	2,670,000.00
704	01-2-2	Traveling expenses in Yugoslavia	880,000	1,130,000.00	1,122,568.65
705	01-2-2	Purchase of clothing and footwear	500,000	500,000.00	498,363.05

Article 5 (continued)

1	2	3	4	5	6
706	01-2-2	Motor vehicle maintenance and fuel	360,000	340,000.00	338,598.20
707	01-2-2	Rent on office space	2,037,000	2,067,000.00	2,067,000.00
708	01-2-2	Costs of educating hydrometeorologists	470,000	--	--
709	01-2-3	Defense-related projects	180,000	104,000.00	103,026.35
		Total Basic Purpose 01	93,704,060	100,139,552.00	99,770,033.35
		Basic Purpose 03--Noneconomic Investments			
710	03-1	Financing the program for development and modernization of aviation meteorology in the SFRY	18,000,000	19,169,000.00	19,169,000.00
		Total Basic Purpose 03	18,000,000	19,169,000.00	19,169,000.00
		Total Section 31 (Items 692-710)	118,704,060	119,308,552.00	118,939,033.55
		Section 32. Federal Bureau of Standards			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
711	01-1-1	Personal incomes of personnel	17,938,300	20,034,432.00	20,034,432.00
712	01-2-1	Material outlays	1,367,300	1,767,300.00	1,626,849.95
713	01-2-2	Compensation for personal income and other benefits of officials	909,500	1,379,573.00	1,375,211.80

Article 5 (continued)

1	2	3	4	5	6
714	01-2-2	Costs of preparing and distributing Yugoslav standards and technical specifications	7,500,000	6,980,000.00	6,624,934.45
715	01-2-2	Translation of Yugoslav standards into the languages of the nationalities of Yugoslavia	3,040,000	3,040,000.00	3,019,412.85
716	01-2-2	Membership dues in international organizations	1,662,000	1,782,000.00	1,779,357.20
717	01-2-2	Purchase of equipment related to translation of Yugoslav standards	1,000,000	1,000,000.00	738,057.15
718	01-2-2	Expenses of the Commission for Standardization of Motor Vehicles	2,000,000	2,000,000.00	1,452,000.00
719	01-2-3	Defense-related projects	70,000	70,000.00	36,177.60
		Total Basic Purpose 01	35,487,100	38,053,305.00	36,636,443.00
		Total Section 32 (Items 711-719)	35,487,100	38,053,305.00	36,666,443.00
		Section 33. Federal Bureau for Patents			
		Basic Purpose 01—Activity of Federal Bodies, Agencies and Organizations			
720	01-1-1	Personal incomes of personnel	13,282,400	16,248,226.00	16,238,254.00
721	01-2-1	Material outlays	800,000	890,000.00	890,000.00
722	01-2-2	Compensation for personal income and other benefits of officials	582,800	789,891.00	789,891.00
723	01-2-2	Costs of printing patent documents	450,000	250,000.00	250,000.00

Article 5 (continued)

1	2	3	4	5	6
724	01-2-2	Traveling expenses abroad	400,000	400,000.00	144,309.00
725	01-2-2	Purchase of and addition to equipment	1,500,000	1,500,000.00	1,496,619.80
726	01-2-2	Printing the patent gazette	310,000	360,000.00	360,000.00
727	01-2-2	Preparation of forms and materials for photocopying	220,000	370,000.00	350,581.05
728	01-2-2	Receiving and shipping patent documentation	220,000	150,000.00	134,159.30
729	01-2-2	Costs of publishing activity	30,000	30,000.00	14,405.05
730	01-2-2	Expenses of printing international patent documentation	200,000	200,000.00	200,000.00
731	01-2-2	Expenses of specialized conferences	20,000	20,000.00	4,622.00
732	01-2-2	Classification of archive materials	200,000	200,000.00	200,000.00
733	01-2-2	Purchase of nonpatent literature for the Center for Patent Documentation and Information	300,000	300,000.00	277,647.40
734	01-2-3	Defense-related projects	40,000	20,000.00	16,478.00
		Total Basic Purpose 01	18,555,200	21,728,117.00	21,366,966.60
		Total Section 33 (Items 720-734)	18,555,200	21,728,117.00	21,366,966.60
		Section 34. Federal Bureau for Weights and Measures and Precious Metals			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
735	01-1-1	Personal incomes of personnel	37,539,500	42,198,755.00	42,198,755.00

Article 5 (continued)

1	2	3	4	5	6
736	01-2-1	Material outlays	3,500,000	3,500,000.00	3,499,945.65
737	01-2-2	Compensation for personal income and other benefits of officials	601,100	749,741.00	735,134.00
738	01-2-2	Rent	361,000	361,000.00	360,959.65
739	01-2-2	Purchase of laboratory equipment and other inventory	5,000,000	4,400,000.00	4,394,418.55
740	01-2-2	Expenses of improving the service	280,000	130,000.00	118,303.25
741	01-2-2	Membership dues in international organizations	523,900	400,000.00	335,589.55
742	01-2-2	Traveling expenses in Yugoslavia	900,000	1,450,000.00	1,292,785.10
743	01-2-2	Traveling expenses abroad	180,000	100,000.00	99,744.40
744	01-2-2	Expenses of international cooperation	60,000	--	--
745	01-2-2	Expenses of issuing publications	600,000	270,000.00	267,187.95
746	01-2-2	Expenses of current maintenance of buildings	1,020,000	2,029,900.00	2,029,900.00
747	01-2-2	Expenses of maintaining trucks	550,000	550,000.00	529,300.60
748	01-2-2	Public relations	8,000	8,000.00	8,000.00
749	01-2-2	Purchase of safety clothing and footwear	300,000	245,000.00	184,746.00
750	01-2-2	Purchase of specialized publications and literature	120,000	120,000.00	120,000.00
751	01-2-2	Nonautomatic data processing	250,000	100,000.00	45,583.20
752	01-2-2	Costs of translation into the languages of the nationalities and ethnic minorities of Yugoslavia and into and from foreign languages	65,000	25,000.00	17,100.00
753	01-2-3	Defense-related projects	120,000	90,000.00	90,000.00

Article 5 (continued)

1	2	3	4	5	6
		Total Basic Purpose 01	51,978,500	56,727,396.00	56,327,452.90
		Basic Purpose 03--Noneconomic Investments			
754	03-1	Laboratory construction	6,800,000	4,830,000.00	4,830,000.00
755	03-1	Purchase of trucks and equipment	600,000	359,000.00	359,000.00
		Total Basic Purpose 03	7,400,000	5,189,000.00	5,189,000.00
		Total Section 34 (Items 735-755)	59,378,500	61,916,396.00	61,516,452.90
		Section 35. Federal Geology Bureau			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
756	01-1-1	Personal incomes of personnel	2,608,500	2,955,169.00	2,955,169.00
757	01-2-1	Material outlays	168,000	218,000.00	218,000.00
758	01-2-2	Compensation for personal income and other benefits of officials	307,500	407,414.00	407,270.95
759	01-2-2	Expenses of the permanent delegation for cooperation with CEMA in the field of geology	580,000	300,000.00	300,000.00
760	01-2-2	Expenses of the Yugoslav Committee for the International Program of Geological Correlation	400,000	400,000.00	348,779.30

Article 5 (continued)

1	2	3	4	5	6
761	01-2-2	Preparation and printing of the comprehensive geological map of Yugoslavia	4,500,000	4,780,000.00	4,780,000.00
762	01-2-2	Expenses of the Commission for the Comprehensive Geological Map of Yugoslavia	65,000	65,000.00	14,518.20
763	01-2-2	Shipping expenses	27,000	27,000.00	--
764	01-2-2	Purchase of equipment	90,000	90,000.00	82,136.70
765	01-2-2	Costs of developing methodology and statistical monitoring of the type and scope of exploratory operations and funds spent to explore for minerals and subsurface water	139,000	19,000.00	--
766	01-2-2	Costs of compiling the balance of minerals and subsurface water of the SFRY and preparation of the analysis of the SFRY's raw materials base	460,000	580,000.00	501,902.95
		Total Basic Purpose 01	9,345,000	9,841,583.00	9,607,777.10
		Total Section 35 (Items 756-766)	9,345,000	9,841,583.00	9,607,777.10
		Section 36. Yugoslav Archives			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
767	01-1-1	Personal incomes of personnel	10,577,300	11,430,769.00	11,430,769.00
768	01-2-1	Material outlays	2,022,000	1,835,183.00	1,835,183.00

Article 5 (continued)

1	2	3	4	5	6
769	01-2-2	Compensation for personal income and other benefits of officials	395,040	583,479.00	583,479.00
770	01-2-2	Public relations	40,000	40,000.00	38,167.80
771	01-2-2	Insurance on the building	220,000	66,953.00	66,953.00
772	01-2-2	Costs of protecting archive materials in case of war	350,000	350,000.00	350,000.00
773	01-2-2	Membership dues in the international fund for development of archives	237,930	167,930.00	134,515.60
774	01-2-2	Costs of maintaining building and furnishings	200,000	200,000.00	200,000.00
775	01-2-2	Traveling expenses abroad	157,130	227,130.00	218,918.25
776	01-2-2	Expenses of preparing projects (publication, research, the photographing of archive materials in Yugoslavia and abroad, analysis and preparation of archive materials for automatic data processing)	500,000	500,000.00	500,000.00
		Total Basic Purpose 01	14,699,000	15,401,444.00	15,357,985.65
		Basic Purpose 03--Noneconomic Investments			
777	03-1	Adaptation and equipping of the building	4,100,000	1,480,000.00	1,480,000.00
		Total Basic Purpose 03	4,100,000	1,480,000.00	1,480,000.00
		Total Section 36 (Items 767-777)	18,799,400	16,881,444.00	16,837,985.65

Article 5 (continued)

1	2	3	4	5	6
		Section 37. Administration for Personnel Affairs			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
778	01-1-1	Personal incomes of personnel	1,113,760	1,271,106.00	1,175,676.00
779	01-2-1	Material outlays	100,000	100,000.00	99,798.80
780	01-2-2	Compensation for personal income and other benefits of officials	680,930	777,156.00	719,152.60
781	01-2-2	Compensation for personal income and other benefits of officials and persons with special status	3,612,920	15,347,262.00	15,097,130.25
		Total Basic Purpose 01	5,507,610	17,495,524.00	17,091,757.65
		Total Section 37 (Items 778-781)	5,507,610	17,495,524.00	17,091,757.65
		Section 38. Service for Rendering Services To Meet the Entertainment Needs of Federal Bodies and Agencies			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
782	01-1-1	Personal incomes of personnel	47,335,730	65,976,536.00	65,976,536.00

Article 5 (continued)

1	2	3	4	5	6
783	01-2-1	Material outlays	1,950,000	3,393,198.00	2,843,198.00
784	01-2-2	Compensation for personal income and other benefits of officials	600,000	200,000.00	189,562.05
785	01-2-2	Costs of maintaining structures and equipment	40,000,000	44,393,430.00	43,993,430.00
786	01-2-2	Costs of maintaining and improving the Jelen Hunting and Forest Preserve in Belgrade	25,000,000	28,600,000.00	28,599,997.00
787	01-2-2	Costs of maintaining and improving the Koprivnica Hunting and Forest Preserve in Bugojno	3,000,000	3,000,000.00	3,000,000.00
788	01-2-2	Remuneration of nonstaff personnel	1,200,000	900,000.00	768,329.55
789	01-2-2	Compensation for overtime and nighttime work	5,000,000	5,000,000.00	5,000,000.00
790	01-2-3	Defense-related projects	70,000	70,000.00	67,030.25
		Total Basic Purpose 01	124,155,730	151,533,164.00	150,438,082.85
		Basic Purpose 03--Noneconomic Investments			
791	03-1	Purchase of equipment and vehicles	70,500,000	88,899,000.00	88,899,000.00
792	03-1	Construction work	135,000,000	135,000,000.00	135,000,000.00
793	03-1	Erection of wire fence and purchase of equipment for the Jelen Hunting and Forest Preserve	12,000,000	14,150,000.00	13,859,137.55
		Total Basic Purpose 03	217,500,000	238,049,000.00	237,758,137.55
		Total Section 38 (Items 782-793)	341,655,730	389,582,154.00	388,196,220.40

Article 5 (continued)

1	2	3	4	5	6
		Section 39. Service for Administrative and Accounting Tasks of Federal Administrative Agencies and Federal Organizations			
		Basic Purpose 01—Activity of Federal Bodies, Agencies and Organizations			
794	01-1-1	Personal incomes of personnel	37,340,060	44,331,266.00	44,331,266.00
795	01-2-1	Material outlays	3,500,000	5,000,000.00	4,800,000.00
796	01-2-2	Compensation for personal income and other benefits of officials	358,390	500,636.00	500,636.00
797	01-2-2	Costs of franking the mail	1,850,000	1,342,000.00	1,342,000.00
798	01-2-2	Spare parts for printing machines and processing materials	1,074,240	674,240.00	674,240.00
799	01-2-2	Compensation for overtime and nighttime work	2,710,000	3,210,000.00	3,210,000.00
800	01-2-2	Remuneration of nonstaff personnel	260,000	100,000.00	100,000.00
801	01-2-2	Purchase of equipment	6,000,000	7,700,000.00	7,700,000.00
		Total Basic Purpose 01	53,092,690	62,858,142.00	62,658,142.00
		Total Section 39 (Items 794-801)	53,092,690	62,858,142.00	62,658,142.00

Article 5 (continued)

1	2	3	4	5	6
		Section 40. Administration of the Office Buildings of Federal Bodies and Organizations			
		Basic Purpose 01—Activity of Federal Bodies, Agencies and Organizations			
802	01-1-1	Personal incomes of personnel	55,479,880	84,449,857.00	84,449,857.00
803	01-2-1	Material outlays	1,600,000	2,560,000.00	2,546,097.25
804	01-2-2	Compensation for personal income and other benefits of officials	297,460	347,566.00	344,030.05
805	01-2-2	Overhead related to maintenance of buildings and equipment	100,000,000	73,584,545.00	73,257,250.75
806	01-2-2	Purchase of equipment and reconstruction projects	36,000,000	68,588,500.00	68,569,374.90
807	01-2-2	Insurance on buildings and equipment	3,000,000	3,250,000.00	3,186,124.30
808	01-2-2	Telephone expenses of joint switchboards	10,000,000	11,159,399.00	10,228,142.05
809	01-2-2	Compensation for overtime and nighttime work	3,500,000	3,500,000.00	3,499,896.20
810	01-2-2	Work clothes, footwear and equipment for workplace health and safety	1,500,000	1,613,576.00	1,611,643.50
811	01-2-2	Contribution for use of municipal land	3,285,500	4,864,758.00	4,830,528.30
812	01-2-2	Transportation services	900,000	450,000.00	446,434.65
813	01-2-2	Costs of establishing special telephone communications	9,350,000	7,330,000.00	6,957,948.90

Article 5 (continued)

1	2	3	4	5	6
814	01-2-3	Defense-related projects	800,000	800,000.00	784,360.50
		Total Basic Purpose 01	225,712,840	262,498,201.00	260,711,688.35
		Total Section 40 (Items 802-814)	225,712,840	262,498,201.00	260,711,688.35
		Section 41. Garage of Federal Bodies and Agencies			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
815	01-1-1	Personal incomes of personnel	33,052,080	41,994,241.00	41,965,748.10
816	01-2-1	Material outlays	580,000	580,000.00	540,276.85
817	01-2-2	Compensation for personal income and other benefits of officials	288,710	330,960.00	330,738.60
818	01-2-2	Compensation for overtime	5,055,000	6,055,000.00	5,694,702.70
819	01-2-2	Purchase of spare parts and expenditures for other purposes	25,000,000	31,575,000.00	31,510,469.10
820	01-2-2	Remuneration of nonstaff personnel	30,000	30,000.00	2,598.50
821	01-2-2	Purchase of equipment and passenger cars	6,450,000	3,749,000.00	3,748,847.10
822	01-2-2	Purchase of tools and instruments	1,178,000	928,000.00	793,030.15
823	01-2-3	Purchase of transportation equipment for national defense purposes	4,900,000	4,900,000.00	4,897,719.95
		Total Basic Purpose 01	76,533,790	90,142,201.00	89,484,131.05

Article 5 (continued)

1	2	3	4	5	6
		Total Section 41 (Items 815-823)	76,533,790	90,142,201.00	89,484,131.05
		Section 42. Translation Service			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
824	01-1-1	Personal incomes of personnel	12,456,550	25,624,432.00	25,624,432.00
825	01-2-2	Material outlays	2,000,000	2,000,000.00	1,258,491.65
826	01-2-2	Compensation for personal income and other benefits of officials	334,100	334,100.00	334,000.00
827	01-2-2	Compensation for overtime and nighttime work	1,370,000	1,819,000.00	1,651,554.80
828	01-2-2	Remuneration of nonstaff personnel	1,200,000	1,687,000.00	1,681,573.90
829	01-2-2	Compensation for separation from family	915,170	845,170.00	536,822.15
830	01-2-2	Traveling expenses abroad	670,000	420,000.00	16,392.65
831	01-2-2	Specialized training and advanced training of translators in foreign languages	600,000	340,000.00	30,902.65
832	01-2-2	Purchase of and addition to equipment	1,350,000	4,284,000.00	4,143,493.45
833	01-2-2	Effort to build up the data bank of terms	500,000	--	--
834	01-2-3	Defense-related projects	90,000	--	--
		Total Basic Purpose 01	21,485,820	37,353,702.00	35,277,663.25
		Total Section 42 (Items 824-834)	21,485,820	37,353,702.00	35,277,663.25

Article 5 (continued)

1	2	3	4	5	6
		Section 43. Administration of Brioni Island			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
835	01-1-1	Personal incomes of personnel	24,549,290	26,546,297.00	26,546,297.00
836	01-2-1	Material outlays	15,000,000	16,650,000.00	16,650,000.00
837	01-2-2	Compensation for personal income and other benefits of officials	325,340	367,417.00	340,251.00
838	01-2-2	Compensation for personal income of seasonal personnel and remuneration of nonstaff personnel	8,000,000	8,350,000.00	8,350,000.00
839	01-2-2	Compensation for overtime	1,462,000	1,462,000.00	1,462,000.00
840	01-2-2	Expenses of maintaining structures and equipment	41,400,000	41,400,000.00	41,400,000.00
841	01-2-2	Purchase of equipment and inventory	8,000,000	6,000,000.00	6,000,000.00
		Total Basic Purpose 01	98,736,630	100,775,714.00	100,748,548.00
		Basic Purpose 03--Noneconomic Investments			
842	03-1	Construction and adaptation of facilities	14,900,000	22,900,000.00	22,900,000.00
		Total Basic Purpose 03	14,900,000	22,900,000.00	22,900,000.00
		Total Section 43 (Items 835-842)	113,636,630	123,675,714.00	123,648,548.00

Article 5 (continued)

1	2	3	4	5	6
		Section 44. Yugoslav Commission for Cooperation With the International Fund of the United Nations for Aid to Children (UNICEF)			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
843	01-2-2	Traveling expenses in Yugoslavia and visits of foreign officials	85,700	85,700.00	45,700.00
844	01-2-2	Traveling expenses abroad	126,900	126,900.00	126,900.00
845	01-2-2	Printing of bulletin	24,000	24,000.00	--
846	01-2-2	Contribution to UNICEF	4,300,500	4,300,500.00	4,300,500.00
847	01-2-2	Obligations under the UNICEF program	300,000	300,000.00	75,000.00
		Total Basic Purpose 01	4,837,100	4,837,100.00	4,548,100.00
		Total Section 44 (Items 843-847)	4,837,100	4,837,100.00	4,548,100.00

Article 5 (continued)

1	2	3	4	5	6
		Section 45. Yugoslav Commission for Cooperation With International Health Organizations			
		Basic Purpose 01--Activity of Federal Bodies, Agencies and Organizations			
848	01-2-2	Traveling expenses in Yugoslavia	200,000	200,000.00	200,000.00
849	01-2-2	Traveling expenses abroad	250,000	250,000.00	150,000.00
850	01-2-2	Membership dues in international organizations	13,278,140	13,278,140.00	13,278,140.00
851	01-2-2	Yugoslavia's obligations as a member of the World Health Organization	200,000	200,000.00	200,000.00
		Total Basic Purpose 01	13,928,140	13,928,140.00	13,828,140.00
		Total Section 45 (Items 848-851)	13,928,140	13,928,140.00	13,828,140.00

Article 5 (continued)

1	2	3	4	5	6
		Section 46. Activity of Socio-political and Public Organizations			
		Basic Purpose 07--Other Earmarked Funds			
		Subsidy to the Presidium of the League of Communists of Yugoslavia			
852	07-3	International activity	16,000,000	16,000,000.00	16,000,000.00
853	07-3	Defense-related projects	1,500,000	1,500,000.00	1,500,000.00
854	07-3	Financing the program for scientific documentation on the international working class movement	3,500,000	3,500,000.00	3,500,000.00
855	07-3	The newspaper KOMUNIST	50,000,000	50,000,000.00	50,000,000.00
856	07-3	The bulletin JUGOSLAVENSKI POLITICKI MJESECNIK [YUGOSLAV POLITICAL MONTHLY]	2,600,000	2,600,000.00	2,600,000.00
857	07-3	Program for financing publishing activities abroad	12,855,000	12,855,000.00	12,855,000.00
858	07-3	Financing the work of the Josip Broz Tito Political School in Kumrovec	15,000,000	15,000,000.00	15,000,000.00
859	07-3	Publication of the collected works of Josip Broz Tito	10,200,000	10,200,000.00	10,200,000.00

Article 5 (continued)

1	2	3	4	5	6
		Subsidy to the Federal Conference of the Socialist Alliance of Working People of Yugoslavia			
860	07-3	Financing the work program of the Federal Conference	71,000,000	71,000,000.00	71,000,000.00
861	07-3	Subsidy to the newspaper BORBA	69,300,000	69,300,000.00	69,300,000.00
862	07-3	For the journal JUGOSLAVENSKI PREGLED [YUGOSLAV SURVEY]-- in Serbo-Croatian	2,400,000	2,400,000.00	2,400,000.00
863	07-3	For the journal MEDJUNARODNA POLITIKA [INTERNATIONAL POLITICS]--in Serbo-Croatian	2,600,000	2,600,000.00	2,600,000.00
864	07-3	For the journal ZENA DANAS [WOMAN TODAY]	1,230,000	1,230,000.00	1,230,000.00
865	07-3	Financing the work program of the Yugoslav Council for Environmental Protection	3,760,000	3,760,000.00	3,760,000.00
866	07-3	Financing the work program of the Federal "Local Community and Family" Conference	1,500,000	1,500,000.00	1,500,000.00
		Subsidy to the Presidium of the Conference of the Socialist Youth League of Yugoslavia			
867	07-3	Financing the work program of the conference	23,141,000	23,141,000.00	23,141,000.00
868	07-3	Celebration of Youth Day	12,700,000	12,700,000.00	12,700,000.00
869	07-3	The international seminar "The University Today"	744,000	744,000.00	744,000.00
870	07-3	For the newspaper MLADOST [YOUTH]	9,500,000	9,500,000.00	9,500,000.00

Article 5 (continued)

1	2	3	4	5	6
871	07-3	For the journal IDEJE [IDEAS]	2,536,000	2,356,000.00	2,356,000.00
872	07-3	For the youth labor festival	936,000	936,000.00	936,000.00
873	07-3	Celebration of the 60th anniversary of SKOJ [Communist Youth League of Yugoslavia]	2,450,000	2,450,000.00	2,450,000.00
		Subsidy to the Federation of Associations of Veterans of the National Liberation War of Yugoslavia			
874	07-3	Financing the work program of the federation	19,000,000	19,000,000.00	19,000,000.00
875	07-3	For the newspaper 4 JUL [4TH OF JULY]	6,335,000	6,335,000.00	6,335,000.00
		Subsidy to the Yugoslav Red Cross			
876	07-3	Financing the work program of the presidium	11,000,000	11,000,000.00	11,000,000.00
877	07-3	Missing persons service	1,615,000	1,615,000.00	1,615,000.00
878	07-3	Defense-related projects	1,500,000	1,500,000.00	1,500,000.00
879	07-3	International special-topic symposium on current issues in international humanitarian law	1,250,000	1,250,000.00	1,250,000.00
880	07-3	Mediterranean Conference of National Red Cross and Red Crescent Societies	1,500,000	1,500,000.00	1,500,000.00
881	07-3	Center for training personnel of the Red Cross and Red Crescent from developing countries and nonaligned countries and also in those countries	3,750,000	3,750,000.00	3,750,000.00

Article 5 (continued)

1	2	3	4	5	6
		Subsidy to the Yugoslav League for Peace, Independence and Equality of Peoples			
882	07-3	Financing the work program of the league	1,916,000	1,916,000.00	1,916,000.00
		Subsidy to the Yugoslav Federation of United Nations Societies			
883	07-3	Financing the work program of the federation	564,000	564,000.00	564,000.00
		Subsidy to the Federation of Reserve Military Officers of Yugoslavia			
884	07-3	Financing the work program of the federation	6,617,000	6,617,000.00	6,617,000.00
		Federation for Physical Education of Yugoslavia			
885	07-3	Expenses of the international activities in the field of Yugoslavia's physical education	83,911,000	83,911,000.00	83,911,000.00

Article 5 (continued)

1	2	3	4	5	6
886	07-3	Exceptional programs of athletic events taking place only in 1979: the Mediterranean Games, the Winter Olympic Games, the Expedition to the Himalayas, the University Games, the Spartakiad, the Secondary School Games, the Anniversary Races through Yugoslavia	15,000,000	15,000,000.00	15,000,000.00
887	07-3	Organizing and holding the Eighth Mediterranean Games	22,000,000	22,000,000.00	22,000,000.00
888	07-3	Popular Technology—Yugoslav Federation of Organizations for Popular Technical Education--for international activities in the field of Yugoslavia's popular technical education	9,190,000	9,190,000.00	9,190,000.00
889	07-3	Firefighting Federation of Yugoslavia for fire protection	1,700,000	1,700,000.00	1,700,000.00
		Total Basic Purpose 07	502,300,000	502,300,000.00	502,300,000.00
		Total Section 46 (Items 852-889)	502,300,000	502,300,000.00	502,300,000.00

Article 6

This final account shall be published in SLUZBENI LIST SFRJ.

7045
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POLITICAL SCIENCE PROFESSOR DISCUSSES ECONOMIC SYSTEM

Belgrade RAD (organ of the SSJ [Federation of Yugoslav Trade Unions]) in Serbo-Croatian No 35, 22 Aug 80 pp 4-5

[Interview with Dr Zivojin Rakocevic, professor of political economy at the School of Political Science of Belgrade University: "Marx's Image on the Dinar"; date and place not given]

> [Text] Last year, and especially early this year, our economy has suffered many misfortunes, some because of domestic weaknesses, others because of imported inflation. Administrative measures have come one after another, accompanied by crash efforts of the workers to stabilize the business operation of their organizations. And the second package of measures by the Federal Executive Council is in the offing, but even this, of course, does not presage a much deeper undertaking in the socio-economic system, the correction of the consequences of disturbances in the market. Science has still not said its piece about the causes of the situation in our economy, at least not in the form of an overall analysis of the shortcomings of the domestic economy. One of those who feel that it is inevitable that science judge the causes of our economic circumstances (troubles) is Dr Zivojin Rakocevic, professor of political economy at the School of Political Science in Belgrade. Through his collaboration with many political forums he has had occasion to "hear of" the problems of production workers and the peasantry in the conduct of economic activity. From a conversation with Dr Rakocevic we are presenting some of his conceptions concerning the faults and virtues of our economy in what are called either-or situations.

[Question] What is the deepest cause of the problems in our economy?

[Answer] Relative prices are in my opinion the most complicated economic problem both in our economy and also in economic science. As a matter of fact, even in political economy there is quite a bit of confusion in interpreting relative prices, since this issue is debated with differing and even altogether opposed theoretical weapons. According to Marx, relative prices are modified market values of goods, the real relationship of absolute values which depend almost entirely on the live and past labor they embody.

[Question] It seems fairly simple....

[Answer] But it isn't. Many things in the movement of relative prices depends on the monetary measurement of prices and on who determines this. Which is why all those things happen which have not been sufficiently elucidated even from the scientific point of view. I am referring primarily to the role and function of the central bank, to the way the rate of exchange is implemented, to the way dinar convertibility, an aim adopted in the reform, is being pursued, if it is.

[Question] Well, has there been success in maintaining that course, which since the economic reform has seemed inevitable, or hasn't there?

[Answer] Not entirely. I even have the impression that there is a retreat from that course in every either-or situation. What is more, the central bank finds rather convenient excuses for this fudging, and I feel that this is precisely the deepest source of our economic troubles, especially those related to prices. It is a scientific truth that our banking system is predominantly governmental, that is, that it is under the wing of government political power, and that holds from the opstina to the Federation. If we remove the outside wrapper and ascertain precisely where the productive work is and where the economic power is, we would reach the conclusion which Marx framed long ago: we have gone too far in our carefree living off future production, and it is the direct industrial and agricultural producers who have done less of this than anyone else. The bankers ought to be more responsive to the demands of physical production, even at the price of displeasing the federal government.

[Question] How similar are the events in our economy to "Marx's market"?

[Answer] It seems paradoxical, but our market has never seriously befriended Marx. What is "operative" for us is the Keynesian theory from the thirties of this century, which even today is the leading theory in the world economy, especially in the West. It has come into our practice and into the practice of the East European countries, though their official spokesmen deny it. For all practical purposes the doctrine of Keynes is applied in a wrapping marked "Marx's market," and the consequences of the overemphasized national economies demonstrate the kind of doctrine it is.

[Question] From the standpoint of theory do we owe the credit for relations on our market to a single scientist, or are these relations a mixture of several economic premises?

[Answer] They are a mixture of various theories and processes, as is indeed the case everywhere in the world. As a general thing no nation's economic life measures itself against a theory accepted as doctrine. At least so the official spokesmen of economic policy assert. In practice, though, the economy of every market is managed, at least in aggregate terms, in accordance with some doctrine, but this is skillfully covered over by a flood of experiments with new theories. Even we are involved in experimentation. The trouble is not with experimentation per se, but with the lack of a sufficiently critical attitude when tests are made of experiences and theories which are opposed to one another. There is hardly even a mention of experimentation along the lines of Marx's ideas. To be sure, no one states this in public, but it seems as though Marx's doctrine is sufficient to us in the sense of political ideology, while Marx has no instructions to give us in the economic sphere.

[Question] The stabilization measures have proclaimed the economy's return to economic criteria in the conduct of business....

[Answer] The so-called value principles in the economy were officially proclaimed as far back as 1965, that is, in the economic reform. There was also talk at that time about establishing the convertibility of the currency, but not, of course, with the ambition of the dinar's becoming a currency of world significance, but so that its real value on a world scale would be found. If we do not carry out that sound conception at the present time, we will lose almost any possibility of taking part in the witches' dance of international market relations. However, money is still what the government says it is, and it has the value which the central bank considers is realistic. We also have been inclined toward this creation of state capitalism.

[Question] Are you referring to science as well?

[Answer] I am referring particularly to our science, which rarely is a research topic it examines with its magnifying glass. It is not even a secret that we are waiting around for the large economies to solve this problem first, and then we will see how we will treat the problem of money and what we will do about it. To be sure, monetary specialists have offered the idea of creating an "alternative currency" which would be valid for all the developing countries and with which they might compete on a more or less equal footing with the dollar, the mark and the pound. Perhaps this would help tht economically weaker countries to become part of the international monetary system more easily.

[Question] Isn't this just another hurdle in the attempt to alter the economic order in the world?

[Answer] Nevertheless, it is interesting as an idea, and I am surprised that nothing has been done to put the theory into practice. What is more, it seems that ideas themselves have dried up. For instance, it has not even been raised as an issue what sort of connection there would be between the "alternative currency" and the laws of world commodity production and whether it would be managed by the government like the Western currencies.

[Question] Do you feel that in the resolution of economic problems there is in general an evasion of science?

[Answer] I would not say that it is evaded, but those in a position to apply it are not showing an excessive desire to do so. I am even persuaded that there is no Chinese wall between the economy and science, though there are pragmatic notions to the effect that the economy can be run without any science at all. Politicians who have become disappointed with false science, and have not looked further, are inclined to such conceptions.

[Question] For which we have paid dearly....

[Answer] Very dearly. I think that the economy will be paying tribute to that kind of prejudice for a long time yet. However, I also blame my colleagues for not sufficiently honoring the truth of the results they obtain, in short, for being timid. I feel that the truths about the results of scientific research should be presented in public, even though this may not be to the liking of the proponents of official economic policy and even though it may result in open debates and even disputes. Not for the sake of science, but for the sake of the health of the domestic economy. The conceptions of science should be defended on their own merits, and not with political pragmatism. Unfortunately, there are scientists who substantiate and justify administrative measures which government agencies have cooked up behind closed doors. When science puts on such clothes, it does discredit both to itself and politics. For example, there are as many different opinions as there are republics and provinces concerning the level of economic development and concerning economic relations among the federal units. That being the case, one might well doubt the disinterestedness and effectiveness of science in economic affairs.

[Question] Is it at all possible to create a "federation of markets"? That is, it seems that there are independent markets within the borders of the republics and provinces, all in the context of the "unified Yugoslav market."

[Answer] The two do not go together. Convertibility of the dinar is a condition for the stability and unity of the Yugoslav market and for its inclusion in international economic flows. With eight markets we have, though tacitly, eight values of the dinar, and even the stronger of our regional economies would not survive with that kind of situation. My opinion is just the opposite of the official position. The opposite, for instance, of the thesis of the central bank, which says that a stable rate of exchange

cannot be maintained, nor the convertible dinar created--because prices are unstable and because investment spending is excessive. But it is precisely because the dinar is not convertible and because the economy is living on credit that society's abstract wealth is being pumped up, and that is why we have excessive investment spending.

[Question] How, then, is the dinar to be strengthened in the international context?

[Answer] It is logical for social capital to "flee" a currency that has lost value, shelter is taken where it can be found, usually in a foreign currency. That is the beginning of the story about our export "boom." We celebrate, with good reason to be sure, when our people carry out construction projects in the outside world, but this kind of pursuit of a stronger currency is a consequence of the worthlessness of the dinar. Thus our capital "flees" to the more stable currencies, circulates in other national financial climes, and there it grows. At home, where credit capital is easy to get, particularly if some factor outside the economy exerts "pressure," capital is transformed into fixed assets. That is the origin of the exaggerated investment spending which has pretty much closed the doors of the world to the dinar.

[Question] Recently even our banks have not been exactly liquid....

[Answer] No, they haven't, since up until the official devaluation indolent behavior prevailed in business life: carefree borrowing from the banks up to the very point of the economic limit on credit. Devaluation was inevitable--so that foreign indebtedness would become less attractive, at least temporarily. The debt limits this year have been set at $2 billion, though the republics and provinces insisted on twice that. I think that we should do something to lay bare the makeup of that indebtedness, its sources, its forms, the terms and the rates of interest. An accounting must be rendered concerning this, next year if not before, since the next agreement on the balance of payments pertains to the economy in the new medium-term planning period. It is now that we are seeing confirmation of Marx's visionary prediction that any society involved in world market flows must fall into a crisis either-or situation when it must settle accounts with "God," that is, with the law of value as it applies internationally.

[Question] Since the devaluation of the dinar exports have been the almost universal formula for solving all problems. To what extent is the export euphoria economically healthy for the economy and for the stability of the dinar?

[Answer] No euphoria is healthy. I do not see why exports should be a general and magical formula for the way out of the economic crisis. I think that the export fever is a consequence of a one-sided examination of the problems in the economy: an examination conducted from the standpoint of the balance of payments. To be sure, exports are an important aspect of

economic life, but the export fever has already caused troubles for our market. Now we have the nonsensical play of fluctuating rates of exchange and a black market for foreign exchange. What is more, few people are concerned about whether exports are profitable. That is, if exporters are constantly offered larger premiums and are given various tax exemptions, then for all practical purposes they are being supported by those who produce goods exclusively for the domestic market. This is an unprofitable business and however quickly and effectively exports resolve the problems of the balance of payments, on the other side the problems in physical production will be compounded and complicated still faster.

[Question] Prices are frozen, and now associated labor is deciding on their fate....

[Answer] However nimbly the members of the Federal Executive Council speak about stabilization. offering all the arguments, the impression remains that the devaluation was undertaken without reliable economic calculations. They even say that they adopted those measures in order to sever relations in the economy which they judge to be wrong, not in conformity with the Law on Associated Labor. The paradox is that they boast of severing relations, but now they are leaving it to the economy to retie those severed threads. Moreover, it has turned out that the effects of this one-sided act were meager. I think that the strength of the associated production workers was underestimated and that at the very least it is no fair for them to be appealed to first to carry out the measures "from above," and then when the economy gets in an either-or situation, the government puts it up to associated labor to solve it. For many business executives the devaluation was like a thunderbolt from a clear sky, a well-kept government secret about the measures intended for the economy—which in and of itself is paradoxical. Moreover, the official spokesmen in the central bank are assuring the public that there exists a floating rate of exchange of the dinar. If that is the case, why was there an official devaluation at all, what is the reason to abolish the official interbank foreign exchange market such as we have had until recently?

[Question] What in your opinion is the way out of our present economic difficulties?

[Answer] If a change of direction comes about in conjuncture in the leading world economies, then they will be the locomotive which will also pull the other national oconomies. I am afraid that that is the only big exit door from the economic crisis for us. If we knew earlier what we know now, we might already have created a number of defensive mechanisms which would now mitigate the trouble with the world market. In 4 or 5 years the situation will be still more difficult unless we take advantage of the next medium-term planning period for qualitative changes in the technology of physical production and in primary distribution and to transfer the most important economic functions to associated labor. If greater difficulties are not to occur, stabilization of the economy cannot be reduced to a belt-tightening

for production workers and the peasantry. Only they can reaffirm the production of value and productive creativity and thus strengthen our economy.

[Question] As a scientist do you feel responsible for the situation in our economy?

[Answer] Yes and no. Yes, because I am involved in public affairs. No, because like a majority of my colleagues, I am not very often called upon. I feel that science could help the economy a great deal, but only if it examines even the most abstract economic issues "on the terrain." That is, if it relies on the economic backbone of the society--the producer part of the working class.

7045
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ROLE, GROWTH OF PENSION SYSTEM SURVEYED

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 4 Aug 80 pp 20-22

[Text] When it comes to disability and old-age insurance, it is relatively easy to carry out the announced reduction of social service expenditures in the context of the overall stabilization measures. The policy of a slower growth for personal incomes, since contributions are calculated by taking a certain percentage at a linear rate, will in and of itself reduce the growth of pension revenues. At the same time, bringing the growth of pensions into line with the growth of personal incomes instead of with the growth of the cost of living will also slow down the setting aside of funds for pensions. In that sense the pension as an economic category will be brought closer to the flows of production, and will be less hindrance to them than in the past. After all, as we know, appropriations for pensions and disability benefits have for years been growing faster than the growth of the national income, which among other things has had a direct impact on the ability of the economy to form capital, and thus ultimately it has encroached upon the income from which appropriations are made for this insurance.

As a social category, however, the pension has a role which is becoming more important under the new conditions of stabilization. It is necessary to preserve the existential level of pensioners when the growth of revenues for old-age insurance is slower and the number of old-age pensioners is increasing more rapidly. This unquestionably implies a more stringent policy concerning the granting of disability pensions.

The Growth of Pensions

Between 1946 and the end of 1978 the number of pensioners in Yugoslavia increased almost 12-fold, and the number of disability pensioners more than 11.5-fold. The growth of pension recipients in the total population increased over that same interval from 1.3 percent to 6.7 percent. Does this reflect demographic laws? Perhaps. But we should also be mindful of the other side of the consequences: between 1948 and 1978 the increase in the

number of pensioners was faster not only than the growth of the total population, but also faster than the growth of the labor force; which means, then, faster than the source of money for pensions. In that interval the increase in the number of pensioners averaged 1.9 percentage points faster than the annual increase of the number of insureds in the labor force. The situation was still more drastic by republics and provinces: the number of percentage points of difference between the growth rate of the number of pensioners and the growth rate of the number of insureds in the labor force was 6 in Macedonia, 5 in Montenegro, 3 in Serbia, 1.9 in Croatia, and 1 in Bosnia-Hercegovina. Only in Slovenia were these two rates approximately the same: the number of pensioners increased only half a point faster than the increase in the number of insureds in the labor force.

The number of pensioners has been increasing in waves. If we take the interval between 1948 and 1953 as the first wave, then it is relatively easy to find the coordinates of the largest influx of pensioners since the war in absolute terms. Over those 5 years pensions increased at an annual rate of 14.4 percent, and disability pensions had a large share in them. The reasons are understandable, the consequences of the war.

Average Annual Growth of the Total Number of Pensioners in Yugoslavia

Interval--Years	Growth, %	Interval--Years	Growth, %
1948-1953	14.4	1961-1971	6.9
1953-1961	6.4	1971-1978	3.3

However, those same consequences of the war, which brought about the huge number of disability pension recipients, brought about a change in the composition of the population to the advantage of the younger age groups; the average age dropped particularly because of the baby boom--a phenomenon which is also well known and which promised a further increase in the army of future insureds in the labor force within an age-specific composition of the population which was already young on the average.

The young labor force, as the number of new pensioners decreased, had the result that the next interval, between 1953 and 1961, was the only one in which pensions rose more slowly than the increase in the number of insureds in the labor force. However, it was in that interval that several statutes were adopted which have tended to alter that tendency--at first only in statistical terms. That is, under the Law on Disability Insurance recipients of disability benefits, who until that time had not been covered by the pension system, acquired that right, which thus tended to increase the growth rate of the number of pensioners. Between 1961 and 1971 the growth of pensioners was also intensive thanks to the drafting of the law on the possibility of early retirement. A new wave of pensioners, the second largest, occurred in the years between 1959 and 1964 and resulted from the use of pensions to resolve the problem of surplus manpower. The simplest solution was to award a disability pension, and the influx, the ever larger

number of pensioners, disability recipients above all, was not seriously affected by amendment of the law raising the pensionable age for old-age pensioners. (In 1964 a law was adopted which raised the pensionable age from 55 to 60 and years of service from 35 to 40 for men, and from age 50 to age 55 and from 30 to 35 years of service for women.)

The possibility of using disability pensions as a solution to various problems in the economy had the result, then, that disability pensions increased faster than old-age and survivor pensions, thereafter to be overtaken and slightly surpassed only by the wave of old-age pensioners resulting over the first 30 years after the war from the new demographic changes caused by the aging of the labor force.

Number of Pensioners Per 100 Insureds in the Labor Force

Type of Pension	1948	1953	1961	1966	1971	1978
Total 13.6	13.6	18.7	16.6	22.5	24.1	25.1
Old-age	2.3	5.3	5.4	8.5	9.2	9.3
Disability	5.8	7.2	6.1	8.4	8.7	8.7
Survivor	5.5	6.2	5.1	5.6	6.2	7.1

The tendency for the number of pensioners to increase relative to the number of insureds in the labor force will be with us over the next several years as well thanks to a further aging of the population and people retiring. In this sense the last wave in the growth of the number of pensioners was between 1971 and 1978, though it is the weakest in the overall survey (the annual growth rate of the number of pensioners is 3.3 percent); if we break it down, it shows that there is a continuing tendency for the number of new pensioners to increase. The average annual growth was 2.8 percent in 1975, 2.6 percent in 1976, 4.1 percent in 1977, 4.4 percent in 1978 and 4.9 percent in 1979. The new wave of pensioners is accompanied by an old phenomenon—once again the share of disability pensioners is growing more and more. It is anticipated that under the present qualifying conditions the number of pensions will increase from 1,615,000 in 1980 to 2,050,000 in 1985. The annual growth rate will in that case rise to 4.8 percent in the next wave. Since the rate of employment will be increasing between 2.5 percent and 3 percent, this will signify a further deterioration of the ratio between the number of pensions and the number of insureds in the labor force. Between 1981 and 1985 this will mean that spending for old-age and disability insurance will grow faster than the anticipated growth of the social product and the national income.

This means that the national income will have to bear the burden of new appropriations for old-age and disability insurance. The stabilization measures have, however, halted that increase. Here is why. For years the share of the national income for pensions has increased faster than the national income itself. Over the last 5 years this share climbed from 9.7 percent in 1973 to 10.1 percent in 1977 and about 10.5 percent in 1979,

which means that allocations for pensions have been increasing at an annual rate of 28 percent, while the national income has been increasing about 22 percent on the average.

The "Second" Stabilization Package

Whereas in the field of old-age and disability insurance the first stabilization package halted the faster growth of pension funds and the growth of the national income, the second has to do with halting the growth of disability pensions. The conditions for obtaining and determining the right to a disability pension are contained in the Federal Law on Basic Rights Under Old-Age and Disability Insurance. However, more detailed conditions for determination of those rights are defined by republic law. Over the last 10 years the percentage of persons receiving disability pensions has moved upward or downward as a function of the policy in the republics, without any other more evident causes.

The example of Serbia eloquently indicates the degree of correlation between the advantages offered by regulations and the relative number of disability pensions granted.

Serbia is among the regions with the highest annual growth of disability pensions and also the fastest increase in the number of new recipients of disability benefits. Nevertheless, in 1978 the new Law on Disability and Old-Age Insurance added another favorable practical opportunity for people to retire with 10 years less of work service for men and 7.5 years less for women if second-degree and third-degree disability are proven. The year after the law was adopted, the percentage of new disability pensions was 12.4 percent.

The report on operation of the Republic Old-Age and Disability Insurance Community of Serbia over the last 4 years shows that the revenues, which increased at an average rate of 24.8 percent, were altogether unable to cover the growth of expenditures (27.6 percent on the average). Except for one year the community has therefore been operating with a constant deficit. The shortage has been covered with reserves, but even they have thinned out in time, and the problematical limit has been reached beyond which the payment of pensions will be uncertain. Thus in 1973 the community could pay from its reserves the total amount for 5 months, while last year it recorded the largest drop of reserves, which at present can hardly cover pension payments for 1 month. This June it indeed happened that certain communities in Serbia were unable to pay pensions, and the pensioners waited several days for the funds to be borrowed. We must state that we are talking about the period between 1973 and 1978, when the growth rate of disability pension recipients (4.4 percent) was already higher than the growth of old-age pension recipients (3.8 percent), and slightly lower than the growth rate of recipients of survivor benefits (4.5 percent).

The strong growth of disability pensions is considerably diminishing the amount of the average pension in general and of the disability pension in particular. An analysis of pensions in Serbia in 1978 has shown a high share of pensions below the marginal amount (2,608 dinars): 43 percent of disability pensions, 52 percent of survivor pensions and 19.3 percent of old-age pensions represent pension income below that limit, and they are being received by 40,500 disability pension recipients, 40,500 survivor pension recipients and 20,800 old-age pension recipients.

In spite of these figures we should say that in recent years both the real and the nominal increase in the size of pensions has been larger than the growth of personal incomes. According to data of the Federal Committee for Labor, Health and Social Welfare Policy, between 1973 and 1978 average pensions increased at a rate of 3.8 percent in real terms, while real personal incomes increased at a rate of 3.5 percent. Pensions in Serbia recorded a similar line of growth, faster than the growth of personal incomes. Figures for last year obtained from the Federal Committee for Labor, Health and Social Welfare Policy show that the average pension has continued to rise faster than the average personal income, in fact even at a slightly accelerated rate, and this has resulted in a further improvement of the relationship between the average pension and the average personal income: from 58.9 percent in 1978 to 60.1 percent in 1979.

The principal argument for the faster growth of pensions has always been the low average pension level. The measure of indexing the increase in the size of pensions to the cost of living was adopted in order to maintain the existential minimum for pensioners.

Size of the Average Pension in Yugoslavia

Republics and Provinces	1978	1979
Bosnia-Hercegovina	2,529	3,035
Montenegro	2,965	3,665
Croatia	3,060	3,852
Macedonia	2,559	3,099
Slovenia	3,606	4,402
Serbia	3,066	3,726
Kosovo	2,228	3,135
Vojvodina	2,755	3,351

It has turned out, however, that the steady growth of funds cannot meet the needs because of the ever larger increase in the number of pensions, in which disability pensions have an ever more sizable share. Yet they, because of the shorter length of service and lower age level of insureds, are by and large low. Preservation of their size at a socially acceptable level means an additional sizable exhaustion of pension insurance funds, and the present stabilization measures must take this into account, most probably through a policy of further protection of small pensions.

What is to be done, however, to adapt the policy governing disability and old-age insurance? Probably we should begin at the beginning. That is, it has turned out that our social insurance statistics do not have even basic indicators on the composition of the insureds in the labor force with respect to age and length of service, which is the principal component of most pension systems in the world, since without it one cannot estimate the expected level of spending. Moreover, our statistics do not even have figures on the degree of disability, death rate and migration of insureds, which is a great obstacle to monitoring and studying these factors and in particular their influence on the volume and composition of expenditures in the old-age and disability insurance system. The figures on pensionable length of service, degree of disability, average and probable length of life, the mortality rate, types of activities in which insureds in the labor force work, their amount of schooling, work safety, the level of their income, family situation, and the productivity they have achieved, provide the basis for serious long-range guidance and formulation of policy concerning pension insurance. Only in late 1970 were regulations adopted on the keeping of records on insureds and pension recipients on the basis of a uniform methodology for the entire country. More complete statistical documentation, however, is expected only in the present year. Without it it is not possible to alter the policy governing old-age and disability insurance without major disruption, nor can steps of any kind be taken. Perhaps it is fortunate, then, that the drafting of the stabilization measures in this domain will coincide with the first more complete figures from records on insureds and pension recipients. The third stabilization package might therefore be drawn up more seriously and cover a longer period of time.

	1969-1973		1974-1978	
Republics and Provinces	Total Pensions	Disability Pensions	Total Pensions	Disability Pensions
Serbia	3.9	1.1	4.3	4.0
Bosnia-Hercegovina	5.3	3.6	3.9	4.4
Montenegro	3.6	2.4	3.3	1.7
Croatia	3.0	0.5	3.0	2.4
Macedonia	5.4	4.1	5.3	3.7
Slovenia	4.0	6.0	2.1	1.9
Kosovo	7.5	8.0	6.2	3.7
Vojvodina	4.1	1.9	3.9	3.4
Yugoslavia	4.0	2.2	3.6	3.2

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DISADVANTAGES OF IMPORTING FOREIGN TECHNOLOGY CITED

Belgrade KOMUNIST (organ of the LCY [League of Communists of Yugoslavia]) in Serbo-Croatian 15 Aug 80 p 13

[Article by Dragisa M. Pavlovic: "Tied Hands"]

[Text] Though efforts are being made to establish fairer international relations in the transfer of technology and the protection of industrial property, the present situation is still very unfavorable for our country. This situation is manifested in restrictive clauses dictated by foreign suppliers of technology in what are referred to as license agreements.

Yugoslavia has objectively been compelled to purchase patents, licenses and technological know-how. According to information supplied by the Federal Economic Chamber, up until the end of May 1972 our organizations had or were using about 500 patents, licenses and rights to know-how. They had concluded 328 contracts on industrial cooperation and long-term production collaboration with foreign partners; 52 contracts on investment of foreign capital calling for a total amount of about 5 billion dinars of joint investments; they had granted or sold 76 patents and licenses, of which about one-fifth went to the advanced countries; in their own production capacities about 50 percent of the production equipment in use had been imported from abroad.

Not many things have changed since then. Even now industry is importing most manufacturing processes. Licenses are almost the only way of obtaining technology, so long as the more complicated forms of international production collaboration are still underdeveloped and insufficiently organized.

According to the figures available, in mid-1978 there were about 600 licenses in the Yugoslav economy. An analysis of 100 contracts chosen at random shows that there are at least 5 restrictive provisions in nearly every contract.

On the basis of frequency of occurrence (about 62 percent of the cases) the most common provision is a limitation on the use of the patented innovation or "know-how" and the payment of compensation even after the life of the patent or the agreement.

In almost 44 percent of the license agreements our organizations are prevented from "researching and developing" the license which they have "obtained."

In more than a third of the agreements there is a limitation on the sale of products. In one case the agreement even has an annex consisting of a map of Yugoslavia on which a heavy line marks off the territory where our organization is "allowed" to sell the products manufactured with the license "granted," and where it is "forbidden" to do so.

Obligations Without Rights

In 31 percent of the license agreements which were examined a restriction on the business management of the "recipient" of the license is encountered, and almost the same number of agreements contain unjustified charges. One illustrative and instructive example is that of one of our organizations which concluded an agreement with a foreign firm on production of drugs and committed itself to purchasing the necessary ingredient for production at a price of 1,000 Swiss francs per kilogram solely from the "grantor" of the license. As it turned out, however, it managed to purchase that same ingredient at a tenth of the price, but from another firm. When the licensor learned about this "economic stupidity" of our organization, it was compelled to pay the "grantor" of the license 600,000 francs in cash by way of damages.

Importing licenses calls for very keen attention and caution. It is unenable to export at any price, much less import under those conditions. First of all, one should look to the needs and capabilities of his own creativity and ensure the legal foundation in license agreements for those capabilities to be brought into play. With many technologies (licenses), even the slightest change, any creative improvement, even when it is done by our workers, is regarded as the property of the seller of the technology. The owner's permission is required for any change in an innovation. In that way we become dependent on the owner of the license. That is why it is high time, now that we have several world producers for nearly every technology, that we ourselves seek out the conditions under which the work of our workers on new solutions, innovations and certain substitutions of raw materials will have definite protection.

The Purchasing of Outdated Technology

When we import technology (a license), it is important that we import something that stands at the peak of technological advance in the world at that moment.

By applying outdated technology we are "incorporating" the lag and diminishing the competitiveness of our economy on the world market. Organizations of associated labor have various reasons for deciding to adopt a technology that is not up-to-date. Sometimes it is because of lack of information, in

others because of credit financing, in still others because of the question of raw materials, and so on. Today there are still organizations of associated labor in which decisions are made on capital investment projects without professional analyses concerning raw materials, size of capacity, and the market, and without involvement of the workers in these processes through self-management. On this basis credits are nonchalantly taken at a price and for periods of time which are materially and economically unacceptable, and little or nothing is done about distribution, new organization of work, planning, and so on.

"Detailed" studies prepared with the methodology which will particularly emphasize the good aspects and conceal the bad aspects of the "undertaking" are brought before the workers for a hasty decision. Such studies will, of course, be adopted after a "good presentation." When we know that it takes us an average of 3 years to put a technology into operation, then it is clear that the optimality of any particular arrangement which we conclude falls to the lowest point very quickly.

Processing materials represent 63 percent of our imports in value terms. Machines and equipment represent one-fourth of imports, and consumer goods constitute only 12 percent. Whenever imports of machines and equipment increase, imports of materials increase in definite proportion. It turns out that with every new factory we are increasing the country's payments deficit. It is therefore important to purchase a technology which makes it possible to utilize our own raw materials. In that way we eliminate dependence for raw materials, and that means we are reducing our overall dependence on foreign countries. Every organization has a very great interest in the kind of raw materials it uses, in the kinds of reserves there are, and in the possibilities that exist for trade.

Often product markets are defined when technology is sold. It is demanded that the markets be only our country or even only parts of our country. This need not, of course, have a restrictive effect on expansion of our economy to the world market, but it could have. Market restrictions of this kind make it more difficult to carry out our policy in certain regions of the world and certain countries. We are unable to carry out certain projects; that is, we must carry them out with a partner from abroad who has sold us the license. Everyone is familiar with the case of Nikola Tesla, our well-known producer of automatic telephone switchboards under a license from the Swedish firm Erikson. The signatures on a preliminary agreement between Nikola Tesla and a customer from Algeria had not yet dried, when representatives of Erikson turned up and simply prohibited Nikola Tesla from exporting this product from Yugoslavia. They would allow it, but only through Erikson. That was what the licensing agreement said. For the enterprise Rad of Belgrade to use the BALANSI system in setting up a housing fabrication plant in Iraq, it first had to pay 10 percent of the total cost of the investment project into the treasury of that French firm.

Our organizations enter into "transactions" with foreign partners without preparations which are indispensable to successful performance of a transaction. Usually they do not have in mind all the necessary parameters for carrying out projects, and in particular analyses as to selection of technology. It is no wonder, then, that such agreements turn out to be unfavorable for our organizations of associated labor, and project completion is usually late.

In most agreements the foreign partner does not share in the risk of the joint venture. If there are service charges under the license, they are paid regardless of the profit earned. Our organizations pay a fixed amount for the technology acquired. There are cases of using the right to technology and trademark when foreign partners are paid a license fee in the form of a royalty which is a definite amount for each article manufactured or even as a certain percentage of the sales price of the product.

The importation of foreign technology has a discouraging impact on development of our research capabilities. Our organizations of associated labor have not been relying on domestic manufacturers and innovators; that is, our organizations have been reluctant to adopt domestic technology.

We dare not fall into deeper dependence in the transfer of technology. It is therefore indispensable that through purchases we safeguard the material right to a particular technology (innovations, patents and know-how), stimulate development of long-term production cooperation and develop our own capabilities for effective transfers. There is also a need to guarantee preference to domestic technological solutions when their value is equal to that of foreign ones. Likewise, we must also provide incentives for them to be transferred to other countries, especially the developing countries, through engineering, industrial cooperation and joint ventures.

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ECONOMIC AND INDUSTRIAL AFFAIRS

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CONTENTS

INTERNATIONAL AFFAIRS

East-West Economic Cooperation Described
(Peter Gal; MAGYAR NEMZET, 16 Aug 80) 1

GERMAN DEMOCRATIC REPUBLIC

SED Plenum Discussion of Economic Measures Published
(Various sources, various dates) 5

West German Commentary
Politburo Report by Lange, by Inge Lange
More West German Commentary
Schuerer Defends New Policies, by Gerhard Schuerer
Modrow on Quality Improvements, by Hans Modrow
Ziegenhahn: Enterprise Performance Varies,
by Herbert Ziegenhahn

HUNGARY

Economist Analyzes Positive, Negative Effects of Regulations, Their Interpretation
(Laszlo Bogar; VALOSAG, No 8, 1980) 43

Bank Official Describes Requirements for Export Development Loans
(Istvan Dancs; NEPSZABADSAG, 10 Aug 80) 55

Regulators Complicate Interests of Grain Growers
(Gyorgy Koranyi; FIGYELO, No 33, 1980) 60

Various Shortages Endanger Profitable Corn Production
(FIGYELO, No 33, 1980) 63

ROMANIA

Preparations Necessary for 1981 Plan Reviewed
(Vasile Parascan; REVISTA ECONOMICA, 8 Aug 80) 66

Irrigation Systems To Be Extended, Modernized
(Petru Pantiru; REVISTA ECONOMICA, 8 Aug 80) 72

Oltenia Coal Basin Operations: Problems, Solutions Viewed
(Vasile Boescu, Bogdan Padure; REVISTA ECONOMICA,
1, 15 Aug 80) 79

YUGOSLAVIA

Republic Foreign Trade in First 6 Months
(Milorad Urosevic; PRIVREDNI PREGLED, 8 Aug 80) 89

EAST-WEST ECONOMIC COOPERATION DESCRIBED

Budapest MAGYAR NEMZET in Hungarian 16 Aug 80 p 3

[Article by Dr Peter Gal: "On the Basis of Mutual Interest"]

[Text] The changes that are taking place in world economic and international political relations have a many-sided influence on international economic cooperation--particularly on one of the most sensitive areas thereof, the system of economic relations between developed capitalist and socialist countries. The continuing development of these relations requires new initiatives for which the mutual interests that might be strengthened currently and in coming years may provide a certain foundation.

Expectations and Realities

The commercial ties between European socialist and developed capitalist countries, even in the most favorable development phase in the world economy, were generally of marginal importance on the basis of trade magnitude. It accounted for only a negligible part of the economic relations of the developed capitalist countries and only about one-third of the total foreign trade of the socialist countries, but their economic and political importance far exceeded the data reflected in the figures.

In the first half of the 1970's, East-West trade increased more dynamically than world trade. Between 1971 and 1973, the exports of the developed capitalist countries to the European CEMA countries increased 18 percent and its imports from these countries increased 9 percent, both calculated in unchanged prices. Following a decline in 1974, there was again an increase in the Western imports of the CEMA countries but in exports there was a minor decline in real value. In the second half of the 1970's, both exports and imports showed a fluctuating development in real value. (At the same time, East-West trade relations at the peak of the most dynamic development in 1975 did not amount to 3 percent of world trade.)

Political changes became of particular importance against the background of mainly economic factors. The strengthening of detente, the signing of the Helsinki Concluding Document and mutual trust made the previously unfavorable

political influences more favorable. The limiting and inhibiting strength of the earlier political factor became an incentive force for a time. This change also made it possible, among other things, for the socialist countries to bridge the difference between their increased imports and exports that were rising to a lesser degree by accepting credits on the Western money markets and loans, the volume of which increased by a factor of 10 in 10 years. All these changes brought certain elements of mutual dependence into East-West relations and strengthened mutual interest in cooperation.

On one hand, the imbalance in East-West trade--the deficit of the socialist countries in their payments balance with capitalist countries and the related indebtedness--and, on the other hand, the fluctuating cyclical situation in the developed capitalist countries, and in part some political factors, resulted in modifications in East-West trade in the second half of the 1970's. In 1977, the former dynamics in East-West trade broke down: the imports of the socialist countries declined 8 percent, and their exports increased only slightly, 2 percent. But behind these figures significant structural changes are evident: while Soviet exports to the capitalist countries increased 12.5 percent, its imports from there declined 8.3 percent; at the same time, the exports of the other European CEMA countries to capitalist countries increased only 8.6 percent, while their imports from there did not decline at all but increased 3.2 percent as compared to the previous year.

The Major Partners

At the end of the 1970's, the share of the West European countries in the total exports of developed capitalist countries to socialist states was 75 percent. In 1979, the United States had a 14-percent share, while the declining Japanese share was 9 percent in the same year. To a certain extent, of course, the situation in this respect also was different between the Soviet Union and the other European CEMA countries. While the U.S. share in Soviet imports from the developed capitalist countries increased dynamically and reached 18.5 percent by 1979, the share of the Western European countries--although actually as a result of a faster growth than average--was 63 percent. (The United States and Western Europe as well increased their share at the cost of Japan.) In the other European CEMA countries, however, the West European "dominance" in imports from the OECD countries is even more important, remaining unchanged for years at 84 percent, while the U.S. share is 9.5 percent and Japan's 4.2 percent. (Let us note that the U.S. share in Hungary's total imports from developed capitalist countries is about 3 percent, which is the lowest ratio among European CEMA countries. In all European CEMA countries, the FRG has the greatest share of capitalist imports; in the case of the Soviet Union, there is a rapid growth in this ratio while in the case of the other countries there is no change. The FRG share in total capitalist imports by the Soviet Union is one-fifth, while in the "small" CEMA countries it is one-fourth.

Almost half of the total imports of the European CEMA countries from the developed capitalist countries went to the Soviet Union in the second half of the 1970's. (Poland, for example, imported 16-17 percent and Hungary 8-9 percent of the total European CEMA countries' imports from all OECD countries.)

The West European states are the best markets for the exports of European CEMA countries directed toward developed capaitalist countries. These states imported about 86 percent of the commodities of the socialist countries, from which it can be deduced that the developed, overseas capitalist countries--that is, primarily Japan and the United States--on the average covered their exports to the socialist states with fewer imports than the old world Western countries. Within total OECD imports the FRG share is the highest in imports (as is the case with exports) from the socialist countries: on the average this share was 22 percent in the second half of the 1970's. FRG firms bought about 19-20 percent of the Soviet Union's total Western exports and about one-fourth of the exports of the other European CEMA countries.

Soviet products made up 52-53 percent of exports from the European CEMA to the developed capitalist countries, whereas Polish goods made up 16-17 percent and Hungarian goods 7 percent at the end of the 1970's.

A Slowly Changing Commodity Structure

The most problematic area in the development of commercial relations between the European socialist and the developed capitalist countries is perhaps latent in the structure of the trade between the two groups. The deficit that developed during the 1970's in the payments balance of the socialist countries and together with this the increase in their indebtedness to the capitalist countries is only one of the important phenomena in trade between the two blocs. Another important manifestation of this asymmetry, which defines the first to a certain extent, is that in the exports, on one side, there are highly processed finished goods for the most part, while, on the other side, unprocessed, or slightly processed, goods dominate.

But the problem is more complicated than this. In both the socialist imports from capitalist countries and exports as well, certain favorable changes have occurred during the development thus far. The exports of socialist countries to the developed capitalist countries also show some improvement, but at the same time the structure of capitalist imports by the European CEMA countries is in part unfavorable, for the ratio of machinery, equipment and investment goods in general representing developed technology and regarded as the main goal of imports from the capitalist countries is still relatively low even after the favorable trend of the changes that have occurred in the past decades.

As for the structure of imports by the European CEMA countries from the developed capitalist countries, the most important products from the viewpoint of technical development--machinery, equipment and transportation means--had a 38-percent share by the end of the 1970's as compared to 32 percent in 1973. At the same time, the share of foods in capitalist imports in the European CEMA countries is very high--ranging from 12-17 percent. Likewise, a relatively high share, about 6-8 percent, is represented by raw materials, and at least a one-third or two-fifth share by various semiprocessed products.

Undoubtedly, the neuralgic point in the structure of East-West trade relations has been and remains in the structure of the exports by the socialist countries. Not only is the ratio of finished products exported by the European CEMA to the developed capitalist countries--primarily machinery, equipment and transportation means--low and well below the share occupied in total exports, but the growth rate as well has hardly exceeded the growth dynamics of exports to developed capitalist countries. Even at the end of the 1970's, the commodity category of machinery, equipment and transportation means made up only 8-9 percent of capitalist exports by European CEMA countries (in total exports this ratio is over 35 percent) while raw materials and fuels made up more than half of exports. The latter is even more dominating in Soviet exports, 70 percent, while it makes up, on the average, only one-fourth of the share of the other European CEMA countries. In the case of the latter, the share of investment goods is also more important in their capitalist exports, and likewise the share of consumer industrial goods is also high, about 15 percent.

Even by way of allusion, it is also worthwhile in this connection to mention the favorable effects of Western production cooperation projects. The structure of these relations is substantially more positive for the socialist countries than in case of trade as a whole. This is, of course, natural by their character. And still we should mention that while in the 1970's the share of cooperation projects in East-West trade as a whole was only 2-3 percent, almost 10 percent of the machine trade was conducted in the framework of production cooperation projects.

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SED PLENUM DISCUSSION OF ECONOMIC MEASURES PUBLISHED

West German Commentary

Frankfurt/Main FRANKFURTER ALLGEMEINE in German 24 May 80 p 14

[Article signed "Gz" datelined Berlin, 23 May: "The SED Intends To Take Action Against Waste and Shoddy Work--Stricter Party Control over Cost Announced; Politburo Report." Excerpts from the SED Politburo Report follow this article]

[Text] In the present phase of organizational preparation for the next five-year plan (1981 to 1985), the SED intends to increase its efforts to check the steady cost increase in the industrial combines and in this connection to intensify party control. This was learned from the report of the Politburo to the SED Central Committee, which Inge Lange--the Central Committee member in charge of women's problems--delivered before the 12th plenary session of the Central Committee.

According to the Politburo report, parts of which were published, the development of production during the first few months of this year was by and large satisfactory and the population was amply provided with basic foodstuffs, necessities of life, children's articles and the "countless little things"; the supply of clothing was sufficient, and further progress was made in regard to high-grade technical consumer goods and other durable industrial products, "but this was not always sufficient for meeting the steadily rising demand."

According to the report, the Politburo had adopted a new resolution, which specified for each combine what kinds and quantities of consumer goods were to be produced and at what time they were to be incorporated in the production process. The report pointed out that the necessity day after day to safeguard supplies was a difficult requirement which "must be met more satisfactorily" in the bezirks and kreises [GDR administrative units].

Mrs Lange stated that the work concerning cost control, a crucial criterion, should be significantly improved. According to Mrs Lange, the targeting, recording and control of the costs in combines and enterprises and at

construction sites and the precise accounting and analysis of the costs by the directors must be organized more rigorously; the party organizations in the enterprises should intensify their efforts to insure that the struggle for maximum material and energy economies, for cost reduction and against any waste of national wealth "be waged energetically."

According to the plans, the accomplishment of these tasks is to be facilitated through introduction of new combinations of intra-plant "plan targets" that are to force the industrial enterprises to economize on materials. At the same time, the Politburo issued new guidelines that are to make possible accurate productivity comparisons between the enterprises of the industrial sector and those of the building trade. The Politburo report also disclosed that at the beginning of this year nearly 20,000 investment projects had been reviewed and that subsequently new priorities had been established, which--the report urged--should now be observed.

The report states that in the agricultural sector, where the SED has been registering, even in the recent past, "stagnation" in regard to yield--for which reason the struggle against shoddy work in the enterprises has of late been intensified by means of picture-stories in the technical journals and identification of the individuals involved--it will be necessary to concentrate all energies on "gradually overcoming" the differences in performance between the cooperatives and the enterprises.

Politburo Report by Lange

East Berlin NEUES DEUTSCHLAND in German 22 May 80 pp 4-7

[Report to 12th SED Central Committee Plenum, held 21-22 May 1980, by Inge Lange, Politburo candidate and secretary, SED Central Committee: "From the Report of the Politburo to the 12th SED Central Committee Plenum." For further excerpts from the Politburo Report which, together with the excerpts published below, constitute the entire text of the NEUES DEUTSCHLAND report, see FBIS DAILY REPORT: EASTERN EUROPE 28 May 1980 Vol II No 104 pp E 1-E 8]

[Excerpts] Having from the outset applied the teachings of Marx, Engels and Lenin to the concrete national and historical conditions of our country, we are consistently implementing the universal laws of the socialist revolution and of socialist development. The comprehensive theoretical-ideological work that was done on the occasion of the 110th anniversary of the birth of Vladimir Il'ich Lenin in appreciation of his life and work convincingly demonstrated the truth, universal validity, vitality and topicality of our world view. It again showed that Marxism-Leninism is the only true beacon toward a future of the nations free from exploitation and subjugation, the reliable signpost in the struggle for socialism, peace and human progress.

This characterized also the celebration in the GDR of the 35th anniversary of the liberation from Hitler fascism. In the life of the people, this celebration turned out to be a convincing manifestation of the indestructible fraternal friendship and cooperation with the Soviet Union. In word and deed, our citizens demonstrated that they will never forget the immense sacrifices, which the Soviet people made in crushing the barbarism of the Hitler regime, and that the German-Soviet friendship and the fraternal alliance with the country of Lenin are the solid foundation of our further progress in the development of the advanced socialist society.

The mass demonstrations that took place on the occasion of the anniversaries of liberation in the national memorials of Buchenwald, Sachsenhausen and Ravensbrueck and of the Brandenburg-Goerden penitentiary testified to the bitter and bloody struggle which German communists and other German antifascist resistance fighters--fighting side by side with their comrades from all countries of Europe--waged during the years of fascism. The words of Erich Honecker--spoken at the powerful memorial demonstration at Marienberg, Brandenburg--met with great response on the part of the people of our country: "In the German Democratic Republic, in the first workers' and farmers' state on German soil, in our socialist fatherland, our people has found its true home. Here the legacy of antifascism is being implemented and along with us all nations that are truly concerned with peace can be sure that on German soil there exists a state in which fascism was eradicated and which will never start a war."

In 2 days, the Fifth Festival of Friendship between the youth of the USSR and the young people of the GDR will begin in Karl-Marx-Stadt. Through this festival, the Free German Youth, the helper and fighting reserve of our Party, honors the 35th anniversary of the liberation, the 110th anniversary of the birth of V. I. Lenin and the 25th anniversary of the establishment of the Warsaw Pact. We are convinced that the Fifth Festival of Friendship will demonstrate anew that on the basis of the revolutionary ideas of Marxism-Leninism the Free German Youth and the Communist Youth League will remain closely allied forever.

Toward Successful Accomplishment of the Economic Tasks

Dear comrades!
In keeping with the guidelines provided by comrade Erich Honecker at the 11th session and at the discussion with the first secretaries of the kreis [GDR administrative unit] administrations, during the period under review the activity of the Politburo and of the Central Committee secretariat was oriented toward obtaining better economic results, in order to be able to prepare the 10th Party Congress and consistently to implement the resolutions of the Ninth Party Congress, which are aimed at improving the well-being of the people and at the consolidation of socialism.

In accordance with the measures adopted by the Central Committee secretariat, the work required to accomplish this focused on the following basic tasks:

Firstly: All-round fulfillment and systematic overfulfillment of the economic plan for 1980 and implementation of the objectives set by the Ninth Party Congress for the 1976/80 five-year plan.

Secondly: Further elaboration of the principal policies aimed at modernizing the structure of our country's material/technological basis and of the basic conception concerning the expansion of our national economy during the period from 1981 to 1985.

Thirdly: Further improvement of management, planning and economic stimulation so as to promote economic growth and improve work quality and efficiency.

The Politburo notes that along with all working people our Party has energetically set to work on the tasks stipulated. This is evidenced by the acclaim of the masses and their resolve in pursuing the goal of significant productivity increases to do their utmost overall to strengthen the GDR and to safeguard and gradually raise the standard of living attained.

The many outstanding commitments and initiatives concerning the all-round fulfillment and systematic overfulfillment of the economic plan for 1980 reflect the great political awareness and the deep trust of the working class, the cooperative farmers, the intelligentsia, the women, young people, and all workers in the successful policy pursued by our Party. They are an indication of the resolve of the working people more emphatically to direct the thrust of the socialist competition organized by the trade unions toward the improvement of work quality and efficiency.

The Politburo is pleased with the results of an exchange of experience between the Central Committee of our Party, the general directors of the combines and the Central Committee's party organizers of the industrial and construction sectors, which took place in March in Gera and which was conducted in a true communist spirit.

In a letter to the secretary general of the Central Committee, comrade Erich Honecker, the participants unanimously stated they would do their utmost to insure further implementation of the resolutions of the Ninth Party Congress and properly to prepare the 10th Party Congress through initiatives and new ideas and projects. Proceeding from this position concerning the overall consolidation of the GDR, the combines jointly committed themselves to produce M 2 billion worth of industrial goods in excess of the 1980 plan. On average, this is the equivalent of the production volume of 2 working days per combine, which for the most part is to be produced on the basis of material economy. It is with great pleasure that we can announce to the 12th session of the Central Committee that prior to the 35th anniversary of the liberation of the German people from Hitler fascism by the glorious Soviet Army, the combines succeeded--as a first stage--in producing one additional daily quota.

During the period under review, the Politburo concerned itself on a monthly basis with the fulfillment of the economic plan and it established all the provisions necessary to continue the steady and continuous development of the national economy. The Council of Ministers was entrusted with the implementation of the measures adopted.

Plan Fulfillment Ahead of the Targets

Thanks to the outstanding results produced by all workers in the socialist competition, the plan got off to a good start. Month after month, the objectives of the 1980 economic plan for the development of productivity were attained and plan fulfillment moved well ahead of the targets.

By the end of April, the fulfillment rate of the industrial production plan was 101.1 percent. As compared to the corresponding period of the preceding year, this represents a 6.2-percent production increase per working day. M 1.3 billion worth of industrial goods were produced in excess of the plan targets.

It should be noted that the number of combines and enterprises which each month--decade after decade--have been fulfilling their production plans and which are steadily moving ahead of the targets has been increasing. Of 115 combines and industrial VVB [associations of state enterprises], 108 fulfilled or overfulfilled the industrial production plan. The combines are becoming a great social force; they represent a stable support of our socialist planned economy.

Of great significance in regard to improved performance is the fact that the qualitative factors are assuming increasing importance. This is reflected in the fact that by the end of April, the fulfillment rate of the net production plan for centrally controlled industry was 104.8 percent. This is attributable primarily to the great efforts made by the workers in regard to reduction of industrial input and improvement of material economy.

In this connection, the Politburo plans to eliminate the still existing differences in performance and in the development of the qualitative factors involved in economic growth and to insure that every combine fully discharges its economic responsibility. It is necessary to evaluate the work of all combines by the same economic criteria. In accordance with a resolution adopted by the Politburo, a uniform evaluation standard was developed for the economic comparison of the combines' economic level and their improvements in productivity.

As compared to the preceding year, labor productivity in industry increased by 5.9 percent. In 34 combines, labor productivity increased more rapidly than commodity output.

The results produced by science and technology were the crucial factor determining the increase in productivity and the improvement of efficiency and product quality. During the period under review, 1,483 scientific-technological projects of the state plan and of the enterprises' intra-plant plans were introduced in the production process.

By the end of April, the fulfillment rate of the construction output plan was 100.3 percent. As in industry, progress has been made in the construction sector in regard to utilization of the qualitative production factors. Thus the fulfillment rate of the construction sector's net production plan amounts to 102.6 percent.

In the transport sector, the volume of goods shipped exceeded by 41 million tons that of the corresponding period of the preceding year, i.e. a productivity increase of 13.2 percent. Thus we were able better to meet the transport requirements of the national economy.

The material-technological basis of our national economy was systematically consolidated. By the end of April, the volume of investments in industry, in the construction and transport sectors and in the postal and telecommunications sector totaled M 8.9 billion, i.e. an increase of 7.2 percent.

We are consistently pursuing the course laid down for the benefit of the people by the resolutions of the Ninth Party Congress and we are systematically implementing the housing construction program, the nucleus of our social policy. By the end of April, all of the targets set by the complex housing construction plan were attained; 47,359 apartments, including 32,801 new housing units, were delivered and 2,780 openings in kindergartens and 2,242 places in day-care centers were made available.

In all bezirks and kreises [GDR administrative units], it is necessary to make available the consumer goods and services planned on a regular basis and on a high qualitative level and more significantly to improve the input-output ratio. By means of efficient construction methods, we must make effective use of the existing possibilities regarding significant overfulfillment of the targets set for housing construction or modernization in the five-year plan for the period from 1976 to 1980.

To give Berlin, our capital city, a dignified appearance is and remains a fundamental concern. Thanks to the achievements of the construction workers and their cooperation partners from all parts of the republic, the work is progressing well. In this respect, the "FDJ [Free German Youth] Berlin Initiative", the greatest central youth project in the history of our youth league, is assuming increasing importance. The volume of the construction projects accomplished in the capital since 1976 equals the architectural volume of the city of Erfurt.

Proceeding from a thorough analysis of the results achieved, the Politburo approved measures concerning the further implementation of the resolutions

of the ninth SED Congress in regard to investments and construction in the GDR capital. Thus there are clear and long-term guidelines for the development and above all for the necessary performance increase in the Berlin construction sector and for the future employment of the construction capacities of the bezirks and of the centrally controlled construction combines. This resolution insures implementation of our Party's Berlin Program without any curtailment in regard to its objectives, but with significantly improved efficiency and quality. This means that the progress made in regard to construction work in our country must be reflected above all in the construction work in our capital.

More High-Grade Consumer Goods

Mindful of the importance of a sufficient supply of consumer goods in regard to the further implementation of our policy of full employment, national affluence, growth and stability, the Politburo and the Central Committee secretariat repeatedly concern themselves with solving the problems concerning the further development of our consumer goods production.

In the first 4 months of this year, the population was amply supplied with basic foodstuffs and the necessities of life, with children's articles and with the countless little things. At the beginning of the spring-early summer season--and for the requirements in connection with the preparations for the youth consecration--a sufficient supply of clothing was available.

In regard to high-grade technical consumer goods and other durable industrial products, we made further progress, without being able always to meet the growing demand. The 11th Central Committee session stipulated that a much greater quantity of high-grade, well-designed consumer goods be produced. The Politburo has meanwhile adopted a corresponding resolution laying down the concrete tasks of the industrial ministries and of the combines. This resolution specifies for each combine what kinds and quantities of consumer goods will be produced and at what time they are to be introduced in the production process; in each case, the quotas established are minimum targets.

The Politburo again stressed the responsibility of all combines and bezirk economic councils for the production of modern consumer goods in high demand. The Politburo urged the Party's bezirk and kreis administrations and the party organizations in the combines and enterprises to intensify party control in this respect.

Reliably to safeguard supplies on a daily basis is a difficult requirement, which must be met more satisfactorily, especially in the bezirks and kreises, since the basic supplies are largely dependent on regional conditions and local production and on the quality of the work of the trade establishments. A satisfactory supply situation presupposes high-quality goods and an appropriate commodity supply by the trade sector. In this respect, the staff members of the trade collectives have set for themselves ambitious goals in the socialist competition.

The Central Committee secretariat discussed data supplied by the Council of Ministers and the federal executive board of the FDGB [Free German Trade Union Federation] in regard to the successful implementation of the pension raise, which came into effect in December of last year. Since that time, over 3 million pensioners have been receiving higher pensions. The average raise amounts to more than M 40 per month. After the measures taken in 1972, 1973 and 1976, this was the fourth extensive raise of pensions and social services that was implemented in the last decade thanks to the outstanding achievements of the working people.

Thus, our society's expenditures on pensions increased from M 9.7 billion in 1970 to M 15.3 billion in 1979. In 1980, they will amount to approximately M 16.8 billion.

The stipulation that women with five or more children, who in spite of this burden were gainfully employed for 12 years, receive a minimum pension of M 340 met with especially positive response. This regulation applies to approximately 120,000 women.

High Rate of Development in Science and Technology

Dear comrades!
We have established the basic conditions that will enable us in 1980 to take further energetic steps toward improving the material-technological basis of the national economy. The strategic work concering the development of long-term growth factors is not a matter of simply preserving the present level of the productive forces. Rather, the objective is to make use of all the possibilities deriving from the combination of the advantages of our socialist society with the scientific-technological revolution.

Proceeding from this position, the Politburo discussed the economic results produced in 1979 in research and technological development and the conclusions to be drawn from them.

It was noted that due to the significant scientific-technological results produced in many fields, it was possible to lay the foundations for greater accomplishments. The exhibits of our combines and enterprises at the Leipzig Spring Fair represent striking evidence of this. The achievements in the field of microelectronics are especially noteworthy.

As was confirmed by the exchange of experience in Gera, a measure that has proved effective in many combines was the systematic orientation of the scientific-technological capacities toward top-level performance. This approach has yielded good results.

The Politburo urges the state directors and the party organizations on the basis of thorough analyses to eliminate the differences in the levels of creative work in science and technology and everywhere to make use of the experience gained by leading combines.

As is well known, scientific-technological achievements are the principal reserve in regard to insuring significant improvements in the refinement of the available raw materials and the high level of quality of the finished products that is necessary to safeguard their competitiveness in the international markets. In this regard, greater efforts are required on the part of the chemical and metallurgical industries in regard to the development of highly refined products and on the part of all combines in regard to the production of high-grade technical consumer goods.

The Party stressed the necessity of extending the range of the economic applicability of scientific-technological results so as to make greater headway in production rationalization and in the reduction of production input. In particular, this applies to the speedy and extensive introduction of modern technologies and procedures for the reduction of working time and labor and for effecting significant material and energy economies.

At the beginning of this year, the Party discussed and approved a report of the GDR Academy of Sciences and of the Ministry for University and Technical School Affairs on the "present state of implementation of the plan concerning the long-term development of basic research, the specification of the research programs and principal lines of research and on positions concerning important developments in scientific-technological research." The strategic orientation of basic research adopted so far has proved successful and is systematically being continued. In this respect, the Party adopted resolutions concerning the further improvement of the conditions prerequisite to scientific research.

These resolutions aim further to develop and better to utilize the creative faculties of the scientists and research collectives, more systematically to direct the inquiries toward basic scientific problems and to concentrate the research work on crucial fields such as energy, raw materials, materials, microelectronics, production technology, nutrition and maintenance of health. An important task is the further intensification of the cooperation between the Academy and university researchers and the research and development centers of the combines so as to be able more quickly and efficiently to utilize research findings conducive to top-level results in industry and other sectors in regard to products, processes, technologies and methods.

The requirements in regard to the rate and effectiveness of scientific-technological progress necessitate above all creative work on the part of the scientists, engineers and innovators. Consequently, we are attributing great importance to the diverse initiatives which have been advanced by the members of the Chamber of Technology and through which they have been contributing to the speedy utilization of microelectronics and other time-, material- and energy-saving technologies.

Toward Effectiveness of Investments

During the period under review, a great deal of work was done to make the investments meet the requirements of the objectively necessary rationalization drive.

At the beginning of this year, the technical-economic indices of nearly 20,000 investment projects were reviewed in accordance with the new higher standards set by the Joint Resolution, which was adopted in October 1979 by the Politburo of the SED Central Committee and the GDR Council of Ministers and which is concerned with improving the effectiveness of investments with the object of further consolidating the productive capacity of the GDR economy.

The objective was to make appreciable progress in regard to the high-priority use of the investment funds for quick application of scientific-technological findings and to insure significant extension of the production range of new commodities.

At present, it is necessary consistently to observe the investment sequence established by the plan, the input targets approved and the start-up target dates and to exceed the technical-economic performance parameters.

The struggle for improvement of investment effectiveness includes thorough preparation of the start-up of material production projects and of the projects concerning housing construction, public education, social and cultural services and health care. For it is only through highly efficient and stable production and efficient utilization of the capacities for the improvement of living conditions that the investments serve their social purpose.

The Politburo and the Central Committee secretariat have been focusing their attention on the improvement of investment management and planning. Through the resolution concerning the decree on the implementation of investments, a new legal foundation was established in regard to the management of investment implementation. The resolution serves to increase the rights and obligations of the plant managers and combine directors and also increases their personal responsibility for the implementation of their investments.

The work collectives in the enterprises and combines of the metalworking industry have been further intensifying their efforts toward systematic utilization of the latest scientific findings in microelectronics, electronic computing and control, industrial robot technology and automation. Today the large-scale application of these findings in the production process is an indispensable prerequisite for improved product quality and reliability, for increased productivity of machines and equipment and for maximum material, energy and working time economy.

In regard to the material-technological safeguarding of the strong rationalization drive, the production of machine tools and processing machinery is of crucial importance, especially for the economical application of microelectronics and for the efficient support of the domestic production of means of rationalization. Proceeding from this situation, the Politburo in April adopted measures aimed at effecting above-average performance improvements in machine tool building, thus creating favorable conditions for the further consolidation of our material-technological basis and for the growing requirements in the export sector.

Preparations in Progress for the Seventh Construction Conference

The Politburo resolved to stage the Seventh Construction Conference of the SED Central Committee and the GDR Council of Ministers on 19 and 20 June 1980 in Berlin, the GDR capital. This conference will establish clear guidelines for insuring--through acceleration of the scientific-technological advances, intensified industrialization of construction, and consistent rationalization--increasingly efficient utilization of the qualitative growth factors in the construction sector, while simultaneously improving the working and living conditions of the construction workers.

At the same time, the conference must work out--on the basis of the results achieved so far and the construction targets set by the 1981/85 five-year plan--ways of further expanding the productive capacities of the construction sector in accordance with the growing requirements. In this regard, the further utilization of the existing architectural substance through the safeguarding of the unity of new construction, reconstruction, modernization and maintenance, a good architectural and urban design of the construction projects--a design harmoniously combining the old and the new--and energy-efficient construction are assuming increasing importance.

In connection with the work concerning the basic conception for the development of the national economy during the period from 1981 to 1985, the Politburo approved a complex proposal concerning the implementation of the housing construction program. The resolution aims to effect--by means of improved efficiency resulting from a favorable relation between new construction, modernization and maintenance of apartments--further basic improvements in the living conditions.

Thus we are establishing the conditions necessary for solving by 1990 the housing problem in the GDR as a social problem. The plans provide for an above-average development of housing construction in the capital and in the Leipzig, Dresden, Halle and Karl-Marx-Stadt bezirks.

Through systematic preparation of complex housing construction and by dynamically improving the performance of all combines and enterprises participating in housing construction through comprehensive rationalization by means of the available financial and material resources, we must insure maximum sociopolitical efficiency.

In order strictly to observe and stay below the state input norms, it is necessary above all to make more efficient use of the land and resources available for construction and to accelerate the scientific-technological advances, especially in regard to energy-efficient construction.

The bezirk administrations of our Party should now intensify their efforts toward systematic preparation of housing construction in the 1980's. Past experience shows that it is in this area that the greatest reserves can be tapped for the struggle for improved quality and efficiency. This was confirmed by the review--conducted in accordance with the standards set by the 11th Central Committee session--of housing construction plans for 206 residential areas, as a result of which it was possible--through more efficient utilization of building land and discontinuance of the demolition of buildings worth modernizing--to realize great savings of investment capital. All participants must closely cooperate to insure that in terms of city planning, architectural design and functionality the residential areas meet the qualitative requirements. We must also concern ourselves with the community service facilities and with the education of the children in the residential areas.

At the same time, the methodical preparation of the housing construction sites, including the timely development of municipal services, as an indispensable precondition for an improved construction work flow based on synchronized and continuous operation imposes heavy demands on the energy and water management and on the transport sector.

To maintain present buildings, it is planned to increase during the period from 1981 to 1985 the volume of building repair work to 125 percent, as compared to the current five-year plan period. Special efforts will be necessary to improve the performance of the building repair and janitorial enterprises, especially in regard to maintenance in urban residential areas.

We are convinced that through energetic participation in the "Beautify Our Cities and Communities--Take Part!" competition, the citizens will continue to contribute to the improvement of their living conditions.

Economical Use of Energy and Raw Materials

During the period under review, extensive work was done for the efficient development and utilization of our country's energy base so as to eliminate in all social areas any waste of energy and to replace high-grade imported energy sources by brown coal.

In view of the necessity to insure energy economy and maximum efficiency in energy consumption, new demands are being made on the planning, targeting, distribution and control of energy consumption. The Central Committee secretariat stipulated the necessary measures in this regard. Since the beginning of April, energy sources have been apportioned--on the basis of the combines' full responsibility--in the industrial, construction and transport sectors and in agriculture.

In our planning concerning the development of our own raw materials and the economical use of all available resources, the extended collection and use of secondary raw materials is assuming increasing importance. The present increase in the purchase prices of selected secondary raw materials from private households is one of the measures taken in this regard. It is planned in this way to collect and make available to industry 16,000 tons of waste paper, 28 million bottles and 22 million glasses in excess of the plan targets.

Problems Concerning Our Foreign Trade

During the period under review, the Politburo constantly concerned itself with the tasks in the field of foreign trade. Of great importance in this regard was the preparation and implementation of the Leipzig Spring Fair. The fair impressively demonstrated the growing productive capacity of our national economy and the significant foreign trade capacities of the GDR. The talks conducted during the fair by the secretary general of our Party, comrade Erich Honecker, and other leading party and state representatives produced a strong effect in the international arena and served to promote trade.

The establishment of party control over the observance of a high degree of discipline and the proper implementation of the agreed-upon shipments in connection with the measures concerning socialist economic integration is one of the measures that have proved effective in regard to the systematic development of the socialist economic integration with the USSR and the other CEMA countries. A resolution to this effect was adopted for the 1980 plan by the Central Committee secretariat and transmitted to the bezirk administrations. This resolution focuses on the implementation of the tasks in connection with the program for production specialization and cooperation between the GDR and the USSR which was signed on the occasion of the 30th anniversary of our republic. Thus party control greatly helps to consolidate the basis of our national economy and to promote the economy's further dynamic development.

The strategy for our economic development in the 1980's entails higher demands on the central state management and planning of the economic reproduction process and on the further consolidation of democratic centralism. The key problem is better to reconcile the basic economic requirements concerning increased performance and marked reduction of input with the economic interests of the combines and enterprises.

Performance-Promoting Indices

In view of this situation, the Politburo adopted during the period under review a number of basic resolutions intended more emphatically to improve the performance and the work quality and efficiency of the combines and enterprises in industry and in the construction sector:

It was resolved to use--beginning in March--indexes for industrial commodity output, net output and basic material expenditures per M 100 of commodity output in the management, planning and accounting of the combines and enterprises and of the economy as a whole. This helps to implement the principle: What benefits the national economy is bound to be beneficial for the combines and enterprises as well.

Closely interrelated, these three indexes have a performance-promoting effect. In the light of these and other qualitative criteria of performance evaluation--such as improvement of labor productivity, cost reduction, share of products bearing the "Q" quality seal--it is becoming more apparent to what extent the increase in the productivity of the combines and enterprises is a result of the utilization of the qualitative production factors. At the same time, the enterprises' own contribution to the augmentation of the national income and to the reduction of production input is evaluated more realistically.

Thus the workers' initiatives concerning the reduction of production input are supported still more effectively and taken into account in the performance evaluation. The raw material, material and energy economies lead to higher profits and at the same time to increasing net output. The index for basic material costs per M 100 of commodity output serves to orient the workers toward more effective material economy and toward a high level of product refinement.

It is now necessary to make use of the possibilities of uniform evaluation, which have been created by this Politburo resolution on all levels of industrial and construction management, for accurate performance comparisons so as to overcome the as yet considerable differences in performance development and further to improve work quality and efficiency for the benefit of the people and of each individual worker.

The Politburo also adopted special measures for improving performance evaluation in the construction sector. These measures aim above all more extensively to orient the management, planning and evaluation of the projects toward the requirements concerning a high level of construction efficiency and quality and toward significant reduction of construction costs, material input and working time. These measures serve to focus the creative initiative of the collectives in the construction combines and enterprises on completing the investment projects planned by the target date specified and in accordance with the qualitative and contractual terms stipulated.

The resolution aims to generalize the experience gained in regard to motivating the planners for elaborating efficient, material- and energy-saving project solutions. According to the stipulations, attempts will be made this year in a number of construction industry combines and in enterprises of the bezirk- and kreis-controlled construction industry to carry out the planning, accounting and complex evaluation of the work on the basis of the

following indices: completion of the planned utility projects within the limits of the input targets established, development of construction output and net output, and reduction of costs. In connection with the performance evaluation, the new construction work prices that came into effect in 1980 must be extensively used for an effective reduction of construction, material and energy input and for the improvement of product quality and productivity.

The Politburo emphasizes that the work concerning cost control--a crucial criterion for the effectiveness of intensification on all management levels--must be markedly improved. The directors must strictly organize the targeting, recording and control of the costs in the combines and enterprises and at the construction sites and they must insure accurate cost accounting and analysis. The party organization in the combines, enterprises and at the construction sites should intensify their efforts to insure that the struggle for maximum material and energy economy, for cost reduction and against any waste of national wealth is energetically waged everywhere.

Results and Tasks of Socialist Agriculture

Dear comrades!
Among the cooperative farmers and all other workers in agriculture and forestry and in the food industry, the 11th Central Committee session and the speech of comrade Erich Honecker before the first kreis secretaries gave rise to diverse new initiatives concerning the steady provision of the population with foodstuffs and of industry with raw materials. Commitments to contribute through outstanding results in the socialist competition to the proper preparation of the 10th Party Congress are striking evidence of their acclaim.

In the first 4 months, the cooperative farmers and the workers in agriculture and forestry and in the food industry met the plan targets for 1980. As of 30 April, the fulfillment rate of the plan targets for meat animals was 101.3 percent, for milk, 102.0 percent and for eggs, 107.9 percent.

In the LPG [agricultural producer cooperatives] and VEG [state farms], the collectives are continuing their efforts to provide a solid foundation for the production of meat, milk and eggs by maintaining large and stable supplies of livestock. As regards cattle (5.6 million head) and hogs (11.9 million head), the present herds are the hitherto largest. Greater efforts are necessary to insure systematic reproduction of dairy cattle. All livestock breeders must devote special attention to the improvement of their breeding results.

On the basis of the stock on hand and of the progress made in regard to control of supplies, the population was systematically provided with potatoes, vegetables and fruit. As regards hothouse-grown vegetables, the production volume totaled 13,779 tons.

Efficient Utilization of the Soil and of the Other Resources

In order partially to offset the feed deficit, the Politburo and the Council of Ministers adopted appropriate measures aimed at supporting the cooperative farmers and workers in the LPG and VEG. The workers of the state forestry enterprises have regularly been meeting the plan targets for lumber and fiberboard.

Proceeding from the 11th Central Committee session, the Politburo in January examined in detail the problems in agriculture, forestry and in the food industry and passed significant resolutions regarding the tapping in 1980 of additional reserves for increasing production and reducing production input so as to improve the input-output ratio in agriculture. At the same time, the Politburo established principles concerning the work of the cooperation councils in socialist agriculture as well as the tasks and mode of operation of the kreis Council for Agricultural and Food Management.

These resolutions and their consistent implementation were discussed at the seminars that were conducted in February in all kreises with the party secretaries, chairmen and directors of the LPG and VEG and their cooperation partners. The talks held at these seminars showed the great sense of political responsibility and the readiness of the leading cadres of the LPG, VEG and other enterprises in collaboration with their collectives to do their utmost to obtain better results in livestock breeding and crop cultivation by means of a more efficient utilization of the soil and all other resources.

The bezirk and kreis administrations of the Party established the conditions necessary for conducting these seminars on a high political level, and on their part the administrations showed a great deal of active involvement.

It is largely due to the administrations' increased support of the basic party organizations in the LPG and other socialist agricultural enterprises that the basic problems of political and economic development are discussed with increasing political intensity at the general meetings, especially the annual meetings, and that efforts are being made to take firm positions in the struggle to set high production targets. The LPG plenary assemblies underscore the increased socialist awareness of the cooperative farmers.

The experience generalized in the Politburo resolutions and the principles established in regard to the work of the cooperation councils and in regard to the tasks and mode of operation of the Agricultural and Food Management Council have been fully approved by the cooperative farmers and workers in the LPG, GPG, VEG and other enterprises of socialist agriculture. Unanimously, they regard these resolutions as important steps toward further enhancement of the responsibility of the cooperative farmers' class and toward consolidation of cooperative ownership.

With the implementation of these resolutions, further progress will be made in the all-round deepening of cooperative democracy and in the development of the cooperative farmers' and workers' responsibility for the management and planning in the cooperatives and enterprises and the cooperation among them and for the development in the kreis. This has been demonstrated by the general meetings of the basic party organizations, by the annual meetings of the LPG and by the meetings of the cooperation councils.

Further Increase Output and Performance

At these meetings, the cooperative members have been discussing ways of insuring--through increased democratic cooperation--that organizations established by them--such as inter-plant construction organizations, soil improvement cooperatives and agrochemical centers--are more emphatically brought into action for the concerns of agricultural production in the cooperatives and for the requirements in the villages. The Central Committee expects the state organs fully to adhere to the guidelines established in this regard.

Further progress has been made in regard to the intensification of cooperation. In accordance with the principles adopted, the cooperation councils were granted greater authority for the purpose of safeguarding the agricultural reproduction process in their regions, and the quality of the work done by them has been improving.

In most of the kreises, the Agricultural and Food Management Councils have taken up their work. A great many experienced and deserving cooperative farmers and workers have been called to assist the chairmen and directors. Now it is necessary systematically to continue the work in all kreises and to focus all efforts on gradually overcoming the existing unjustified differences in performance among the LPG and enterprises.

In accordance with the stipulations of the Central Committee secretariat, central discussions were held in regard to the further tasks of the agrochemical centers as inter-cooperative institutions and in regard to increasing and stabilizing the production of sugar beets and their efficient processing. Scientists as well as party secretaries, specialists and managers of the LPG, VEG and agrochemical centers participated in the discussion of the tasks in connection with the further intensification of crop cultivation. Some first results are reflected in the activities during the spring field work.

Just in time, the Central Committee secretariat passed an appropriate resolution focusing on the political-ideological and organizational preparation and implementation of the spring-time field cultivation and maintenance work. On the basis of this resolution, the work was carried out on a high qualitative level. In keeping with the stipulations of the 11th Central Committee session, the cooperative farmers and workers in the LPG and crop cultivation VEG--supported by the workers in the agrochemical centers and

kreis enterprises for agricultural technology--cultivated the entire agricultural acreage. Now it is necessary to focus all efforts on the maintenance work--one of the factors determining the yield per hectare.

Stable Links to the Trade Sector

On the basis of the conclusions drawn from the experience gained in 1979, the Central Committee secretariat concerned itself with the production, purchase, storage, processing and marketing of fruit and vegetables with the object of better meeting consumer demand.

Above all, the fruit and vegetable growers and the comrades in the processing and retail trade sectors have been urged to insure production of a broad assortment of high-quality produce and energetically to curtail losses in all sectors. The storage and retail trade sectors must intensify their efforts so as to be able at all times to meet the consumers' demand for fruit and vegetables.

It is necessary through close cooperation between the trade organizations and the branches of the Association of Allotment Gardeners, Homesteaders and Small Livestock Breeders to improve the conditions concerning the wholesale buying of products in excess of the producers' own requirements.

At the instigation of the Central Committee secretariat, a central conference was held with the party secretaries, directors and specialists of the freshwater fishing VEB and the production cooperatives of working fishermen.

In keeping with the growing importance of freshwater fishing for the exploitation of domestic reserves, the conference discussed measures concerning the intensive utilization of all available waters. Through utilization of the advances made in science and technology, through rationalization measures and reconstruction of the available waters and installations, the freshwater fishing industry must improve the input-output ratio in the interest of greater productivity.

It is the responsibility of the bezirk and kreis administrations systematically to support the basic party organizations in the freshwater fishing VEB and the production cooperatives of working fishermen.

The Suhl bezirk administration reported to the Politburo on the implementation of the resolutions concerning forestry which were passed by the Ninth Party Congress. In this connection, honorable mention was made of the great accomplishments of the forestry workers in regard to safeguarding a sufficient supply of lumber. In this sector, the principal task now is further to increase the domestic lumber output, more fully to utilize it and to develop close cooperation between the state forestry enterprises and the enterprises of the woodworking industry.

Problems Concerning Science and University Affairs

Dear comrades!
During the period under review, the Politburo and the Central Committee secretariat repeatedly occupied themselves with problems concerning science and university affairs--problems deriving from these sectors' growing importance for social and scientific-technological progress in the GDR.

The Politburo resolution of 18 March 1980 on the "tasks of the universities and technical colleges in the developed socialist society" is of crucial importance for the Party's policy concerning science and university affairs. The resolution demonstrates the continuity of scientific work in teaching and research and the great responsibility of our country's foremost educational institutions for the training of scientifically highly trained cadres devoted to the cause of socialism. The resolution aims to strengthen the unity of teaching and research and of theory and practice and fully to utilize the advantages of socialism in safeguarding a high level of quality and efficiency of scientific work. The resolution serves further to consolidate the alliance between the working class and the socialist intelligentsia.

The resolution and its implementation in the party organizations and state administrations, in the science, student and work collectives has given fresh impetus to the constructive discussion of all related problems in connection with the preparation of the GDR's Fifth University Conference in September 1980.

This is evidenced by the many letters, comments and proposals issuing from a large number of scientific meetings and from conferences with the work partners and by the results of the FDJ [Free German Youth] student days and progress shows at the universities. It is justly assumed that the objectives of the resolution are oriented toward both immediate and long-range concerns.

The Politburo resolution defines the higher requirements concerning scientific work and--derived from this--the qualitatively new demands in regard to education, training and advanced training, academic studies and research. All educational institutions and scientific disciplines should discuss the most effective ways of implementing the resolution's objectives. Implementation of the resolution necessitates above all creative participation, initiative and work on the part of all university members; but it also calls for farsighted management, planning and organization of the research, study and work processes by the state organs in charge of the universities and in particular by the Ministry for University and Technical School Affairs.

The party organizations of the universities and technical schools should further increase the fighting strength of the party collectives and the effectiveness of the political-ideological work aimed at implementing this

resolution, which is in keeping with our party program's basic policy regarding the universities.

High-Quality Instruction and Education

The resolutions of the 11th Central Committee session have met with lasting response on the part of the party organizations in the national education sector. At present, all of the initiatives of the teachers and educators are oriented toward showing solid work results at the conclusion of the 1979/80 school year so as to lay a good foundation for the coming school year. In this regard, they are concentrating above all on insuring a higher qualitative level of instruction and educational work in every class, subject and lesson.

Of great importance are the intensified efforts of many industrial and agricultural enterprises, which are aimed at further improving the polytechnical instruction and increasing its impact on the communist education of the students.

The kreis administrations have effectively been supporting the schools and enterprises. Through courses of instruction for school party secretaries, leading staff members and teachers of civics, in which kreis administration secretaries and other leading functionaries participated, the teachers and educators were given valuable assistance for their political and pedagogical work.

At various meetings, the bezirk and kreis administrations continued their efforts in regard to discussion of the experience of the various educators, elucidation of problems of communist education as a task of society as a whole and control and coordination of the cooperation of all participants from the point of view of a close connection of school and life.

The Politburo analyzed the state of medical research in the GDR and at the same time approved the basic trends of its future development. Through its results, this scientific field deeply affects the physical and mental well-being of man. Thus it is only natural that the citizens entertain great hopes in regard to new, significant results in medical research.

Research for the Benefit of the Citizens

In the past 35 years, there developed in our republic an efficient health and social service sector, which through its medical services for all citizens enjoys great respect in the international arena. At present, the further general improvement of national medical care--accompanied by the continuing expansion of the personnel-related and material capacities of the health service--depends above all on qualitative factors. Medical research and training increasingly determine the further improvement of medical work and represent the focal point of the health policy pursued by our Party.

Medical research has been charged with the task of obtaining through its work vital knowledge in regard to the causes and conditions underlying disease and health and in regard to improved control over the processes of human life. In this regard, it must increasingly take into account the requirements resulting from the increased incidence of chronic diseases. It is necessary centrally to support especially those research projects, in which it is possible--with due regard for the medical traditions of our country--to establish favorable material-technological and staff-related conditions and to produce results conducive to medical progress. This has been confirmed by the individual results that have been obtained in the last few years and that have won international recognition.

The Politburo holds that the scientists engaged in medical research are capable and ready to work hard to attain these new ambitious goals.

Lively Intellectual-Cultural Activity

During the period under review, the successful development of intellectual-cultural life and of artistic creation has been continued through diverse activities. The resolutions adopted at the 11th Central Committee session oriented thought and action in all fields of cultural work toward finding ways of further improving the quality and ideological effectiveness of the cultural and artistic achievements and of more effectively guiding the cultural life in the enterprises and regions.

The Central Committee secretariat received information concerning the elections in the Writers' Association, the results of the bezirk art exhibitions, the political-ideological situation in the theatrical field and the developments in the field of entertainment.

Fully aware of their growing responsibility, the writers, artists and cultural activists are proving themselves--in word and deed--to be active participants in the struggle for peace, for the all-round consolidation of socialism and against the imperialist threat of war. This was demonstrated at the plenary session of the GDR Academy of Art, which took place on the occasion of the 30th anniversary of its establishment.

The "GDR Days of USSR Friendship and Culture" and the Second Festival of Popular Art in Socialist Countries proved to be significant events of intellectual-cultural life. Diverse events such as the National Film Festival in Karl-Marx-Stadt, the Week of the Book with over 3,000 festive events, the Leipzig Theater Workshop, the GDR Days of Music in Berlin, the entertainers' competition and the Halle bezirk Days of Popular Art at the Palace of the Republic are proof of the high qualitative level of our socialist art and culture.

The "Intergrafik" Fair and the International Leipzig Book Fair were events of international caliber. In all bezirks, professional and amateur artists are presently getting ready with new works for the 18th Rostok Workers' Festival.

Pioneering Work as Defined by Thaelmann

The Politburo received a report by the SED's Aue kreis administration on the implementation of the resolution of 24 July 1973--"For a high level of socialist education in the 'Ernst Thaelmann' pioneer organization." The report conveyed positive results and experience in regard to the communist education of the oncoming generation and confirmed that this education is based above all on active learning and work attitudes, noteworthy socially useful accomplishments and great solidarity achievements of many pioneer collectives. The Politburo instructed the party administrations, pioneer leaders, educators and helpers of the "Ernst Thaelmann" pioneer organization markedly to raise the level of the children's communist education. In this regard, the FDJ base organizations and the pioneer friendship groups bear great responsibility.

The leaders of the pioneer friendship groups are expected enthusiastically to propagate--in their capacity as FDJ functionaries--the ideals of Communism among the children. It is their responsibility in collaboration with the educators, FDJ members--especially those in the schools--parents, sponsoring enterprises and other social forces convincingly to transmit to the children the policy of the Party and the world view and ethics of the working class.

This is the principal task of the "Ernst Thaelmann" pioneer organization. With due regard for the age and the interests of the children, this political work should be carried out in all pioneer groups and it should be combined with diverse collective experience and concrete socially useful work.

Moscow Awaiting the Youth of the World

Dear comrades!
The most important sports event in the period under review were the 23rd Olympic Winter Games in Lake Placid. With their magnificent achievements and their civic bearing, our sportswomen and sportsmen were worthy representatives of our German Democratic Republic at these winter games. Together with the athletes of the 37 participating countries, they helped to strengthen the humanitarian intent of the Olympic movement, which is oriented toward peace, mutual respect, equality and friendship among the nations.

With nine Olympic victories, seven silver and seven bronze medals and numerous other good placements, these athletes were the most successful GDR team in the history of the Olympic winter games.

On the occasion of the award ceremony for deserving athletes, coaches, exercise physiologists and sport functionaries, the secretary general of the SED Central Committee and chairman of the GDR Council of State, comrade Erich Honecker, expressed his appreciation of this outstanding performance

of our Olympic team. On behalf of the party and state leadership, he paid tribute to these magnificent results, which the population welcomed with pride and joy.

The hopes of the youth of the world are now focusing on the 22nd Olympic Games, which in a few weeks will be festively opened in the Moscow Lenin Stadium. However, this anticipation is being marred by the ignominious, indefensible actions of those circles that are opposed to the Olympic games, that have long been objecting to the policy of peaceful coexistence and that want to abuse for their reactionary machinations the Olympic idea, the great athletic competition bringing the nations together.

True Home of the Olympic Idea

We should not fail to mention that in this situation the International Olympic Committee unanimously spoke up in favor of the preservation of the Olympic movement and reminded all national olympic committees of their duty to insure observance of the Olympic rules. This also applies to the fair attitude of the International Sport Federation and of the president of the Association of National Olympic Committees.

In this connection, it is characteristic that in regard to the Olympic problem the FRG--of all nations--decided against the participation of FRG athletes in the Olympic games in Moscow and that the initiators of the boycott--through their opposition to the athletes, to the Olympic idea and to detente--chose to isolate themselves. What is welcomed in the international arena is not the policy of threats and confrontation in the world of sports, but common sense and support of international athletics.

The GDR sportswomen and sportsmen will train hard for the Olympic games. Their participation in the Moscow games will again demonstrate to the whole world that the existence of the GDR--a socialist state on German soil in which the Olympic idea, which is oriented toward peace and international understanding, has found a true home--is a blessing for our people and for the world.

In our socialist society, we implement the Olympic idea through the simultaneous development of mass-participation sport and competitive sport. It is along these lines that the GDR DTSB [German Gymnastics and Sports Federation]--in collaboration with other social forces--has been intensifying its efforts to raise the level of physical exercise and sports and to make them accessible to more and more citizens.

Worth mentioning in this connection are the good results produced at the Children's and Youth Spartakiad [athletic competition] in the winter sport disciplines, which was staged in the kreises and bezirks. Over 200,000 children and juveniles participated in the preliminary competitions. The Spartakiad contests in the various sports and disciplines were conducted on a high athletic level. We can make use of this experience for promoting

still more emphatically regular athletic activity on the part of the children and juveniles.

Cooperation Based on Solid Tradition

Of great importance for the close comradely cooperation aimed at the all-round accomplishment of the new exacting tasks was the extensive exchange of information and experience that comrade Erich Honecker--following a proven tradition--engaged in immediately after the 11th Central Committee session with the chairmen of the allied parties and the president of the National Council of the National Front.

We greatly appreciate the fact that the leaders of the allied parties and the board of directors of the National Council thoroughly studied the speeches delivered by comrade Erich Honecker at the 11th Central Committee session and at the conference with the first kreis secretaries. The conclusions drawn for their own political-ideological and organizational work are a reflection of the joint work for our socialist state, in which all of the parties and mass organizations united in the democratic bloc and in the National Front are participating.

We fully approve of the activities of the National Front committees that aim to organize political talks in the residential areas, house-communities and families in accordance with the basic CC secretariat-approved policy of the National Council of the National Front in regard to continuation of the "Take Part!" competition.

Consolidation of Our Fighting Alliance

Dear comrades!
The entire Party has been working hard and successfully further to implement the resolutions of the Ninth Party Congress and to prepare the 10th Party Congress.

It is of great importance that at this stage in particular our Marxist-Leninist fighting alliance has made significant gains in fighting strength and solidarity with the masses, as a result of which we can confidently tackle the coming great tasks.

The Politburo feels that thanks to the thorough study of the materials of the 11th Central Committee session and of the speech delivered by the secretary general of the Central Committee, comrade Erich Honecker, before the first kreis administration secretaries, the Communists and the Party collectives have been oriented toward the new requirements in connection with the further development of the advanced socialist society in the GDR. They have thus been enabled to make a greater contribution to the implementation of the Party resolutions.

The workers and Party members were greatly pleased to learn of the Central Committee's resolve consistently to pursue--even under changed conditions--the political course aimed at accomplishing the principal task.

Of special importance for the speedy and uniform mobilization of our Party were the bezirk administration sessions, which were conducted on a high level. In accordance with the resolution of the Central Committee secretariat, kreis party conferences were held, which were attended by approximately 150,000 comrades. These conferences generated new ideas regarding the improvement of the quality and efficiency of the Party work.

Above all, the conferences helped more emphatically to concentrate the management work of the bezirk and kreis administrations on creating in the Party and in all workers the awareness necessary for solving the tasks of the 1980's.

Thanks to the specification of the new problems, we are able better to meet the growing demands on the leading role of the Party and to establish the necessary fighting positions in the base organizations.

Evidence of this is the further improvement of the planning work of the bezirk and kreis administrations and of many base organizations, which on the basis of informative, accurate analyses are increasing their own contribution to the further consolidation of our republic. Thus the administrations are establishing a solid starting position for the political guidance of the social processes; they are exerting influence on the elaboration of ambitious performance objectives and at the same time are insuring the large-scale participation of the workers in the proper preparation of the 10th SED Congress.

These results have been confirmed by the report of the SED's Magdeburg bezirk administration to the Central Committee Politburo on the "evaluation of the 11th SED Central Committee session and of the conference of the Central Committee secretariat with the first kreis secretaries." It is especially since the last conference of bezirk deputies that it has been possible--through systematic management work of the Magdeburg bezirk administration--to tap significant reserves for accelerating the rate of economic growth.

Proceeding from this report, the Politburo instructed all bezirk administrations to place greater emphasis on the political-ideological work among the masses, which is the corner-stone of the Party work.

Work Among the Masses Highly Effective

Experience has shown that the work among the masses is all the more effective, the more the propagation of our Marxist-Leninist world view focuses on the basic laws of social development and on the interrelationship between domestic and foreign policy. Comrade Erich Honecker's statements

in regard to the consistent combination of the advantages of socialism with the scientific-technological revolution and in regard to the effect of the performance principle and its role as a driving force of socialism are especially helpful in deepening the understanding of the dialectical interrelationship between the advance of our social system and the exacting requirements made on each of its members. Comrade Honecker's statements help to create a social atmosphere conducive to the development of productive capacities and of the will to work for the consolidation of the GDR. They impel many party and work collectives at greater length to discuss work attitudes, responsibility, honesty, discipline and the full utilization of the productive capacities in their fields, to eliminate shortcomings and energetically to oppose any instances of dawdling.

The bezirk administrations must more effectively help the kreis administrations more extensively and efficiently to discharge their responsibilities vis-a-vis the base organizations so as to enable them better to define the crucial work problems and to accomplish the exacting tasks concerning Party work and the work among the masses.

The intensified concentration on the guidance and control of the kreis administrations in the consistent implementation of the Central Committee resolutions must be more closely linked to the joint discussion of acute developmental problems and to the assistance rendered in their solution. This applies above all to the development of production and to the transmission of the most valuable experience gained in important combines and enterprises, in the construction sector, in the local supply sector and in socialist agriculture.

List of Topics for the 1980/81 Party Instruction Year

It is also in regard to the management work of the state and economic organs that the political-ideological guidance is assuming greater importance. In this regard, it is imperative that the directors at all times fully discharge their responsibility and set a personal example. Above all, it is necessary to keep the workers informed on political and economic interrelationships and on problems arising in the course of the accomplishments of tasks and to encourage criticism and self-criticism. This serves to stimulate zealful work and to increase productivity.

Comrades!
It has again and again been demonstrated that in regard to the political-ideological work the party instruction year is of great importance. Thus the Central Committee secretariat's resolution on the "list of topics for the groups and seminars in the 1980/81 party instruction year" places special emphasis on the study of the growing role of the Party and on the tasks of the basic party organizations in the preparation of the 10th Party Congress. A more thorough analysis of the laws of the global revolutionary process, of the economic laws of socialism and their conscious utilization for continuing the efforts toward accomplishment of the principal task

under changed conditions and the thorough study of the history of the SED and of the life of Ernst Thaelmann will likewise be of great benefit in this regard.

The Personal Talks Consolidated Our Ranks

Comrades!
The Central Committee members and candidates have been presented with the Politburo-approved final report on the implementation of the resolution of the 11th Central Committee session concerning the checking of Party documents and the proper registration of the Party members and candidates.

We can say that this important political-organizational measure has been fully incorporated in the party organs' management work regarding the implementation of the resolutions of the 11th Central Committee session and of the objectives established at the conference of the Central Committee secretariat and the first kreis secretaries. The Politburo appreciated above all the personal talks and the many suggestions and proposals submitted by the members and candidates. This is a reflection of the encompassing intra-party democracy and of the great willingness to accomplish the tasks confronting the Party.

The principal results of the inspection of documents can be summarized as follows:

--The further consolidation of our Party and the unity of its ranks have been impressively confirmed. The trust in the policy pursued by the Central Committee and in its secretary general, comrade Erich Honecker, is reflected everywhere. There is no doubt that our Party is closely linked with the working people.

--The political-ideological work has been given fresh impetus. It has become more offensive and more concrete. It is thus creating the awareness necessary for the further development of the advanced socialist society in the GDR and it increasingly corresponds to the intensifying class struggle with imperialism.

--The struggle for the fulfillment of the economic plan and the conscious utilization of the qualitative factors concerning the expansion of our economy's productive capacity are increasingly becoming the principal motive underlying the actions of the Party members. The fighting programs of the base organizations have proved to be a mobilizing factor in regard to the model role of the Communists and the large-scale participation of the working people in the socialist competition and in regard to the control and solution of the economic problems.

--Both intra-Party life and Party education have been greatly enriched. The Party work is more and more characterized by optimism and a constructive spirit. The base organizations' capability of creatively implementing the resolutions of the Central Committee has been growing.

In accordance with the guidelines of the SED Central Committee, personal talks were conducted with 2,113,913 comrades (i.e. 99.2 percent), and their documents and lawful registration were checked; 2,105,537 comrades (i.e. 99.6 percent) established the validity of their party documents; 8,376 party documents that for various reasons were declared invalid were seized and new ones were issued.

In checking the Party documents and the proper registration of the members and candidates, the Party accomplished a great task. The fact that hundreds of thousands of comrades are trying--with great modesty, hard work and a sense of responsibility--to accomplish tasks deserving of recognition and appreciation is evidence of the healthy and vital organism of our Party. Supported by more than 300,000 volunteer helpers, the bezirk and kreis administrations and the administrations of the base organizations conscientiously checked and complemented the registration documents.

The inspection confirmed that the present system of registration of the members and candidates--which is in accord with the guidelines for the organization work of the Party--is fully effective.

The talks focused on the creative and constructive exchange of views on the personal contribution of each comrade to the further expansion of our economy's productive capacity, on the participation in the ideological struggle of the Party and on the tasks and requirements concerning the safeguarding of peace. Characteristically, the talks were conducted in an open, comradely spirit distinguished by a pronounced sense of responsibility.

The Party administrations have come better to know the abilities of a large number of young promising Party members and are thus in a position to support them and to include them more effectively in the Party work. The talks also showed that in the future work more emphasis should be placed on Party education, on training, on the development of volunteer work, on the work in connection with Party commissions and on the encouragement of criticism and self-criticism.

The base organizations also dealt with those comrades, who in the past had not always been sufficiently conscientious in implementing the Party resolutions, in whom word and deed had not always been in agreement. Taking heed of the criticism expressed in the personal talks, these comrades again fell in with the Party collective; 3,944 comrades, who were not prepared to follow the Party regulations, who were unworthy of Party membership, withdrew from the Party.

The proposals, suggestions and criticisms submitted in the course of the inspection of documents are a veritable storehouse of ideas conducive to the improvement of the Party work and of the work in all social sectors. They reflect our intra-Party democracy and the high level of our comrades' political work.

Optimistically Preparing for the Party Congress

Thus those Party administrations acted correctly, which incorporated in their management activity the process of recording, processing and answering the proposals and criticisms and which in the general meetings in April and May reported on the state of implementation of these proposals. Now it is necessary to clarify the as yet unsettled questions and to subject this process to strict Party control.

Every administration should be aware of the fact that the accomplishment of these tasks is a matter involving the authority of the Party and the relationship between the leadership and the individual comrade. Consequently, we must not allow a single proposal, suggestion or criticism to remain unanswered.

All administrations are well advised to make use of this storehouse of experience for raising the level of leadership and for drawing general conclusions for the Party work and the work among the masses.

Comrades!
Thanks to the results produced in regard to the implementation of the resolutions of the 11th Central Committee session and of the objectives formulated in the speech of the secretary general of the SED Central Committee before the first secretaries of the SED kreis administrations and in regard to the inspection of the Party documents and the proper registration of the members and candidates, we have established good starting positions for optimistically and confidently entering the crucial phase in our preparations for the Party Congress.

Looking forward to the 10th Party Congress, we are now confronted with the task of preparing and implementing the Party elections--a significant event for our Party and our entire nation.

More West German Commentary

Frankfurt/Main FRANKFURTER ALLGEMEINE in German 24 May 80 p 2

[Article signed "Gz" datelined Berlin, 23 May: "Resistance in GDR Enterprises to the Introduction of New 'Indexes'--Party Leadership Discusses Potential for Further Improvement of Performance." The discussion speeches to the plenum by Gerhard Schuerer, Hans Modrow, and Herbert Ziegenhahn, cited below, are published following this report]

[Text] During the deliberations of the SED Central Committee, which convened on Wednesday and Thursday, several speakers criticized the considerable differences in performance in the enterprises. Certain enterprises were identified by name. Hans Modrow, first secretary of the SED's Dresden bezirk administration, said that in the enterprises "the attitude of waiting for ready-made solutions, which is still encountered in some places,

must be consistently eliminated." He pointed out that the rate of quality improvement was not sufficient. Herbert Ziegenhahn from Gera stated that through exchange of experience and performance comparisons, "reserves of new orders of magnitude" should be opened up. Similar views were expressed by the Party secretaries from the Schwerin and Rostok bezirks, which are oriented more strongly toward agrarian concerns; these secretaries emphatically pointed the need for higher yields.

An important contribution was made by the chairman of the State Planning Commission, Gerhard Schuerer, who familiarized the Central Committee members with ways of more effectively "stimulating" the workers to improve their performance. The new industrial indexes that presently are being discussed in the GDR publications are to effect cost reductions and material economies. Schuerer's statements--insofar as they have been published--also indicate that the introduction of the new indexes apparently has met with resistance in the enterprises. At any rate, Schuerer pointed out that the planned improvement of efficiency was concerned with a "cardinal problem"--a problem that affected the present five-year plan terminating at the end of this year more than the coming five-year plan--namely "to improve material refinement and to create more value, more goods and more finished products."

Since the agenda of the 10th SED Congress, which will be held in the week before Easter 1981 (11 to 16 April), has already been published, it has been learned that--as was the case at the last Party congress--the directive on the next five-year plan (1981-1985) will be submitted and confirmed by Premier Stoph. At a later date, the new five-year plan will be formally confirmed by the GDR People's Chamber. That means that in the next few months the enterprises and the planning organs will conclude the preparations for this directive, especially since the directive must be coordinated--at least in regard to its basic points--with the partners within the Council for Mutual Economic Assistance and with the Soviet Union in particular.

Schuerer Defends New Policies

East Berlin NEUES DEUTSCHLAND in German 23 May 80 p 6

[Excerpts from the discussion speech to 12th SED Plenum by Gerhard Schuerer, candidate, SED Central Committee Politburo; deputy chairman, Council of Ministers; and chairman, State Planning Commission: "Growth of Performance and Efficiency Will Be Stimulated"]

[Text] Dear comrades!
I fully approve of the Politburo report and of the weighty account of the secretary general of our Party. I would like to comment only on one problem, namely, the evaluation of performance. Mention was made of the following issue: In a certain enterprise, the workers produce forgings of reduced weight so that for the identical function they create the same or a

higher utility value; however, on account of the material economy, they then lack the tonnage necessary for meeting the output target and thus are at a disadvantage. The same goes for low-tolerance rolling in the metallurgical industry.

As is well known, the Politburo resolved to introduce--beginning in March--a complex of indexes in the management, planning and accounting of the combines and enterprises and of the national economy as a whole--namely, "industrial commodity output," "net output" and "basic material costs per M 100 of commodity output." According to the report of the Politburo to the 12th Central Committee session, "This will help to implement the principle: What is beneficial for the national economy is bound to be beneficial for the combines and enterprises as well."

Three Indexes--A Single Objective

What does this entail in regard to the aforementioned example of the forge workers? We know that industrial commodity output, the first of the important indexes stipulated in the Politburo resolution, is targeted and calculated on the basis of quality and value. When in the production of forgings the workers save material, they produce in terms of industrial commodity output at least the same value as previously, and the plans are fulfilled accordingly.

Of late, measures passed by the Price Office have come into effect, according to which it will be permissible to raise the prices for thin-walled castings and for low-tolerance rolling in the metallurgical industry; these price hikes will even make it possible not only to fulfill, but overfulfill the commodity output plan.

It has been claimed that on account of the material savings, the quantity fell short 4 percent. If the commodity output is considered separately, this shortcoming persists. For this reason, the Politburo resolved to employ net output as the second important index. Net output represents the value newly created. Thus, in saving material, the forge workers at the same time create a new, higher value. This higher value created by the workers benefits the national economy, the combine and the enterprise; in fact, it also helps the brigade to fulfill and overfulfill its plans.

As for the third index, the basic material costs per M 100 of commodity output decline in this example; for if less steel is used for the same forging, there is a reduction in the costs per M 100 of commodity output. Thus, with reduced material input, commodity output is increased and a greater contribution is made to plan fulfillment. This, too, benefits the national economy and the enterprise.

Benefits for Those Who Economize

The plan fulfillment efforts in the enterprise, in the department, in the brigade and also in the national economy as a whole focus on producing results in regard to the value of commodity output, in regard to net production and in regard to the reduction of basic material costs. This plan fulfillment and overfulfillment underlies the incentives provided for the workers in the enterprise, down to the individual work place. This means that all these measures are beneficial for the worker, for the brigade and for the enterprise or combine and that recognition is effected through incentives. So the worker derives benefit from the identity of his actions with the interests of the national economy, and conversely, the national economy derives benefit from the efforts of the worker.

Comrades, the Politburo specifically pointed out that these performance indexes must be employed as a unit. The Politburo report to the Central Committee states: "Being closely interrelated, the three indexes serve to improve performance." If they are not employed as a unit, but considered separately, we would in the case of the forge workers be confronted with the fact that the tonnage fulfillment falls short 4 percent.

Crucial Problem: Improvement of Material Processing

I have to point out here that the state, the combine, the enterprise--in short, all of us--cannot dispense with the commodity output index. For it is an index that both on the international and the national level is needed by the state, down to the individual enterprise, as an index of quantity and value. And we need exact data as to how many tons of forgings the GDR has produced. For all the considerations of quality, this can only be expressed in terms of tonnage.

Some observers have suggested to calculate a coefficient for the quantity of material saved and to express this coefficient in terms of tons of forgings. This means that we would have to do another conversion involving many difficulties and coefficients. Although it is worth considering, I feel that this approach would divert us from the crucial problem of this and--even more so--the next five-year plan--namely, in accordance with the resolutions of the Central Committee session to improve the material refinement, to create greater value and to turn out more goods, more finished products. Consequently, I feel we should stick to the integral application of these three indexes in the way it has been prescribed.

Modrow on Quality Improvements

East Berlin NEUES DEUTSCHLAND in German 23 May 80 p 3

[Excerpts from discussion speech to 12th SED Plenum by Hans Modrow, member, SED Central Committee and first secretary, Dresden Bezirk Management: "Making the Entire Wealth of Knowledge and Experience Effective"]

[Text] Dear comrades!
With our 12th session, we are entering the phase of extensive preparation of the 10th Party Congress. I can assure the Central Committee that the Dresden bezirk party organization is well prepared and equipped for this new stage of our struggle.

The talks with the comrades have confirmed and strengthened the close ties with the Party, the deep trust of the comrades in our Central Committee and its secretary general, comrade Erich Honecker. They have confirmed the great willingness to make every effort in the struggle for the further implementation of our policy, which is oriented toward the well-being of the working class and of the entire nation.

On the basis of the political fighting positions and thanks to the comrades' example and power of persuasion, thanks to the further strengthening and training of the cadres and the knowledge, skills and commitment of the working people, good results were produced in the first 4 months of this year in regard to the overall consolidation of the GDR, especially in the economic sector.

During this period, the enterprises of the bezirk succeeded in exceeding the industrial commodity output targets by M 106.2 million; to the domestic trade sector alone, they delivered M 36.9 million worth of goods in excess of the plan quotas. During the same period, our construction workers made available to the population 490 new apartments and 119 modernized apartments in excess of the plan targets.

In spite of various difficulties in regard to the feed supply, the cooperative farmers and the other workers of the bezirk's socialist agriculture likewise exceeded all of the plan targets set for livestock breeding.

The past weeks and months provided us with experience and taught us important lessons, especially since we had to work hard for our success. At the beginning of the year, some directors and collectives still raised questions and even made skeptical comments in regard to the requirements of the 1980 plan. In the sharp conflict of opinions, which was triggered by the Party resolutions and which was subsequently enriched by the exchange of experience with the Gera combines, true fighting positions prevailed. Under the slogan of "Plan Guarantee 80," the workers of the bezirk launched a broad movement, in which they identified themselves with the objectives concerning the fulfillment and overfulfillment of the plan.

In this regard, we are also trying to insure plan fulfillment in fields such as the school construction program, in which plan arrears have been tolerated. All our measures aim by 31 May to effect plan fulfillment in these fields.

Progress in Microelectronics

I am in a position to report to the Central Committee that in regard to the implementation of the long-term plans for the development and application of microelectronics in the GDR economy, we have achieved good results. With the establishment of the Dresden Center for Research and Technology/ Microelectronics, large-scale capacities have been created, which under the leadership of the strong party organization are about to produce--in important branches--top-level results meeting the highest international standards. Progress has been made in regard to the improvement of microelectronic circuits. In 1980, all of the targets concerning the development of special technologies in microelectronics have so far been met and exceeded.

We consider all this a good starting position and at the same time we feel it is important to intensify our cooperation with the Erfurt comrades so as to insure that the new Center for Research and Technology/Microelectronics meets all the requirements in regard to work quality and that on this basis we can launch the urgently needed productivity drive for our national economy, which is made possible by microelectronics. Naturally, the ultimate criterion is to what extent we will be able to translate microelectronics into product and production quality and efficiency, to save through the new dimensions working time, labor, energy and material, and with less input to produce more and better consumer goods. This is one of the key tasks of the fighting program of the bezirk Party organization and of the Party organizations of the combines and enterprises.

The bezirk administration is trying to generalize the positive experience of combines such as Robotron and Pentacon and of enterprises such as Radebeul Planeta and Dresden Mikromat and to eliminate the attitude of waiting for ready-made solutions, which is still found in some places.

Likewise, in regard to the development and employment of industrial robots, our bezirk can point to a number of good examples, in particular in the Robotron combine. Through the establishment of shared access, we want to make them more widely available. In this regard, the Dresden Technical University is to serve as a technical center, while Robotron is entrusted with the development and employment of robots in electrical engineering/ electronics, especially in the production of printed circuit boards, and the Fortschritt Combine, with the development of welding robots. Through complex agreements, the Technical University is linked with many partners. Now it is necessary to bring the experience gained in the cooperation with individual combines to bear on a larger framework. After all, what is good for Zeiss Jena, cannot be detrimental to Robotron.

In order to get more out of what we have, it is necessary to intensify in all Party organizations the debate as to how we can effectively convert our great wealth, the knowledge and skills of our scientists, engineers and skilled workers into economic productivity, and in this connection--in view of the impending 10th Party Congress--further to raise the targets of the fighting programs. Even if the pertinent plan targets are met and exceeded, the rate at which most of the enterprises in our bezirk increase the share of new, high-grade products bearing the "Q" quality seal has so far not been sufficient. However, it is only with products embodying scientific and technical advances that it will be possible to curtail and possibly to discontinue the export of material- and working time-intensive products.

Increase Output of "Q" Products

In our bezirk, too, it has been demonstrated that the establishment and consolidation of large-scale industrial combines has considerably improved the conditions necessary for effecting the great and dynamic performance improvement required for our national economy. In honor of the 35th anniversary of the liberation from fascism, the Robotron Combine posted 1 day's output in excess of the plan.

The workers of Dresden Bezirk produce a relatively large share of the GDR's total output of consumer goods. This implies great responsibility for accelerating the rate of production in this sector in accordance with the Central Committee resolutions and, most importantly, for producing more high-grade consumer goods for the population and for exports.

We must systematically improve management work so as to safeguard supplies and we must insure more thorough analyses and enforce quick and responsible response. However, to insure a large output of goods for mass consumption and of high-quality consumer goods is and remains the principal objective. This is the crucial factor in regard to consumer satisfaction, retail trade supplies, and--in large measure--the effectiveness of the performance principle as an important driving force of our development.

In the new phase of our struggle, the Communists and the working people of Dresden Bezirk will do their utmost to continue our proven policy, which is devoted to the well-being of the workers and of the entire nation.

Ziegenhahn: Enterprise Performance Varies

[Excerpts from discussion speech to 12th SED Plenum by Herbert Ziegenhahn, member, SED Central Committee and first secretary, Gera Bezirk Management: "Enterprise Comparisons Reveal Reserves in a New Dimension"]

[Text] Dear comrades!
I fully approve of the directive report of the secretary general of our Party, comrade Erich Honecker, concerning the convocation of the 10th Party Congress and of the Politburo report delivered by Inge Lange.

All Communists and all working people fully approve and energetically support the people-oriented policy of our Party and its ability to wage the struggle for socialism and peace even under aggravated international conditions. As a result of the inspection of party documents and of the personal talks, the Party members' aggressive and disciplined political-ideological work toward implementation of the Party resolutions has been intensified in all Party collectives.

Our bezirk party organization is doing its utmost further to improve the results obtained and--in preparing for the 10th Party Congress--month after month to improve performance. More and more collectives aim through material economy to exceed the plan target by 2 days' output by the anniversary of the establishment of the republic.

However, we do not by any means fail to take into account the still existing, indefensible differences in performance that conceal large reserves to be tapped for the further consolidation of our republic's economic strength. Experience has shown: Wherever the Party organizations head the struggle, wherever they take an unequivocal political position on the tasks at hand and wherever they do their utmost to utilize the qualitative factors, the tasks are accomplished.

The 11th Central Committee session, the speech of comrade Erich Honecker before the first kreis secretaries and the exchange of experience between the Central Committee and the general directors of the combines and the Party organizations of the Central Committee impelled us to help the Party organizations, the economic organs and all collectives more deeply to delve into the economic processes so as to reveal the reserves for performance improvement and to orient the initiatives of the Communists and of all working people toward the crucial chain links of the expansion of economc productivity. This calls for extensive political-ideological work so as to deepen the understanding of complexity of the tasks, to deepen the understanding of the economic-political strategy of the Party and to prepare the Party organizations for the qualitatively new tasks. In this regard, the personal talks were very helpful.

I would like to talk here about certain experience gained in regard to our way of implementing the demands made by comrade Erich Honecker at the 11th plenary session, namely, in preparation for the 10th Party Congress to make the best results of today the social norm for all.

The Combines and Their Net Output

Encouraged by the Gera exchange of experience, we have more intensively concerned ourselves with the question as to what demands are made on the leadership of the Party organizations--from the bezirk down to the Party groups--by the rapid and cogent generalization of the experience of the best workers. Our analysis proceeded as follows: On the basis of the net output produced, what is the contribution of our bezirk, of the kreises,

combines and enterprises to the growth of the national income? What is the rate of production renovation? What is the profitability of our patents and what is the share of top-level achievements in the science and technology plans? What are the orders of magnitude of the reductions in the consumption of basic material per M 100 of commodity output? How can we ensure that labor productivity, net output and the production of goods bearing the "Q" quality seal increase more rapidly than industrial commodity output?

The concrete analyses show the pronounced differences that are rooted in the level of leadership and of the political-ideological work and in the fighting position of the base organizations and of the leaders. Whereas in enterprises such as the Zeiss Combine, the Ceramics Combine and others the share of net output of the total industrial commodity output amounts to over 50 percent and whereas these enterprises aim--through early implementation of material- and time-saving measures based on the science and technology plans--to speed up the revision of the production program in the interest of attaining maximum quality, to make the most efficient use of highly productive installations and significantly to expand their own means of rationalization and thus obtain in 1980 net output growth rates of 10 percent and more, other enterprises such as the Ronneburg Automotive Accessories Plant VEB, one of the bezirk's biggest consumers of basic materials and of rolled steel in particular, or the Bad Blankenburg Antenna Plant show a much lower net output share.

Some comrades claim the conditions they are facing are not as favorable. It goes without saying that one must take into account the differences in regard to starting positions. But on closer examination of this question, it appears--and in this regard the performance evaluation indexes adopted by the Politburo are very helpful--that as a rule the largest reserves for performance improvement are found in those enterprises that do not yet sufficiently utilize the qualitative factors. To change this, it is necessary--on the basis of the experience of the best workers and under the direction of the bezirk and kreis administrations--to exchange experience and compare performance so as to eliminate the marked differences in regard to the level and rate of performance development and to open up reserves on a much larger scale.

Our analysis revealed that the tasks can be accomplished only if they are dealt with as a unit and if they are discussed, defined and confirmed at general meetings. These efforts begin with the establishment of correct standards and of positions characterized by a true Party spirit. Thus it is necessary not only to speed up the development of new products, but also to ensure the lowest possible material input and the highest possible productivity. We must enforce utilization of the qualitative factors--which is the only way to increase the national income and the economic end product. To this end, each kreis administration must thoroughly analyze the performance level of the enterprises in the kreis.

To facilitate the exchange of experience and quickly to disseminate the results, it has proved to be expedient for the kreis administrations to select those base organizations that have the most experience and show the best results in regard to the implementation of the resolutions of the 11th Central Committee session. Study teams and first secretaries of the kreis administrations visit these base organizations, in order to evaluate the positive experience gained in the Party groups, departmental Party organizations and production and research collectives.

The concrete conclusions in regard to utilization of the experience of the best workers, including the new performance targets, are discussed and confirmed by the base organizations and the study team of the kreis administration. It is imperative that the kreis administration adopt an unequivocal position on the objectives to be pursued by the given Party organization and enterprise collective. Thus, through the kreis administration's systematic leadership, the achievements of the best workers are cogently generalized in the base organizations with due regard for the given concrete conditions, while in the enterprises there are elaborated the measures concerning the great performance improvement at the important next stage. On this basis, the base organizations and the kreis and bezirk administrations are presently developing their measures, contribution and program regarding the preparations for the 10th Party Congress.

Long-Term Decisions

It is apparent everywhere: Today any exchange of experience necessitates in all Party organizations an uncompromising struggle for the accomplishment of the tasks established; it also calls for the ability self-critically to evaluate one's own work and to measure it against the standards set by the best workers. Thus it is necessary not only to recognize the results produced by the best workers, but also unconditionally to adopt them as standards of one's own performance. To this end, it is necessary to work out the changes required and to make long-term management decisions.

After the bezirk administration session and upon evaluation of the results of the 12th Central Committee session, the innovators and efficiency experts will at the 6th bezirk conference in June discuss and confirm the qualitatively new targets on the basis of the program of the bezirk Party organization and of the expanding mass initiative. Thus, under the leadership of the Party, the best representatives of the ruling class determine the pace of our further successful development.

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ECONOMIST ANALYZES POSITIVE, NEGATIVE EFFECTS OF REGULATORS, THEIR INTERPRETATION

Budapest VALOSAG in Hungarian No 8, 1980 pp 38-46

[Article by Laszlo Bogar, economist and group leader of the Executive Committee of the Borsod Megye Council: "Interest Relationships, Secondary Economy, Corruption: An Attempt to Discover the 'Hidden' Dimensions in Historical Processes"]

[Text] One might say that in the course of recent years the expressions figuring in the title have become fashionable concepts. More and more scientific works deal with uncovering them but interest in them is increasing even at the level of everyday awareness. All this is not at all by chance. These concepts and the linkage systems which bind them together are important links in the self-awareness of our society. Today, when the need for change and the necessity of renewal permeate our economic and social relationships, it is most important that we form a precise and detailed picture of ourselves for the strategy of change can come into being only with a fundamental discovery of the reality of the present.

With my following thoughts I would like to prove that a basic analysis of the concepts in the title and a historical study of the interdependencies between them is an important condition for becoming oriented in our present social relationships. I think that in many areas the social sciences have failed to give a satisfactory answer so I would like to speak about the reason for these deficiencies and about the possibilities for a solution.

The fact that the picture which our society has formed of itself is somewhat deficient is well illustrated, I feel, by the fact that in the course of past years the effectiveness of our very important decisions passed at the highest levels has broken on the resistance of reality.

The question arises, why have those difficulties facing our national economy and in a broader sense Hungarian society as a whole concentrated together just now?

In the first place there certainly are world economic factors involved. But we would be off the track if we thought that the source of our troubles was the economic crisis of the capitalist world. According to this logic we would have to make the world economy "responsible" for our accelerated economic growth at the end of the 1960's because it was the western boom which, in part, made possible our noteworthy development.

In the second place we must admit that the Hungarian economy was not capable, either at the end of the 1960's or today, of flexible accomodation or quick reaction and did not produce at a level which would have made it capable of at least maintaining the world market positions attained. If we broaden the historical horizon we can say also that according to some calculations the terms of trade of the Hungarian economy have deteriorated by about 70 percent as compared to 1913--thus, the period preceding World War I. In general this means that today the world market values each unit of Hungarian work lower by 70 percent than it did 65-70 years ago. Discounting brief periods of stagnation, this means that the world market positions of our economy have constantly deteriorated and the deficits it suffers have gradually increased. So the real problem is not that all sorts of changes--sometimes very swift ones--take place in the world economy but rather that in the most varied periods of its development the Hungarian economy has found it difficult to give a constructive response to the challenge.

The lack of flexibility of the Hungarian economy is not at all a unique phenomenon among the socialist countries of central and eastern Europe. This complex of phenomena has very deep roots--going back over several decades--so it is natural that I cannot undertake a detailed analysis in the framework of this brief study. But the prospects for the development of CEMA integration depend to a large extent on whether we are capable of jointly and separately discovering the historical roots of the economic policies followed in past decades so that our strategy should overcome the limitations deriving therefrom.

In general it is characteristic of these countries that after the vexed and tension-filled social processes following World War II the progressive historical forces--with essentially bloodless actions--took power in 1947-1948. But seizing the positions necessary for the exercise of political power put the guidance of society before a necessary dilemma.

This historical question mark was not something new. The large scale debates of the 1920's in the Soviet Union sought answers to the same questions. And although the outlines of the answer seemed to be developing the ramming through of central measures--not independent of international developments--put an end to the debate.

What sort of dilemma are we talking about? To understand this we must review one of the basic equations of the classics of Marxism--one which explains the dynamics of the development of societies. According to this equation the unbroken development of the productive forces of society from time to time necessarily clashes with those social relationships the

relative stability of which is an indispensable condition for the existence of certain social-economic formations. To the extent that the existing relationships slow down the development of the productive forces to an intolerable degree the frameworks of the relationships will be broken down via the infinite dimensional transmission system of social-economic interdependencies, building new fields of movement on the ruins. This classical example of the application of the method of dialectical materialism is very well known and a vulgar adaptation of it is familiar even to high-school students. But in the course of its frequent repetition it was almost completely forgotten that the dialectic is valid in general for the analysis of processes and does not go in one way only. In the given case, for example, it also "goes backwards." Thus, if we hypothesize that we want to "operate" the given productive forces in many times more developed and qualitatively different production-social relationships then according to the laws of dialectics the productive forces will bring down to their level those relationships which are really more developed in regard to their theoretical essence. Let me note that we should treat the expression "want to operate" with suspicion because objectively the productive forces determine that zone of relationships in which they can develop or even function and if we arbitrarily designate the boundary values of the zones on the basis of a subjective wish we can regard the difficulties of this undertaking as assured over the longer range. This is true also because the relationships are always relationships among the objectively existing elements or sides of the productive forces and thus are the relationships of the given productive forces.

At the end of the 1940's the victorious political forces necessarily faced the apparently unsolvable dilemma when they wanted to institute developed socialist production-social relationships, in accordance with the political structure which had developed, in countries with backward and undeveloped productive forces. But there were only a few months--as compared to the time taken by the Soviet debates--to develop the action alternatives deriving from this and the debates did not take place on the surface but rather in the deeper and more hidden spheres of the developing social systems. Naturally, in the given historical situation--with the spread of dogmatism--there was very little likelihood of another alternative but still we must state that after the general progressive victory--and in the course of a swift polarization process--power went with surprising suddenness into the hands of forces which conceived the theory and practice of the guidance of society in a voluntarist manner. It is a historical paradox that the existence of the Soviet Union created the political-military conditions for the creation and development of the people's democracies while the power of its example at that time almost immediately determined the paths of this development. Thus, without debates and the social experiments deriving therefrom, the execution of the people's democratic program could be carried out only with the aid of voluntaristic guidance systems which even in their view touched the border of irrationality.

I might note that the leaders of society at that time actually recognized the tension built into the balance condition of society but--as a result of the logic of the situation--there could not be a suitable solution.

They imagined that the militant revolutionary elan and self-awareness of the masses could be the ideological "footstool" on which the undeveloped productive forces could "stand" to "bring themselves up" to the developed production relationships. We can "thank" this theory for the Stakhanovite movement, and for the superficial methods, filled with unjustified optimism, of the early labor competition and other movements.

This voluntaristic model, which virtually stood reality on its head, produced distortions in both material processes and social awareness the harmful effects of which can still be felt today.

In my opinion a common cause for these effects can be found in an important motif of the incorrect answer given to the already mentioned historical dilemma. We might call this motif--with a somewhat forced expression--the "oversocialization" of productive forces. (The expression might be challenged--primarily liguistically--but the concept designated by it can hardly be challenged.) We should add that naturally there is no scientific economics method with the aid of which one could precisely determine what degree of socially organized operation suits the given developmental level of the productive forces. But the experienced facts give us sufficient reason to hypothesize that the period between 1948 and 1953 did some violence to reality and created a level of socially organized movement of the given productive forces--which were very undeveloped--which can be regarded as a distortion of socialist economic development as a whole.

It has been proven innumerable times in the course of history that when reality is "attacked" it will defend itself and the "immune reactions" have accompanied our entire economic development since. Considering, however, that there still has not been a more profound analysis of the real circumstances surrounding and the roots of the development of the voluntarist economic policy our knowledge of these latent consequences is still dim and uncertain. But we have experienced their negative effects intensively in recent years. It is not at all by chance that research on the group of phenomena summed up under the name of the secondary economy has accelerated recently. In essence the secondary economy is a collective concept for the non-socialized forms of activity and as such it can be closely related to the above mentioned "immune reactions."

In the period between 1948 and 1953--as I have mentioned already--the socialization of production reached too high a level which could be maintained only by the force of a voluntaristic economic policy. And this only apparently. Because while it is true that in those times--and certainly since--the non-socialized forms of activity were to be condemned from the ideological viewpoint, were politically suspect, and thus their open practice seemed risky in general, the "only" thing that resulted from this was that "being outside socially organized distribution," as one of the basic criteria of the secondary economy, gradually became incorporated in the organizations of the socialist sector. Naturally this process could take place only in a very hidden form, at the price of innumerable deformations, which produced consequences hardly recognized thus far in the entire system of the socialized sector. From the economic viewpoint the effect of economic

policy was to force the non-socialized sector into too small a sphere of movement. To use a physical simile, the pressure increases in a compressed space--the result of which in the case of our theme is a double transformation. On the one hand the movement of the economic "molecules" accelerated extraordinarily in the non-socilized sector which existed legally but which justly felt its legality to be uncertain. What will be characteristic is a mentality which encourages living for the moment, get rich quick, looting and a wasteful life. On the other hand the great pressure virtually "forced" elements and characteristic movement forms of this sector into the socialized sector. It appears from all this that for a long time politics can ignore economic laws and hinder their realization, but there are consequences of this. And yet--as we have seen--these laws--which naturally cannot be abolished--have a diverting effect beneath the surface.

These effects produced not insignificant changes in the socialist sector and the real internal interdependencies of it--we are really feeling this only in recent years--are not at all as they are described by our political economy textbooks. Unfortunately we know very little about what they are really like. The excessive socialization of the productive forces, which naturally was accompanied by excessive centralization, was actually based on an unshakeable faith in the omnipotence of the center. If--the unspoken explanation went--social property is absolute and if it will take the form of fewer and fewer giant enterprises then the center, without any great difficulty, will be able to realize the social interest represented by it in the course of running the economy. And if we are talking about interests we must stress that the Marxist social sciences have not provided a many-sided analysis of real interest relationships in a socialist society--perhaps because of the increased political sensitivity.

The voluntaristic policy of the 1950's made prevalent the idea that there was no place in the system of socialism for differences of interests--not even to speak of interest conflicts. This illusion which forced interests into a false unity was based on two dogmas.

The one hypothesized that every particular interest in a socialist society was a harmful, individualistic remanant which stood in opposition to society and as such was to be eliminated by persuasion, education or the tools of force. The other dogma was the hypothesis that under all circumstances the central will would perfectly express the social interest and was the only possible form of its manifestation.

The common--anti-Marxist--basis of these two principles was a denial of the objective existence of differing interests which was expressed by forcing onto practice the illusion of a socialism free of separate interests.

It is thus understandable that the policy of the 1950's, which tried to present the interdependence of interest relationships as a harmonic unity and presented as realized something the conditions for the realization of which were not given, held back the development of the self-awareness of society as truly reflected by interest relationships.

The political atmosphere of the past two decades has made it possible for us to come to the recognition that the interest relationships of the socialist society are structured and derive from the structure of this society itself. But this recognition has not yet at all pervaded the view governing the guidance of society and the economy. This is why--as Lajos Hethy writes in one of his articles--it is recognized and emphasized in words at most levels of guidance that "lower order" group and individual interests going beyond the all-social interest do exist in our society but people still frequently act as if the basis for their activity were exclusively the "higher order" social interest, as if the existence of other interests were some sort of undesireable state of affairs which must be overcome. Declarations concerning the structure of interests and the recognition of the existence of interest differences and even interest clashes does not at all mean in itself that thinking in terms of interests and interest relationships has become an organic part of the social conception of guidance. What is absolutely necessary for this is thinking in terms of changing interests, in terms of their movement mechanism, without which references to interests are merely a basis for allusion, an ideological disguise, which tries to put a modern mask on an obsolete view of administration and guidance. The picture formed about the role played by interest relationships in human action and the traditional guidance and administrative ideas formed about the functioning of organizations co-exist in the "thinking" of guidance. And since the latter have much deeper roots in our views, in our political and social practice and in our historical traditions than does the conception of the structured nature of interests progress runs into difficulties.

But if we accept the formulation of Engels according to which "... the economic relationships of a given society appear before all else in the picture of interests," then our conclusion can only be that the lack of thinking in terms of interest relationships is equivalent to weak "vision relationships" and faulty "road signs" in the major relation systems of society and thus equivalent to deteriorating chances for the solution of the problems.

To sum up what has been said thus far, the dogmatic political leadership of the 1950's turned our social-economic processes, in part, into a mistaken bed, into a bed alien to these processes. This created severe distortions in the entire system of social-economic relationships, the symptoms of which can still be felt even today. The substantive transformation of the economic mechanism in the course of the past 10-15 years and the processes set in motion by this have indisputably created a favorable atmosphere for the elimination of these mistaken relationships. But the compromises of the reform measures made possible the survival of a few such remnants. The first motif in uncovering these remnants may be an acceleration of research dealing with the structure of interests and their link to the decision mechanism and the organization of guidance. I would like to prove with the following train of thought that the creation of pure "vision relationships" for society is not merely an end in itself, not some sort of humane gift or some new showy act in the spreading of democratism. This train of thought is also an experiment in the apprehension of the mechanisms of corruption.

The social-economic reality--as we have seen--responds with a unique "immune reaction" to the effect of the voluntarist policy. In our case this defensive mechanism is a process in the course of which there appears in the organizations of the socialized sector--first in some layers of the activity taking place here but then permeating the entire organization--a "being outside of socially organized distribution" as one of the basic criteria of the secondary economy. This process even appears in the organizations of the "most socialized" sector, in the organization of state administration and state power.

Considering that according to the most general formulation we are accustomed to refer to the "distortions" of the social distribution of goods under the comprehensive term "corruption" we can view the distribution distortions appearing in the organizations of the socialized sector--which come about as a result of the above mentioned processes--as increasing the chances for a corruption of the system. To make the definition somewhat more precise we might say that we can regard as corruption any act in the course of which the person responsible violates the distribution system based on social consensus for the benefit of others and in the expectation of some recompense therefor.

In what follows I will try to examine who becomes a participant in corruption and under what conditions, thus becoming a factor in the secondary or even "third" economy.

If we examine more closely what we have just said about the nature of corruption it is impossible not to notice that we are faced with a unique conflict of interests. In the final analysis, if the distribution system based on social consensus is violated anywhere this means that someone is violating the just interests of a higher order interest sphere, encroaching on its goals, for the benefit of his own interest community or directly for the benefit of himself. It seems logical, therefore, that the possibility of corruption is greatest for those who have the ability to realize greater, broader interests. With a certain constraint the professional sociological literature equates the possibility of realizing interests with the concept of power, so with some simplification we can say that the number one condition for corruption is to have power. (However trivial this statement may appear!) In the social system of the division of labor those have power who dispose of and exercise control over the distribution of certain material and moral goods, who stand at the "sluice gates" of the distribution channels. The higher the position occupied in this system of the division of labor the more important, qualitatively and quantitatively, the goods over which one has control and thus the ability one has to realize interests is substantially greater.

Let us note here that generally recognized interdependency, which is formulated in the works of the authors Hethy and Mako, which shows that the contemporary view of guidance in judging the ability to realize interests is characterized by a unique mixture of naivite and voluntarist determination. What we mean is that, whether it is said or not, there is

an idea according to which the abilities to realize interests are nicely stacked up in a great central warehouse and everyone receives as many of these abilities--in accordance with the strictly controlled directives of the center--as are absolutely necessary for the successful filling of the position occupied by him in the social system of the division of labor. This conception--unfortunately rather general--completely ignores the interdependency according to which guidance does not set the processes of reality; on the contrary, reality determines the possibilities of guidance. But we do have some initial experiences concerning the complex social system for the development and functioning of the real abilities to realize interests.

The very dim and imprecise picture of the realization of interests is an important constituent in the response to our basic problem because it increases the uncertainty in research on the sources of corruption. It is natural that the greater the difference between the real ability to realize interests and the ability hypothesized by central guidance in the case of a given group or individual (let us hypothesize to the benefit of the former) the greater the possibility that the individuals or groups involved will have uncontrollable freedom of movement and action in the hidden dimensions not presumed to exist officially. This uncontrollability potentially increases the possibilities of corruption.

Another important motif of the interdependency is that not only will the chances of realizing interests increase for those occupying a high place in the social system of the division of labor but there will also be an increase in their possibility of presenting their real individual or group interests as the interests of a much broader community (the megye, the national economy, etc.). This very general phenomenon is linked to that very tenaciously surviving dogma according to which the higher hierarchic level represents higher order interests under all circumstances, indeed that general interests can be formulated only at a higher level. And, of course, here one finds the other side of the interdependency, already mentioned, from which it logically follows that every openly particular interest is harmful, an individualistic remnant, which is opposed to the interests of the higher order communities and as such is to be abolished by persuasion and education or with the tools of force. The contemporary conception seems to have distanced itself substantially from this view because we have come to the recognition that the interest relationships of our socialist society are structured and that this derives from the structure of society itself. But the conceptions followed in the aministration and guidance of society and of organizations therein have not yet been brought into suitable harmony with this recognition.

Thus, to sum up, we can state that the information we have available concerning the real mechanisms of interest relationships and the chances for realizing interests is very limited but in a unique way, in the case of our theme, this statement seems essential because it is precisely this uncertainty, the unknown elements, the lurking suspicions, the formalized surface which only hides the already mentioned hidden dimensions and arouses

distrust which are all of them important conditions for the development of corruption.

Naturally, the picture would be somewhat one-sided if we approached the question only via interest relationships. It is well known that in the final analysis human motivations are determined by a very complex and difficult to discover mutual effect of interests, values and feelings. We have just seen that the system of distribution based on social consensus can be distorted by the fact that under present conditions as one rises in the hierarchy there is a swift increase in the chance to realize individual interests which damage the common interests, to present this act as activity serving high level interests and, in a paradoxical manner, to win material and moral recognition for this. On the level of motives this is only the possibility for corruption; whether a given individual actually becomes corrupt depends on the extent to which his value system and his associated feelings determine his behavior. Naturally one could write an independent social psychology study about these questions so I would risk only a few observations here. As in every definitely transitional society in the process of formation so in our system also very heterogeneous value systems develop; feudal, quite atavistic, bourgeois and socialist value systems, this last still existing in part only hypothetically and burdened with the dogmatic inheritance, exist side by side in a system of open or hidden conflicts. The virtually complete lack of historical roots for human communities with self-regulating, democratic traditions also deforms our human value systems. The problem is increased by the fact that instead of discovering the real interdependencies of the political practice of the initial period of the building of socialism they were often covered over by a popularization of an artificial surface. As a result of this, among other things, there developed a type of man and an idea of man which were rather disillusioned and cynical--thus "not paying attention" or apolitical but still maneuvering among the everyday ceremonies of the dogmas--in the final analysis antisocial and incapable of cooperative strategies.

I believe that it is not necessary to offer any special proof that this unique situation unambiguously favors the existence of corruption because on the one hand the natural control of people is dissolved or does not come into being and, what is more important, there is no incentive which would favor non-corrupt behavior.

As a result of very complex processes which cannot be analyzed in detail here there may develop a public sentiment which condemns manifestations of corruption formally only because it has been left out of it. There comes into being a sort of schizophrenia which makes it possible for a single individual to peacefully accomodate what is routinely corrupt while officially and with conviction condemning and persecuting other manifestations of corruption. So it would be an illusion and self-deception to believe that the decisive majority of our society rejects corruption as a phenomenon alien to socialism. This cannot be because, in the first place, this phenomenon is not at all alien to the present, actually existing

socialism--at most it may be to an idealized abstraction of it--and in the second place under present circumstances the frequent acceptance and everyday use of some form of corruption is a social necessity which cannot be stopped, the chain reaction of which cannot be reversed, by the insight, good intentions or cooperativeness of individual people. He who takes himself out of this chain will lose--whether he like it or not. So there can be no doubt that for some time to come the social trap of corruption will be a basic problem of many societies, including our own.

Thus far we have concentrated on the subjective side of corruption and on the immediate causes and possibilities determining it. Let us now examine what additional causes contribute to the development of this phenomenon. It is very frequently said in connection with corruption that the shortage of some commodities is an important external condition for its existence. One can easily see that there is a much greater "temptation" to "correct" distribution in one's own interest in the distribution of goods available in limited quantities than there is in other cases. It is also rather well known that it is customary to call the economic system of socialism a shortage economy. The incentive for corruption from this side is most unambiguous. But in the interest of finding a way out it would be better to think through this interdependency--the extent to which the shortages appearing in socialism can be regarded as natural, organic shortages and the extent to which they can be regarded as the consequences of demand, frequently an over-demand, which is sometimes anarchic despite the apparent complete control, actually over-regulation which has lost control.

Once again it would not be unprofitable to examine the historical roots, because the key to the over-demand hides in the basic characteristics of socialism. It may exist in that still unsolved dilemma which involves how to base a strategy of dynamic economic growth on two rather contradictory axioms, namely that we would like to preserve the "ideological purity" of the silk purse character of the phenomenon but would like to make all this out of a sow's ear. How this will succeed and when is a historical question mark but one thing seems certain, that in this way progress will be increasingly protracted. Our economic policy paralyzes the crucial functions of the law of value--without the realization of which there is no commodity producing society--with sometimes unlogical inconsistencies which make it impossible, for example, to stop the spinning of the above mentioned abnormally overheated demand. It could be stopped only by giving up another political axiom, the principle of swift growth. Without pursuing this any further let me note one interdependency, namely that in the economic system of socialism thus far there has not been any real economic limitation to the unrestrained over-demand for the factors of production. This necessarily led to a shortage economy and the economy of shortages necessarily encouraged the tendencies of corruption.

Among the external causes of and conditions for the existence of corruption we should deal in some detail with another important factor which is tied in in several ways. It is a phenomenon which can be observed around the world that corruption flourishes primarily where the principles for the

distribution of goods are not sufficiently clarified and where there are those who have made people believe that this or that decision depends on their judgment, inclination or pleasure. And since their real ability to realize interests is much more extensive than the social control hypothesizes this is often true.

I note in passing that despite all appearances it does not seem excessive to state that we have a rather superficial knowledge of many important relation systems of the social and economic system of socialism. There is a quite obvious explanation for this lack of knowledge--there is simply little historical perspective and relevant experience. But there is another reason too which is a substantive problem because the fact is that a sort of bureaucratic rigidity is characteristic of the entire system of socialism--as it has been of every society thus far. There are very many people whose interests and feelings tie them to certain interdependencies which may have been important achievements in their time but the present role of which is strongly retrograde. All of this holds back a discovery of the real relationships and the defective nature of self-awareness can be attributed either to society itself or to those institutions and relation systems of it which have outlived their time. And no organization can regulate itself with sufficient efficiency with a self-awareness which is defective and greatly impeded in its development.

Because--to return to the original question--it is in vain for the rules coordinating the distribution processes to be unambiguous if their execution is uncertain and arbitrary. In this case the result--or lack of result--will be the same. Any type of regulation can fulfill its function only if it first knows with merciless sincerety the slice of reality to be regulated.

If it neglects to do this--or if it does it only superficially--then the regulator system may be apparently perfect and consistent but its effect will break on the resistance of interdependencies contrary to its hypotheses. Regulation does not move the social processes; these processes will realize themselves following their own objectively existing internal laws. Thus, guidance and regulation are capable of influencing the objective course of affairs--for example, the development of interests and of possibilities for realizing interests--only to the extent that their nature permits; in other words, the existing reality can be regulated only to the degree and in the way made possible by the internal laws of its autonomous movement.

One should neither over-estimate or under-estimate the possibilities of social regulation in this. There can be no doubt that regulation cannot substantially change the abilities to realize interests--without the risk of harmful consequences. But it is capable of and it must be suitable for building up and constantly maintaining those zones in which the most varied interests can confront one another as the result of the clash of which there can develop interest compromises and consensus which have a progressive direction for society.

Constant maintenance is very essential so that regulation can flexibly follow the development of economic and social relationships by modifying the rules. Because if it becomes rigid it will become a brake system in a short time and the dynamic aspirations for development must seek possibilities for progress on byways, possibly on roads which have been distorted into corruption. The chief problem here is not that some sort of corrupt practice develops--which may be useful for a time--but rather that over the long range corruption will undermine and parlyze these aspirations and slow down and hinder development as a whole.

There are signs of "rule inflation" these days in that the presently existing system of economic-social regulation can satisfy these requirements only to a limited degree and thus despite our over-regulation we frequently become unregulated and thus our decisions will be, in part, unrealistic.

It is natural that in the atmosphere thus developing moral inhibitions are weakening because of the psychosis of uncertainty and arbitrariness. And although we have already mentioned the interdependency of social awareness, value system and corruption it would not hurt to note again from this side that it is a difficult task in our society to form and constantly renew those norms, that totality of action rules, which make possible in every area of life the passage of unambiguous decisions. Many contradictory or at least incompatible principles and facts cross one another, extinguish each other's effectiveness, and as a result it is impossible to control human behavior. No one of them has sufficient content or force, not one of them is strong enough to bring into some kind of order or socially harmonize the multiplicity of constantly proliferating momentary interests. Corruption easily flourishes on the soil of this weakness of the value system.

Returning to the theme of regulation, the social system of regulation must better stimulate the creation of economic, social and political structures and institutions which can mediate among the various strata and groups of society, which are capable of effectively concentrating the information needed for successful decisions, which can create and systematically maintain the clash and play of the aspirations of the most varied interest groups. In part institutions capable of this never existed in our society; in part they have weakened as a result of the swift development.

There can be no doubt that today we have gone--at least in words--far beyond self-satisfaction; but social practice still often suggests this. The disadvantageous development of external and internal economic conditions, however, does not make it possible to maintain this practice any longer. The real springs of social processes must be made clearly visible to everyone; only in this way can everyone find his own place, the possibilities for putting in motion his human energies. In the future we will have ever greater need for the concentration of energies, for the free development of the abilities hiding in people.

8984
CSO: 2500

BANK OFFICIAL DESCRIBES REQUIREMENTS FOR EXPORT DEVELOPMENT LOANS

Budapest NEPSZABADSAG in Hungarian 10 Aug 80 p 3

[Article by Istvan Dancs, business director, Hungarian National Bank: "Export Development Loans"]

[Text] The presidential board of the Hungarian National Bank discussed recently the experiences in the use of the credit line known as the 45-billion program, and concluded that this has been the most successful credit operation in the last 12 years. This huge sum aids primarily the implementation of investments in export development. Its use is thus a great contribution to the improvement of our foreign trade balance. And since only modern, constantly high-quality and profitable goods may appear--and be competitive--on the world market, these investments also promote a faster turnover of products and increase the organization and profitability of production. It is characteristic of this form of credit that its conditions were not determined individually for each branch, but were presented to all enterprises and cooperatives as a unified norm. This means that competition for credit also increased; the bank's strict requirements can be met only by those firms which are in good or excellent condition.

Fifty-one Billion Instead of Forty-five Billion

In spite of stiff credit requirements, enterprise and cooperative investments were lively in the first 3 years of the present plan period. The majority of the applicants thought that they could finally implement their old pet development projects through our program (for the stiff requirements were accompanied by certain benefits). Although the bank tried to give, through strict selection, preference to proposals that were most profitable for the national economy, our money allocated for this purpose was gone by 1978. Then the government, seeing that this form of credit was successful, allowed us to extend the credit margin by 8 to 10 billion forints until the end of the plan period.

By the middle of this year, more than 1,700 investments had been started --mostly in export development and, to a lesser degree, in import

reduction--with a credit of 51 billion forints and the enterprises' own resources, totaling 90 billion forints. By the end of 1979, 37 billion of that has been finished. The food industry and agriculture used most of the credit; the cooperatives filed mostly joint applications. In the industrial area, the machine and chemical industries took the largest share: the investments there were very concentrated, 40 percent of them being made up by 10 large-scale investments. The significance of the program is indicated by the fact that these investments resulted in exports amounting to $870 million, which is 13 percent higher than planned. Foreign exchange revenues are also a good illustration, i.e., when we deduct from the value of production the value of the imports necessary for production; this is 15 percent higher than the enterprises had hoped for. All of this means that the investments' time of return from the net foreign exchange revenues is, on the average, within 3 years. In short, one-third of these investments has already been paid back in full.

It must be added to all of this that, although these developments can no doubt be considered better than usual, the quality level of their implementation is not even: 25-30 percent of them had problems in cost estimation and market evaluation. Investments involving large constructions are especially affected by the weaknesses of the domestic investment market. It says much in itself that the spirit of enterprise suddenly increased in 1976. This was not always beneficial to the requirement of thorough preparation: it resulted in a danger of frittering the assets away, in extra costs, and in a slow-down of implementation, especially at larger constructions. The development of insecticides and pesticides at the Kobanya Medicine Factory involves significant extra expenses and thus it will cost 60 percent more. The development of the poultry processing plants of Kikunhalas, Debrecen and Zagyvarekas and the Nitro-Chemical Industrial Plants became more expensive for similar reasons.

But the passing of time not only increases the expenses, it also endangers the developmental goal. In a few cases the investors made an incorrect market evaluation, that is, they were not careful enough in selecting the imported technology. There are now six investment projects underway which make protein imports unnecessary. These will require new technology, for the existing technology does not work well. The Finnish press bought for the ERDERT's Vasarosnameny fibre-board plant broke down during the initial testing.

The Goals Are Being Achieved

The constant capitalist depression also plays a role in the problems of the market. This is why there was tension in the case of the MOM, the Csepel Vehicle and Bicycle Factory, the Jaszbereny Refrigerator Factory and the Orion plant. The lessons are manifold. What is most apparent is that the business deals are too one-sided, there are too few export

proposals connected with stable cooperation in trade and production, and thus the domestic enterprises are at the mercy of their partners. I think it is a mistake that, although the regulation makes it possible, the interests of the producer and the foreign trade enterprise are still seldom identical, and that the entire burden of the risks are mostly carried by the producing enterprise. The associations that are being created presently may indicate a step forward in this area.

The credit program has achieved a market-oriented development, which was its main objective. In addition to exceeding the export targets, we were also able from the middle of the plan period to appear on the market with really new products, such as, among other things, the secondary metallurgical products made with a technology that is efficient in the use of material and energy, e.g., thin pipes or highly efficient chemical materials, herbicides and pesticides, and certain important chemical intermediaries. These are, however, only the first swallows. Unfortunately, however, there are still enterprises which still use today's technology to manufacture yesterday's products: they connect the "what" with the "how"--not the other way around. A steady improvement of our terms of foreign trade cannot be expected with this kind of export. For this reason, we will give more support in the future to the manufacture of new and viable products which are the results of more mental efforts.

Because of the stricter regulations, the profits of certain enterprises are lower than planned. This tension is highest in the machine industry. Also instrumental in this is the fact that while the government adjusts the prices to the changes in the world market--that is, it conducts a sensible anti-inflationary policy--the majority of the enterprises still do not know how to deal with this effort, they still do not feel the possibilities of exchange economy. It is a fact, of course, that this would require not only an increase in exports, but also better labor management, a decrease in production costs, and conserving of energy, material and manpower. It also must be noted here that, especially in the processing industry, the expected export profitability of an investment can hardly be estimated and cannot be separated from the enterprise's entire activity. Even the credit-lending bank is put off in these cases. The real guarantee for the obligations and output is the enterprise's entire previous activity. All of this is a warning for us that we must evaluate every new developmental goal in connection with the enterprise's entire activity.

Unfortunately, few small and mid-sized enterprises and cooperatives are taking part in the program, although we agreed with the National Federation of Artisan Cooperatives 2 years ago that we would help flexible and rapid undertakings in many ways, if only to eliminate the problems of the supplier industry. The slow pace of moving forward is explained by the fact that some of the smaller enterprises did not submit any proposals for evaluation and others are deterred by the requisites or do not think they will get the credit even when their proposal is good and

economical; they do not know that the bank does not always insist on the specified degree of self-contribution. These developments are also hindered by the fact that the enterprises which export finished products do not, with a few exceptions, pay back a specified percentage of their extra profits to their cooperating and outside associates. We would encourage this kind of joint effort; several enterprises may submit joint credit applications in the future.

I think the weakest area of the development program is the administration of import-substitution investments. We also gave credit for this kind of investment, although not too often. The revenues from these, for the time being, lag somewhat behind the expectations. But in general, we ourselves rather supported the development of exports, although the area of economical import substitutions also has many hidden resources. It will suffice to refer only to our investment possibilities in sensible energy rationalization, which substitute for expensive imports of hydrocarbons. True, our enterprises did not make any exact estimates either, as to what parts and part units they could manufacture at home. However, the only worthwhile import substitutions are those which are as valuable as the imported competitor, and it does not hurt either if they not only improve domestic supply, but also make a certain amount of exporting possible. This is why the bank will also encourage the enterprises in the future to take such credits if the economy of the import substitution is proven or easily measurable.

New Proposals

The export development program as a whole did fulfill the hopes for it and thus it will be worth maintaining this credit structure in the future without any significant change. According to the plans, the export development credit, with a slow-down of the pace of investments, would be 60 to 65 billion forints, which is about half of the expected total credit limit in 1981-1985. In my judgment, we can continue to contribute to the improvement of our country's international balance of payments only if we do not ease the strict credit requirements, but are more flexible with regard to the conditions and consider the financial situation of the enterprises and the wider possibilities of management. The program's success also urges us to use the experiences gained in export development investments in other areas of credit lending as well.

Finally, let me mention that we have not used up the 1980 credit limit entirely, because the enterprises are waiting. This is partly understandable since they are just getting familiar with the effects of the new regulations and the new price system, and they do not yet see the possibilities of the next plan period in their entirety. The trouble is that credit is not even being sought by enterprises which would be competitive in the long run because of efficient production. But we would like to avoid the credit slump resulting from the change to another plan period. It is not campaigns that are needed to hold onto

and extend our existing market positions. What is needed is systematic work in market and technical investment development.

Our primary expectation regarding this year's new price and regulatory system is that it will improve our clearsightedness in evaluating the enterprises. We will now be better able to select from the submitted development proposals the economical ones which deserve a bank credit and even a state subsidy. In order to keep the spirit of enterprise alive, we must coordinate the possibilities of our credit and subsidy systems and our methods.

9414
CSO: 2500

REGULATORS COMPLICATE INTERESTS OF GRAIN GROWERS

Budapest FIGYELO in Hungarian No 33, 1980 p 11

[Article by Gyorgy Koranyi: "The Changing Interests of the Grain Industry"]

[Text] In order for the Grain Trust to obtain as much in the development fund from profit as it did last year, it will need a profit of 373 million forints, that is, a 43 percent bigger profit than last year. But the area of expenses does not provide as much room for formation of profit as before. The regulators introduced on 1 January changed the economic interests of the grain industry in many areas. For example, in 1979, 18 percent of the average tax on profits could be retained to form the development fund, which represented 6.8 percent of the profits. But this possibility was eliminated in 1980.

The obligation to pay progressive taxes has also changed. Formerly, formation of a dividend fund of up to 2 percent of total wages was still tax free. Since 1 January, however, a 200 percent progressive tax must be paid even after formation of the dividend fund of between 0 and 2 percent. (Profit appears in the denominator of the profitability index, and the numerator is the product of the net value of the equipment inventory and the chronological average of the total inventory plus the annual total wages.)

If, on the other hand, the profitability index reaches 2 percent, but not more than 4 percent, then 0.5 percent of the dividend fund formed is tax free; in the case of profitability between 4 and 6 percent, 1 percent is exempt from the progressive tax. For every additional 2 percent increase in the index, another 0.5 percent of the dividend fund is exempt from the progressive tax.

The average profitability index of enterprises in the grain industry this year is expected to be between 4 and 6 percent. Therefore, approximately 1 percent of the dividend fund will be exempt from the progressive tax.

A further significant change is that only 60 percent of the yearly allowance for depreciation or amortization goes into the development fund, instead of 100 percent. Through the centralization of 40 percent of the amortization, the possibility of formation of development funds at the trust level has been reduced by some 190 to 195 million forints.

Wage regulation has also changed significantly. In enterprises working under the system of regulation that ties total wages to enterprise output, the average wage (wage level) can increase tax free by 3 percent more than the wage increases possible on the basis of the output index. For example, if in a particular enterprise the value added rises by 15 percent compared to the basis, then total wages can rise by 4.5 percent, and the wage level by 7.5 percent, free from the wage-increase tax.

By the terms of the regulations of 1979, taxes must be paid in every case in which wages rise by more than 6 percent. Under the new regulations, the wage level can increase by up to 9 percent, depending on changes in the output index, without the wage-increase tax having to be paid. But there will be no possibility of that in the coming year for the enterprises in the grain industry.

This is because the value added is about three times the profit. In practice, the value added can be increased only by multiplying the profit. According to this, the profit would have to increase by three times 30 percent, that is 90 percent, in order for the wage level to rise by 9 percent without taxes. Taking into account the fixed or maximum prices, it is impossible to count on such a large increase in productivity.

Not just the financial regulations, but also the prices of produce have changed. The basis for price regulation was the year 1977. Disregarding minor official corrections--such as allowance for depreciation of storage capacity built by the government as a target investment--the profit expected in produce prices is the 1977 equipment inventory plus 4 percent of the total wages. In view of increased expenses over the past 3 years, the high commitment to equipment, the forced reduction in overhead costs in the years 1978-1979, and the limited possibilities for changing the production system, the new prices do not even yield enough to cover partial self-financing.

It is true that within the framework of the price system it has been possible to make the profitability of some domestic activities (milling, production of mixed feeds, etc.) approach that of exports, but in practice the price system had as its starting point not the realistic income needs of the enterprises in the grain industry, but the price levels of feeds and bakery products. (So, for example, in setting the retail prices of flour and white rice the aim was that there should be no need for retail price subsidies.)

With the discontinuation of the reserve fund for the food industry, the sensitivity of export output in the grain industry increased. Until the end of last year, 100 percent of the price difference in exports to ruble countries was covered by the reserve fund, and 95 percent of the profit from exports to nonruble countries was paid into this same fund. The loss resulting from the difference in price in food wheat used for animal feed was also covered. The reason for discontinuing the reserve fund was that profit resulting from the difference in prices from sales to countries with different economic systems could pay for the loss from reclassifying bread wheat as animal feed.

Results below or above the planned exports--which in the grain industry are determined by external factors--as well as changes in price levels can change the final outcome of an enterprise by several million forints. In practice, expansion of standing and working capital must be financed in the grain industry out of the development fund. But the sizes of these two main directions are not in harmony. In the grain industry the average inventory can vary from year to year by as much as 600,000 to 800,000 tons, with a value of 2 to 2.5 billion forints, because of grain production, time of marketing, possibilities for importing feeds, world-market prices, and domestic demand for feeds. Even one-third of this, 500 to 700 million forints, would involve such demands on working capital that even extraordinary work on the part of the enterprises would not be able to balance it, not even with intermediate-term credit, which in a particular year could reduce investment possibilities by 100 to 300 million forints. The large differences in the amounts available for investment make the investment activities of the enterprises in the grain industry very difficult and sometimes even haphazard.

9611
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VARIOUS SHORTAGES ENDANGER PROFITABLE CORN PRODUCTION

Budapest FIGYELO in Hungarian No 33, 1980 p 11

[Article: "Corn Cultivation: Conditions for Productivity"]

[Text] The Association of Hungarian Agricultural Sciences and the editors of FIGYELO arranged a round-table discussion of the possibilities and problems of expanding corn production. The experts agree that domestic corn production must be intensively expanded in order to feed 2 million head of cattle and 8 million pigs, and to exploit export possibilities economically. The results in 1979 were outstanding: the average production of corn per hectare was 5.4 [metric] tons, total production was 7.4 million tons. Domestic corn growers have been given the task of maintaining this level or increasing it without a decrease in productivity.

How Profitable?

Ecological conditions in Hungary are favorable for corn cultivation. The question is just this: What conditions are necessary so that the large agricultural operations can achieve higher average production and greater total production than today, without impairing economic efficiency? That is, so that the yield will increase faster than expenses. This has been successful in recent years under the Babolnai Industry-type Corn Production System (IKR), whose 235 members raise corn on about 240,000 hectares.

Growth of Profitability of Corn Production per Hectare in the IKR
(average of 235 members)

	1977	1978	1979
Average production (tons	5.52	6.02	6.31
Value of produce (forints)	14,113	16,066	16,706
Expense of production (forints)	12,337	13,554	13,665
Net income (forints)	1,776	2,512	3,041

Under this same IKR system it required a production of 4.5 tons to cover the cost of growing corn on 1 hectare in 1977 and 4.9 tons in 1978 and 1979. This year it is expected to go up to 5.1 tons. This size average production must be achieved so that the operations will at least break even and not have to pay for their corn. In view of the ever-increasing costs of production, profitable expansion of production will require new initiatives and the creation of conditions that have hitherto been lacking.

In recent years for example, soil analysis has developed greatly. It is today no problem for the operations to determine the needs of their soil for nutrients. Thus they could put precisely the amount and composition of nutrients needed on their soil, if industry and commerce could always fill their orders. But this is often not the case, so they often use whatever fertilizer happens to be available. In the IKR last fall they wanted to fertilize with calcium and phosphorus, but at that time those minerals could not be obtained, so they were not put onto the soil till this spring. But that does not have the same value as fertilizing in the fall, because the harrowing which is required after it, dries out the soil. This results in a poor bed for the seeds.

These technological deficiencies and forced solutions are accompanied by serious economic consequences. Efficient use of ever more costly fertilizers and chemicals for protecting plants can only be guaranteed if they can be applied at the appropriate time, and in the appropriate amounts and composition. Fertilizers are becoming a more and more significant expense factor. For example, in the IKR they amount to 25 to 30 percent of production expenses.

Efficient use of fertilizer is also impaired by a lack of appropriate spreading machines. In the IKR, 480 kilograms of nutrients per hectare were applied to the soil, of which about half is utilized. The inefficient fertilizer-spreading machine has been improved by experts employed by the system, and they work with good efficiency. However, the Agricultural Machinery Trust will not undertake production of the modified machine, and is only willing to deliver the old type, which the operators could modify if they wanted to. This is an extra cost of production and is hardly the best way to improve productivity.

Good sowing seed is also a condition for good production. In recent years the selection of corn seed has expanded rapidly; the most modern hybrids have quickly appeared in Hungary too. At present the operators of 1.5 million hectares of corn-producing farms can choose from among 48 kinds of hybrids. According to the producers, however, the Hungarian regulations are too lax, and they permit a relatively high proportion of imperfect seeds, as a result of which reason the rate of sprouting in the field differs significantly from the results of laboratory tests (15 to 20 percent lower).

Conditions for efficient corn production also include reliable and energy-saving machines for tilling. In Hungary, cost-saving procedures for tilling the soil cannot yet be implemented for lack of suitable machines. But the large-capacity tractors can pull several tilling machines at once. With such so-called joined machines, energy can be saved and the work of tilling can be accomplished faster. According to the factories which manufacture agricultural machines, there is no demand for joined machines, and therefore they do not make any.

The reliability of the machines on hand depends of course not only on their technical level, but on the availability of spare parts. Certain machines can place their operators in a difficult situation when availability of spare parts is poor. So they may prefer to buy less modern machines with smaller capacity, for which spare parts are available, than those which, though modern, can remain idle for weeks waiting for spare parts.

Harvesting and Storage

At present a major portion of the corn harvest is ground and dried with drying machines powered by oil. But this method--if the operators intend to use the corn for feeding their own animals and not for sale--is extremely inefficient. Because of the small capacity of the drying machines, the operators generally speed up the drying process. But drying at too high a temperature destroys some of the nutrients, lessening the food value of the corn. Such over-dried corn cannot be utilized as well by the animals.

According to statistics compiled by the Grain Trust, about one-third of the corn crop is utilized in the operations involved in direct feeding of animals, and the remaining two-thirds enters the commercial market. As a first step, it would be expedient for the farms to preserve and store at least their cattle fodder moist and not dry it. It will still be necessary to dry it for use in production of feeds and for commercial sale, but instead of hot-air drying, which requires much energy, the method of drying in cold air--the old method used in small farms--could be implemented. It is true that by this method drying takes longer, but then the food value of the corn does not suffer.

9611
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PREPARATIONS NECESSARY FOR 1981 PLAN REVIEWED

Bucharest REVISTA ECONOMICA in Romanian No 32,8 Aug 80 pp 7-8

[Article by Vasile Parascan: "The Leap to a New Quality Involves New Requirements in Plan Preparation"]

[Text] Recently, there was a meeting of the Political Executive Committee of the Romanian Communist Party's Central Committee, the Permanent Bureau of the Supreme Council of Economic and Social Development and the Government of the Socialist Republic of Romania which discussed and approved the Report Regarding the Sole National Economic-Social Development Plan for the country in 1981. A fundamental goal established at this meeting for the ministries, centrals, all enterprises and local party and state organs is to take energetic, firm measures to prepare in advance and under the best possible conditions for the exemplary fulfillment of all plan indicators and goals in the coming year.

In this context, there is special significance in the advance provision of a technical-material base for the plan, a decisive condition for achieving planned production and investment projects and providing goods for the market, and for fulfilling provisions for exports. The experience of recent years clearly shows how important it is for each enterprise to have all problems clarified prior to the beginning of the plan period regarding the sale of production and supplies, to know in detail the requirements and possibilities of the partners with which they will deal and, especially, to perfect these dealings through economic contracts.

In order to ensure the best possible conditions for fulfilling plan tasks, priority attention must be given to achieving the planned production in the primary production sectors for basic raw materials that provide the resources for the intermediary and final processing phases for these products. To this end, it is first of all necessary to carry out the intensive geologic projects program, which represents a significant increase compared to 1980 achievements, especially in the fields of hydrocarbons, coal and nonferrous ores. Bringing about the increases in the geological reserves outlined in the plan tasks represents one of the decisive elements for the development of mining production.

In this field, first priority goes to intensifying activities for the on-time completion of projects and the start-up of new production facilities for lignite in the Oltenia mining basin (Tismana II, Rosia de Jiu and Pesteana Jiet-Sud) through the better organization of strip-mining projects and the improvement of the degree of use of excavation equipment. Decisively depending upon these measures is the production of lignite, whose percentage in the structure of energy sources is noticeably increasing. It is enough for us to point out that approximately 60 percent of the electricity produced in the country comes from the use of coal and hydro-electrical power in order to show the substantial changes that are occurring in this field. At the same level of importance we also find increases in the production of non-ferrous ores, copper, zinc and lead. In this area in recent times world prices have shown a tendency for increases, so that the complete fulfillment of production programs for these ores also represents great significance from the point of view of providing certain important hard currency savings.

All of the branches have especially important tasks with regards to ensuring a energy base and rationally using all categories of energy sources. Without a doubt, first place goes to the task of reducing the consumption of fuels, combustibles and energy. It must be said that the measures to reduce consumption imposed not merely for economic reasons, but because of the trend of continuing increases in the purchase prices for oil on the world market and the difficulties in obtaining oil constitute a key point in the 1981 plan, and each economic unit must rigorously adhere to the amounts allocated to it. Unfortunately, this year's experience shows us that many enterprises were caught unprepared to meet the tasks of reducing consumption, and they did not take the necessary measures in time. For that reason, we feel that it is worthwhile to emphasize several of the concerns that must be considered by the enterprises in preparing for next year's plan from an energy point fo view:

-- updating all products and energy-intensive technologies and limiting production to the strictly necessary amount;

-- scheduling the judicious use of heating furnaces (for rolling, forging and so forth), with periodic shutdowns when the volume of work does not justifiy continuous operation;

-- ordering and installing heat and air preheating recovery units. In 1981. we will have to recover over 20 percent more of recoverable energy resources than in 1980. What is especially important is that approximately 60 percent of this will have to be used in 1981 in units other than where it originated, which requires that we now draw up the solutions, designs and projects that will be required;

-- in order to identify the real level of energy resource use it is necessary to use or, as the case may be, to draw up an energy use review for each consumer installation, on the basis of which to define the measures to eliminate any waste;

-- energy conservation measures are necessary in the field of transportation by strictly adhering to both optimization schedules and the broad scale use of tractor-trailer tractors and full-load round-trips;

-- in the field of electricity production and transmission, the levels of consumption in their own technologies and losses in their networks will be substantially reduced, so as to represent no more than six and five percent, respectively, of the total;

-- expanding on a broad scale the use of new energy sources and, above all, energy from thermal waters, so as to make a contribution to the primary energy balance of over 300,000 tcc next year. Another important source is micro-hydroelectrical power centers built on interior rivers which could noticeably reduce the consumption of electricity produced from fuelds.

Several problems require attention with regards to the timely preparation of conditions for providing the economy with metals. First of all, it is especially important to concentrate all efforts to reduce the length of the timeframe for attaining projected parameters at the new heavy plate rolling mill at the Galati Steel Combine, whose contribution to the total balance of metals is decisive in ensuring the necessary amount slated to go for production in the machine building industry. In all the metallurgical units, and especially at the Special Steels Combine in Tirgoviste, they are still facing problems this year with regards to the accentuated increase in the production of certain types of metals that put raw materials to higher use and the reduction of imports. We are talking about production increases in stainless and refractory steel plate, where production must be double compared to this year, with production increases in electrotechnical plate steel, forged bars and blocks of tool steel, calibarated steel and others whose production directly conditions the provision of a material base of certain important sectors of the national economy.

Similarly, it is worth noting that overall ferrous metallurgy will have to obtain a metal output index of 80 to 85 percent, to which end the Ministry of the Metallurgical Industry must now organized detailed analyses in every combine and come up with output indices in accordance with the measures and the existing specific conditions in each unit.

Another element of special significance in the overall preparations for the 1981 plan is ensuring the conditions for the maximum recovery and use of all categories of reuseable material resources. As is stressed in party documents, these resources must be used to a greater degree in ensuring the necessary amount of raw materials, for some resources at the rate of 40 to 50 percent and even more. It should be remembered that next year recovered ferrous metals will reach the level of nearly 7.7 million tons, or over 40 percent in the production of steel. Increased tasks are also foreseen for nonferrous metals, totalling 20 to 25 percent of the metals recovered in the total production, for wood materials, for textiles and so forth. It must be especially pointed out that all measures must be ensured to recover approximately 300,000 tons of paper and cardboard, which will be substituted for important quantities of wood materials and which will condition to an important degree the provision of resources slated for different categories of paper, cardboard and items made from these products.

There must be an intensification and completion in the shortest possible time of projects regarding technologies for using certain reuseable resources that currently are not put to use. In each branch and in nearly every enterprise there are these types of problems and there is also the technical and organizational potential to solve them. We will refer to only some of these: tinplate for canning, red mud with iron content from the production of aluminum, useful elements from light bulbs, fluorescent light bulbs, electronic tubes, electric batteries, bakelite from various used items, different types of residual waters, gypsum, textile waste from blended fibers and numerous others that constitute a potential whose use would allow the making of products worth billions of lei, without calling upon any new raw materials.

In this field of reuseable resources, we must work so that right from the second quarter of this year, according to the established tasks, we can increase the volume of collections beyong the initial level in the plan with special accent on ferrous metals, nonferrous metals, paper and rubber. With regards to rubber, it must be stressed that all categories and sizes of tires must be recovered when they reach the limit of use for repairing or recapping. To this end, special attention should be given to the on-time completion of the new recapping facilities slated to be built both through the development of existing units in Bucharest, Tirgu Frumos and Iasi and through new units planned to be built in Tirgu Jiu, Marginea-Timisoara, Constanta and Zalau. The Ministry of the Chemical Industry must provide the on-time production of all equipment and assemble and install it in order to achieve, in this manner, the planned resources and make important savings in the quantity of new tires.

Within the framework of preparing the 1981 plan's material base, much attention must be given to drawing up programs and creating conditions for effecting repair and maintenance projects upon which the optimum use of production facilities and the achievement of product resources in the

plan depend. As is known, a series of deficiencies continued this year in ensuring planned repairs because of insufficient preparation and the failure to obtain spares and other items. This led to production losses, especially in carbon black, polyisoprenic rubber, synthesized ammonia, cement, fabrics and so forth. The principal objective of activities in this field must be the establishment of repair periods and length of downtime for each installation and piece of equipment and the determination of the necessary numbers of spare parts and, first of all, those that can be obtained through reconditioning or from our own production, keeping in mind that the repair schedule influences the rhythm of production, the month-to-month scheduling of production and, as a result, the deliveries that will be made through economic contracts.

Special attention must be given to a thorough preparation for investment projects by ensuring the necessary documentation and equipment, creating the conditions at all work sites and starting up new objectives and facilities on-schedule. As is known, in the wake of the measures taken construction and assembly efforts must be concentrated at a number of work sites and industrial complexes where all the conditions must be created to complete the projects in the shortest possible time. In this direction, we must especially keep in mind the following principal tasks:

-- bring up to date right during this quarter the construction documentation for those projects still be completed after 1980, using designs with the most efficient construction solutions;

-- improving construction and assembly contracts by immediately establishing contracts between the user and builder and drawing up a monthly and quarterly schedule for completing projects;

-- drawing up and presenting orders for approval for the projects that are to be started in 1981;

-- establishing the volume of equipment by each ministry with the Ministry of the Machine Building Industry and with the other producer ministries that is to be delivered to each project and contracting for this equipment for timeframes correlated with the assembly schedule, giving priority coverage to the necessary amount for the development of production of fuels and energy.

All these measures are designed to lead in the end to the achievement of planned production volumes at the new facilities, an aspect of special importance in respecting the initially established material balance throughout the plan.

The entire process of preparing for ensuring the material base of the 1981 plan must be finalized through the complete contracting of production both for domestic use and exports and the provision of the appropriate technical-material supplies in all enterprises and through the strict

adherence to the approved norms of consumption in all production units. Once the general framework of the plan is established, its is absolutely necessary to immediately move to clarifying all problems and to develop the quotas and forward assignments so that by the end of the current quarter all contracts are concluded. One of the most damaging phenomena in this activity is passivity, waiting for problems to be solved from above through administrative acts. And, as is known, one of the essential characteristics of self-administration and self-management is the enterprises' obligation to determine their own production profile, by types, in accordance with the real needs of the economy, to contact and known suppliers of raw materials and to specify all the details concerning the characteristics of the goods sold and supplied. And, these things are very little carried out, with many enterprises waiting for assignments to resolve their sales and, in this manner, they could require the consumption of certain products that the economy needs. That is why in the current stage it is necessary for each central and enterprise to organize reciprocal contracting activities between suppliers and users and to clarify all aspects prior to finalizing economic contracts. The manner in which we work now, in this stage, will decisively condition the beginning of the plan next year, which is, at the same time, the first year of the new 1981-1985 five year plan.

8724
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ROMANIA

IRRIGATION SYSTEMS TO BE EXTENDED, MODERNIZED

Bucharest REVISTA ECONOMICA in Romanian No 32,8 Aug 80 pp 12-13

[Article by Dr Petru Pantiru of the University of Galati: "The Program for Extending Irrigation - A Component of a New Revolution in Agriculture"]

[Text] Reflecting the economic-social relations in our country, the agrarian policy of our party and state established the major objectives in each stage of development, calling for the progress and modernization of agriculture. Among these objectives, a decisive place is held by the extension of irrigation, as a basic factor of increasing the production and efficiency of agriculture. The importance and need the carry out an irrigation program rest in the fact that together with the other factors of production they must ensure the growth of the efficiency of the land to the maximum limits of the possibilities offered by contemporary science and technology and the pedoclimatic conditions of our country. Currently, comparing the results obtained by our country's agriculture with those in countries that have large irrigated areas shows that for corn, a crop that uses irrigation to the greatest degree, the average production per hectar in 1977 (the last year for which the statistical yearbook in 1979 published comparative data) was 5,290 kg in France, 6,570 kg in Italy, 5,700 in the United States, 4,230 kg in Spain and 3,040 kg in Romania.

The scope of land improvement projects recorded a decisive turning point right after the Ninth Congress of the Romanian Communist Party. On the basis of a rigorously scientific analysis, the Congress showed the remarkable economic potential of Romanian agriculture, stipulating the necessary ways and means for its development, including the significant role that must be played by irrigation. In this regard, clear and concrete measures were established referring to: increasing the funds for land projects; extending these projects by hydrographic basins and territorial-administrative units; developing the industrial sectors that supply the equipment necessary for irrigation; and, granting assistance (financial and technical) to the agricultural cooperatives for carrying out local projects and for modernizing existing ones. At the same time, our party has combated firmly certain concepts from that past era, according to which irrigation cannot be efficient, concepts that actually slowed the development of these projects in our country for a good period of time.

The transition to a qualitatively new stage in the development of our society, marked by the Tenth Party Congress, required the establishment of new tasks in the field of water use and the extension of projects to improve and conserve land resources in view of developing and modernizing agriculture in close connection with the rates of growth of the national economy and the requirements of social life. Under the new conditions, the programs previously drawn up regarding the management of water and the extension of irrigation no longer corresponded to the objectives of the new stage. As a result, on the basis of the decisions of the Tenth Congress, there was a move to drawing up the "National Program Regarding the Rational Management of Water Resources, the Extension of Irrigation Projects and the Combating of Soil Erosion During the 1971-1975 Period and the General Provisions Until 1980."

The later guidelines of the party leadership, the directives issued by its secretary general and the evaluations made of the objectives contained in earlier programs, as well as the furthering of studies in this field in close correlation with the requirements of creating a multilaterally developed socialist society, created the premises for drawing up, on the basis of the decisions of the 11th Party Congress, the "National Long-Term Program for the Management of Hydrographic Basins in the Socialist Republic of Romania." Conceived from a new viewpoint, this program contains the group of projects necessary for the management and complex use of water, such as: the management of the entire hydrographic network; the regularization of all water courses; the creation of an important number of holding basins and lakes; the management of the entire economically irrigable potential of the country; the prevention and combating of floods, pollution and soil erosion; the development of interior navigation; the growth of fish production; the full use of the country's hydrographic potential and so forth. The national program calls for providing, by the year 2000, the water necessary for the development of the entire economically irrigable potential (of 5.3 million hectares) and even certain supplementary areas of nearly two million hectares, under conditions where the extension of irrigation will prove necessary and opportune.

During the 1950 to 1979 period, irrigation projects were in a continually ascending, but not uniform evolution in its rate and degree of modernization (see Table No 1).

From an analysis of the carrying out of the process of managing land for irrigation we discern two periods. The nature of the first stage (1950 to 1965) is expressed in the fact that the rate of extending irrigation was slow, with this due to both the more reduced economic possibilities of the country and specific conditions in the period of socialist transformation of agriculture and the fact that there was not a full understanding during that time of the importance of the irrigation factor for the intensification and modernization of agriculture. Further, even some initial provisions referring to the development of irrigation projects were cancelled in the

1961 to 1965 period. The moment marked by the historic Ninth Congress is also reflected in the fact that in the 1966-1970 five year plan the developed surface area was two times greater than that existing at the end of 1965, while in the next five year plan (1971-1975) these projects were extended by another approximately 760,000 hectares, or over 3.4 times more than the entire area that had been developed up to 1965. The intense rate of carrying out irrigation projects from 1965 to the present has resulted, at the end of 1979, in the fact that we have available a developed area of over two million hectares, which represents 13.54 percent of the agricultural area of the country and 38.13 percent of the economically irrigable potential.

Table No 1
The Evolution of the Agricultural Area Developed for Irrigation

Year	Agricultural Area Developed for Irrigation (Thousands Hectares)	Percent of Developed Area In Total Agricultural Area	Percent of Developed Area in Total Area of Irrigable Potential
1950	42.5	0.29	0.80
1955	93.1	0.65	1.75
1961	184.6	1.27	3.44
1965	222.6	1.50	4.15
1970	664.6	4.45	12.40
1975	1,424.2	9.52	26.55
1978	1,822.8	12.18	34.39
1979	2,020.8	13.54	38.13

Also in this period (1966-1979) there were important changes with regards to the modernization of irrigation projects, as well as in the structure of crops in accordance with the extension of irrigation. In this regard, we should mention: the elimination of irrigation via surface draining in those areas where this method does not give the best results and the use of sprinklers instead; the introduction and expansion of the type of irrigation using pressurized pipes; the concentration of irrigated surfaces in large systems with a centralized water supply; the expansion of the use of crops having the greatest demand for water; the establishment of certain crop rotation schedules designed for irrigated lands; and, the diversification of the structure of crops and the adaptation of these crops to the needs of society.

The 12th Party Congress marked a completely new stage, completely different from the previous periods, in the field of developing and modernizing agriculture. The defining characteristic of the development strategy of this branch in the period to follow was the carrying out of a profound

agrarian revolution that included both the development and modernization of the technical-material base and the furthering of the process of organizing production. In our party's view, the achievement in practice of these two facets at the current level of creating a multilaterally developed socialist society presupposes: the rational use of the entire land fund; the conclusion of the process of regionalizing crops and establishing a crop rotation schedule; the complex mechanization of agricultural projects and the chemicalization of production; the full modernization of wine and fruit growing; the continued growth of the numbers of animals and the improvement of animal stocks; and, the radical solution of the problem of fodder.

Understanding the fact that the demand for agricultural products is becoming ever greater (as a result of the development of the entire economy, of providing an ever higher standard of living, of the growth of the population and of export demands) and under conditions where the arable land is and remains, naturally, limited, irrigation becomes an element of great significance for the development of agriculture in the context of achieving the goals of the agrarian revolution. Specifically, irrigation ensures increasing the production capacity of the land, brings about substantial changes in the structure of crops, changes the profile of agricultural zones, influences the development of new brances of an industrial nature and contributes to the integration of agriculture into industrial activities and to the judicious distribution of the forces of production throughout the country, thus being a factor in the elimination of differences between the country's counties. To this end, in the group of tasks established by the 12th Congress of the party a special program was drawn up for the 1981-1985 period regarding the development of irrigation systems and land improvement. In this stage, it calls for the additional development of 700,000 to one million hectares so that by the end of 1985 the total area developed will reach approximately four million hectares, which will represent 75 percent of the economically irrigable potential.

Concomitant with the expasion of the area, important changes in the field of construction technologies and the use of developed areas are also called for in the documents of the Congress and in the special program. Thus, from the point of view of water supply and differing from the systems built in the past, 80 percent of the new lands will have existing water basins as their source of water plus those that will be built in accordance with the objectives of the national long-term program for the management of hydrographic basins.

In this stage, important water storage basins will be put into operation in the Olt, Buzau, Prut, Somes, Ialomita and Siret basins, with the result being that in the future five year plan the largest irrigated areas will be developed in these basins. From an administrative-territorial point of view, the new systems will be located in Ilfov, Galati, Ialomita, Buzau,

Dolj, Prahova, Arges and Botosani Counties so that agriculture will substantially contribute to the growth of total production per inhabitant in the economy of these counties.

Of the newly developed land areas, approximately 75 percent will belong to the agricultural production cooperatives, with this involving especially important tasks for the unique state and cooperatist agro-industrial councils which have full responsibility regarding providing the conditions necessary for the carrying out of irrigation projects and the rational and efficient exploitation of these projects. These organizations also have considerable responsibility with regards to carrying out local projects that will extend to an additional 20,000 hectares in the next five year plan. In order to supply this area, they will use as a water source the water supply basins that result from the development of approximately 400 kilometers of natural valleys.

The agrarian revolution will also mark a qualitatively superior stage in the field of irrigated agriculture efficiency. Moreover, the new developments are conceived in an improved way that takes into consideration advanced construction solutions and technologies that will permit the reduction of material, energy and manpower consumption. Within the framework of the complex group of solutions of a technical nature, an important role in the construction phase is played by the spread of the type of project using a slow canal network and a buried pipe distribution network, a solution capable of ensuring the reduction to a minimum of the land area occupied by the projects and the losses of water during use, as well as the realization of significant material savings. Similarly, the use of hydrant pieces and accessories in the pipe network will lead to a reduced consumption of metal. The introduction of certain improved procedures for the waterproofing of irrigation canals will reduce the consumption of metal stemming from pump replacement. We also have in mind the diversification and improvement of installations for the mechanization of water application operations and the growth of the percentage of self-deploying equipment, which will also ensure the improvement of the quality of sprinklers, as well as decrease the use of manpower in exploiting the land. The movement of water through gravity-flow channels and low-height lift pumps (compared to the current 66 meters, the pumping height in the new systems will only be 38 meters) will have implications for the noticeable reduction of energy comsumption in the use of the projects. The spread of the furrow method of irrigation wherever it is possible, accompanied by the possibility of also using sprinklers in those projects in the case of crops planted in close rows, constitute still another factor for making irrigation efficient.

Another important direction for action in transiting to a higher quality in the field of irrigation efficiency is the complete use of the area and the correct application of waters and other production technologies in order to obtain increased efficiency per hectare. In this regard, the

secretary general of the party emphasized at the Working Conference of the Central Committee of the Romanian Communist Party in February of this year: "We are making a great financial effort in this area; each hectare that is irrigated costs us, on the average, 20,000 lei. For that reason, it is inadmissible for us to use only partially those areas that we have irrigated."

Beginning with the major objectives of the agrarian revolution, the role of agriculture in the development of the country and the direct implications of these activities, the problem of the efficiency of irrigation must be considered, in our opinion, in a broader context, keeping in mind two large aspects: a) increasing the net income per hectare on the basis of achieving large production for each crop and of establishing certain efficient structures on the perimeter of the project or in specialized areas; b) ensuring to a fuller degree the social needs for different agricultural products as a result of the increased demands of industry, other sub-branches in agriculture, supplying the populace and creating amounts of products for export.

In close connection with this manner of viewing the efficiency of irrigation activities, the problem is also raised regarding the elements that must be taken into consideration when we propose figuring efficiency. We feel that in the complete evaluation of the efficiency of irrigated agriculture we must, perhaps more than in any other branch, keep in mind the cumulative efficiency of irrigation activities. This involves also extending the analysis to those branches and sub-branches that use the raw materials from agriculture (raw materials from irrigated crops), to the export of agricultural products and, implicitly, to the expenditures (evaluated in other exported products and in hard currency) that would be made if these products were imported.

Along the same lines, another element in evaluating the efficiency is the length of the timeframe being analyzed. In our opinion, if this is limited to a year it cannot lead to the formulation of certain telling conclusions. Consequently, the efficiency of the projects should be determined for the entire period of operation of the irrigation system in order to see to what degree the investments can be recoverd at the level of the unique agro-industrial council, simultaneously with the use of those crop structures that meet the demands made by society.

Even the experience to date shows us that the large systems, located for the most part on the land of agricultural units or that of a small number of enterprises, have provided large production per hectare. This is also explained, to a good measure, by the fact that only in this manner can there be a rational mixing of crops, keeping in mind natural, economic and social factors. In this sense, the results of the two irrigation systems in Galati County are graphic.

Table No 2
The Value of Production Achieved on Irrigated Lands

Farm	Developed Land Systems (Hectares)			Production Achieved (Lei/Hectare)		
	1976	1977	1978	1976	1977	1978
Barbosi	3,155	3,155	3,155	8,266	10,666	7,845
Tecuci	14,081	14,327	13.736	4,784	10,492	11,109

As shown in Table No 2, the average total production obtained per irrigated hectare was over 11,000 lei, with reserves still existing for its improvement. The formation of councils and the creation within these of unique sectors for mechanization, chemicalization and water improvements constitute new premises in the growth of production. These sectors have the task of providing the administration and maintenance of all systems under good conditions, of fully using all the developed land with increased efficiency and of applying the appropriate technologies and the entire complex of factors for increasing production.

A decisive direction for increasing economic efficiency, emphasized in the documents of the 12th Party Congress, is the development of scientific research. Thus, the Program-Directive for Scientific Research, Technological Development and the Introduction of Technical Progress establishes as objectives for study in the field of irrigation: the adaptation of certain solutions that will lead to the reduction of water consumption; the production of certain watering installations and equipment having high productivity and whose use will permit the mechanization of watering, regardless of the size and state of development of the crops; the use of certain improved types of irrigation and equipment with the possibility of applying certain norms for variable watering corresponding to the requirements of the crops at any given moment; the reduction of the use of materials and energy; and, the achievement of certain hybrids having an increased ability to use useful substances contained in chemical fertilizers.

Along with the further use of science and technology in economic processes and the development and modernization of the technical base, an ever greater role is played by the specialists and all workers, concomitant with the increased responsibilities of each worker in carrying out his tasks on-time and in the best possible conditions.

Working in the spirit of the 12th Congress documents and the secretary general's directives, agricultural workers and all our people have the guarantee that the objective of carrying out a profound agrarian revolution can be fully realized, placing this basic branch of the economy at the highest points of economic and social progress.

8724
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OLTENIA COAL BASIN OPERATIONS: PROBLEMS, SOLUTIONS VIEWED

Bucharest REVISTA ECONOMICA in Romanian 1, 15 Aug 80

[Article by Vasile Boescu and Bogdan Padure]

[No 31, 1 Aug 80 pp 9-10, 17]

[Text] The discovery and utilization of raw material and energy resources are one of the cardinal problems of our economic development. On one hand, this is due to the dizzy rise in the prices of raw materials by the large foreign suppliers and, on the other, as a result of restricting the volume of reserves available on the world level. That is why the problem of intensifying geological research activity for the discovery of new resources as well as the utilization of raw material and energy resources at a high level has been posed as a major task facing the specialists and all workers by the party and state leadership.

In this context we also have the operation of existing lignite reserves in the Oltenia coal basin, as an available resource for the production of electric energy in the country. For utilization of them, two of the country's largest thermal electric power centrals--in Rovinari and Turceni--also have been set up in the center for coal operations in this zone. But Oltenia's lignite is a fuel for the other large thermal electric power centrals, too, and for supplying the population, so that the uninterrupted increase in production has become a major goal.

Fulfillment of these tasks requires the moblization of all technical and human potential in this coal basin and organization of production in such a way so that the plan forecosts--the quantitative and qualitative ones--for coal extraction and for the investments for placing the new capacities into operation can be fulfilled in an exemplary way. From this viewpoint how do matters stand with the Oltenia mining Combine?

Steady Plan Fulfillment and Steady Delivery of Coal to the Beneficiary

The characteristic of most Oltenia operations is surface coal extraction in large pits, although underground workings also exist.

Depending on this specific, broad suppliers have been provided with the necessary means of production and modern operation and utilization technologies have been put into practice. On this base production recorded marked increases, particularly this year. Whereas 60,000 tons of coal per day were being extracted in 1979 (under conditions where the Beterega pit also is in production). production this year rose to 80,000 tons per day, without placing new capacities into operation. The Oltenia operations in this way are in the forefront of Romania's coal production, with more than 32 million tons to be extracted and delivered to the electric centrals this year.

A number of enterprises of the big combine month after month are steadily fulfilling the plan provisions and, on this base, they are honoring the economic contracts concluded. Among them are the Urdari, Motru and Lupoaia mining enterprises. In Urdari, for example, due to the superior organization of work, they have reached 84,000 tons per year in productivity per man and position; in the other enterprises, as well, through the good use of equipment for driving the internal transport, between 15,000-25,000 tons of coal are being produced daily. What is more, the favorable geological conditions in these operations also permit the quality of the coal to approach and sometimes even better the forecasts. Also, the thermal electric power centrals being supplied with lignite from these operations (Isalnita, Turceni, Doicesti and Oradea)annually are paying large amounts as rebates for the high quality of the coal received compared with the contract provisions. The units mentioned have also obtained good results in raising the qualification of the work force and utilizing the excavators, underground mechanized means (particularly the combines) and tip trucks with high output; at the same time, we should mention the concern of the leadership cadres with providing new capacities and work fronts on time, ones which permit the continued rise in coal production.

However, following the diagram of production by combine and for each enterprise and operation, we find that the fulfillments do not rise to the level of plan requirements: Up to the middle of July nearly 6 million tons of coal have been recorded as back production, while the lags are much greater for deliveries to beneficiaries (it also is a matter of back quantities from prior years). At the Jilt enterprise only around 30 percent of the plan forecasts were fulfilled in the 1 January-15 July period; for Rosia it was 26 percent and at Rovinari it was 70 percent. Such a situation has led and is leading to upsets in the activity of the beneficiaries, that is, the thermal electric power centrals. Thus, at the Rovinari thermal electric power central the lack of supply, added to which is also the inferior quality of the coal delivered, have meant that a large portion of the energy production plan is not being fulfilled for the first half of the year. And this is under conditions in which the black oil consumption exceeded forecasts. And large lags in supplying coal have been recorded for other beneficiaries.

The reasons which have led and are leading to the recording of lags in the plan and contracts are both of a subjective as well as objective nature and are not new.

As Comrade Nicolae Ceausescu pointed out at the RCP Central Committee working meeting in May, "The failure to fulfill the coal plan is the result of lacks in the appropriate organization for carrying out investments and continuation of the negative state of affairs, particularly in Oltenia, in creating the necessary base for assuring coal production achievement. Very serious and immediate measures are required to solve this problem effectively in Oltenia. We will not be able to supplement the failure to produce 6 million tons of coal in Gorj with the production of the other mines. For that reason, without neglecting the opening of new mines, the main attention should be concentrated on the efforts which must be made in addition and, in this framework, let us also see what must be done to help this county, including with a work force, in order to be able to extract the coal we need. The failure to fulfill this year's plan involves great consequences for next year and for the coming period in general."

Why the Delays in Placing New Extraction Capacities Into Operation?

One of the main shortcomings hindering the achievement of coal production in the Oltenia basin at the amounts planned is the lags in placing large capacities into operation, particularly through the stripping of land areas in whose veins the coal is found. Whereas precisely the forecasts for excavation would have been fulfilled in the last 4 years, an active coal reserve of nearly 25 million tons, equal to the current need, would have been assured. The problem in itself, among other things, involves a number of aspects which should be remembered because the measures which have been taken and which will be taken to contribute to speeding up the rate at which the new production capacities are placed into operation.

Above all it is a matter of the need to respect the provision that the stripping projects be carried out with proper equipment--tip trucks and multi-bucket excavators. The lack of these in some zones, particularly the hilly zones (Tismama I, Rovinari East and so forth)has brought the utilization of excavators with rotors, a fact which has led to lower productivity, the failure to do work on slopes, frequent defects in the equipment and carrying out daily excavation programs in proportions below the tasks and so forth. Thus, the result is the objective need that appropriate equipment be programed in accordance with the state of the land so that the stripping forecasts can be carried out on time and even ahead of schedule if possible. At the same time, it is necessary for the suppliers who have contracts with the mining units for this equipment to give them priority in manufacture and immediately recover the lags in delivery.

Taking into account the specific conditions of the zone, it also was necessary for the drainage projects for the swamps and very damp places to be carried out at least 1-2 years prior to the point of transition to stripping and the actual exploitation of the coal veins. However, in practice, in many cases coal exploitation has been carried out together with the drainage and stripping work, ignoring certain technological rules required under such conditions.

If it is true that this matter is due to start of mining jobs depending on certain urgent needs, then it is just as true that sometimes the failure to start on time has been the result of a lack of preparation and well-founded, timely organization of investments. It is certain that such a method of work has had and does have negative effect on a rational utilization of the technical base and work force in assuring the exploitation from for the future . In order to avoid such shortcomings in the new mines, greater attention is needed in establishing the order to start jobs, in organizing and balancing all activity so that the urgent jobs can be carried out better coordinated with the start of the future jobs.

In the same framework one may also speak of the failure to build access roads and traffic roads, the finishing of which would have been needed earlier in order for the heavy transport equipment to be operated intensively and extensively, even under conditions of the most varied temperatures to which coal mining subjects it. This explains the fact that some exploitation and transport aggregates get stuck in the mud in some pits, a fact which has made them inactive for a prolonged period or which has led to the deterioration of some of them much before they have fulfilled the planned operating programs.

In the end, we cannot help but recall here that in some cases large amounts of investment capital havebeen spent while a good portion of the work force and of the equipment has been affected by some stripping projects because, in the end, the layer of coal as well as the quality of it are below estimates and, clearly, below the level of efficiency anticipated. Of course, in any research there is a certain risk factor, yet the good results obtained in many cases show that it is possible for the geologists to draw up maps, diagrams and estimates which are closer to reality in many cases, on the basis of much more thorough studies and research which are substantiated more strictly.

In conformity with the tasks given in the party documents, a number of measures have been taken to improve the situation in this area. Thus, starting in July large-capacity means of transport, accompanied by qualified drivers, by mobile workshops for intervention and qualified cadres arrived from all over the country; national youth job sites were also organized and so forth. The thousands of people arriving in the Gorj zone and the hundreds of pieces of large-capacity equipment will aid the combine's enterprises for a certain period of time, primarily in doing the stripping jobs, to speed up the start of some main coal extraction capacities into operation, the extraction and transport of as large a quantity of coal as possible to the thermal electric power centrals in the zone and the warehouses. In order for this action to give the best possible results, it is necessary for the entire technical apparatus of the combine and the enterprises to be present at all work points, assuring the necessary technical assistance and contributing promptly to the application of the most efficient organizational and technological measures.

The construction of warehouses to stock coal both for suppliers as well as beneficiaries is a well-initiated measure which should be continued. The advantages obtained are substantial if we bear in mind that conditions are created in this way for the superior drying of coal and for raising quality, its content in calories through sorting and mixing. At the same time, taking into account their capacity, action should be taken urgently to fill them with quality coal. On this basis the buffer stock of coal, which should increase more than 1.5-2 million tons, will mean that the thermal electric power centrals should have a certain independence from the suppliers, avoiding critical supply situations. At the same time, the buffer stock will assure continuity in the supply with coal in the winter period, when the weather is unfavorable for various operations--excavation, transport from the pits to the warehouses and so forth.

More attention should be given to the way in which the stripping work is done. In this connection the problem is posed of selecting fertile earth and storing of it separately. Action should be taken with more responsibility in this area to avoid situations where the same earth excavated was stored in one spot, without taking into account that a good portion of it was fertile. For this reason, following the work after coal extraction, when the holes were covered and the land prepared to be returned to agriculture, the ground could only be utilized for agriculture after a period of several years, with costly fertilization work needed. Also, the action of returning land from which coal was extracted for agriculture must be intensified very much, since until now only one-tenth of it has been prepared to be cultivated.

A thorough analysis of the measures specified for investment activity and prompt finalization of them and follow-up on the basis of a schedule of results, taking into account the new conditions created (aid with the work force and equipment), that a large volume of lags to be recouped and assures a solid base for 1981 production, when it will be necessary to extract a much greater quantity of coal.

[No 33, 15 Aug 80 pp 5-6]

[Text] The quantitative and qualitative increase in coal extracted and, on this base, electric energy obtained from cheap sources available in the country--a goal of maximum importance for the entire economy--makes it necessary to increase the efforts of all factors involved: the mining units, the enterprises which supply technological extraction installations, transport and processing, the thermal electric power centrals which produce energy, the geological prospecting units, research institutes and institutes for technological engineering and design and so forth--in order to improve their own activity as well as improve cooperation among themselves. With the wish of identifying new solutions and directions of action intended to contribute to increasing the quantity of coal delivered to the beneficiaries, in this issue we are continuing the REVISTA ECONOMICA analysis of the activity

carried out in the Oltenia coal basin, comparing the opinions of mining specialists and those from the units which supply coal exploitation equipment, on the particularly important problem of the supply with highly productive technological installations and their operation and maintenance.

The Miners' Opinion:Adaptation to the Specific Nature of the Activity and Placing the Technological Equipment Into Operation On Schedule

Coal extraction in the daylight pit at the level of plan tasks means primarily that it is necessary for technological excavating and transport aggregates to exist in the mining units at the level of the supply plan provisions. From this viewpoint, the difference existing between forecasts and achievements should be signaled in the delivery, assembly and the start into operation of the excavators and the dumpers. Of the 7 and 3, respectively, that were to be honored by suppliers in 1979, until now only sets of incomplete subassemblies have been delivered from the first two excavators.

The situation is being prolonged this year, too, when the mining units up to now have not received any from the task of the supplier units to deliver a number of other large-capacity excavators. Given the fact that in 1980 some seven technological lines with a total capacity of 14 million cubic meters excavated should be put into operation in the second half of the year, in conformity with the forecasts, it is necessary for the supplier units to concentrate their efforts on a priority basis on building all the equipment contracted and sending it urgently to the mining operations in Oltenia, equipment whose schedules have currently expired.

Another aspect with negative consequences for the activity of placing the new coal extraction capacities into operation is the poor organization of activity for assembling the equipment in the pits, which, instead of being carried out in 4-6 months lasts even more than 12 months. Why? A first reason is that the suppliers deliver subassemblies which they build in tens and hundreds of small parts, despite the fact that they assemble them beforehand when they are subjected to technical testing. It is, among other things, a matter of metal products for excavators, the supplier being the Satu Mare Unio Enterprise, and conveyor belts , the supplier being the Filipestii de Padure Mining Equipment Enterprise. At the same time, it also should be remembered that many times the component parts arrive at the beneficiary in an order other than the one needed in accordance with the assembly technology.

A possible solution would be for the supplier unit to assemble the equipment--of course, with the help of the beneficiary where necessary--and turn it over to it depending on the point at which the parameters forecast are reached. However, until then, the current method of understanding of the obligations belonging to some suppliers--true, it is easy for the producers--should immediately be replaced with a more responsible attitude which takes into account the interests of the national economy in conformity with which the installations must arrive at the job site already assembly by the enterprise which built

them, verified technically and operationally very well. In this way a high net quality and productivity for the assembly would be achieved and there would be a substantial reduction in the length of time it takes to place the new aggregates into operation.

Rapidly reaching the parameters forecast and maintaining some high indicators of utilization for the existing aggregates in operation, as we know, bring the quantity of coal extracted directly. As a result, the lags recorded in 1979 and in the period which has passed this year for some main groups of technological equipment--between the planned indicators and those actually achieved--must be analyzed more carefully; it is a matter of excavators (plan--85 percent, fulfilled--62 percent), bulldozers (85 and 62 percent, respectively), tip trucks (75 and 50 percent, respectively), driving subassemblies (85 and 81 percent, respectively) and stoping combines (86.5 and 85 percent, respectively) and so forth. What have been the main reasons?

Specialists from the Rovinari Mining Enterprise have pointed out that for some equipment (bulldozers, dumpers, hydraulic installation from the floor of the support complex for the driving combines, action station for the belt transporters for underground--supplier, Ploiesti CIUTPM) some differences have appeared between the performances provided in the draft and those required by the specific conditions for operation in the mines and pits. For existing bulldozers, for example, the motors' capacity is lower than the one required by the technology for pit operation. Also, it is felt that the current types of tip trucks delivered are not in agreement with the specific nature of the difficult working conditions imposed by doing the stripping jobs in the pits, which brings frequent interruptions in operation, reduction in the quantity of coal extracted and transported to the beneficiary compared with the plan forecasts. Under these conditions, with the help of 600 auto mechanics and a 60-million-lei consumption of spare parts, in 1979 an active stock of only half the number of tip trucks existing in the supply was maintained and a production of around 1,250 tons/ton of transport capacity (compared with the 3,000 tons per ton of transport capacity planned).

It is felt for the specific requirements of daily operations in the Oltenia basin that what are needed are types of tip trucks with transmission and hydraulic systems which are larger and stronger than the ones supplied until now.

At the same time, it was felt that the finalization of improved technologies and equipment which would permit a selective extraction of coal and reduction in the volume of debris transported and better utilization of the thin veins of useful substances are needed. To carry out these requirements, specialists from the mining combine feel it is especially necessary for the researchers and designers from the Ministry of the Machine Building Industry to make a more thorough study on the spot of the specific working conditions in the pit and work out and deliver extraction and transport equipment for the coal which is better adapted to the specific nature of work in the day operations, with higher productivity and durability.

In other cases, the indicators of utilization of some machinery--and clearly the quantity of coal delivered--have been considerably smaller due to the inappropriate "service" given by the supplier units (such as, for example, the Braila Progresul Enterprise and so forth) on the maintainence and repair of 130 bucket excavators and more than 400 bulldozers. And this is because a number of assimilations of subassemblies which are conditions for the good operation of the existing equipment are behind at the producers; for the suppliers from the machine building industry, it is a question of (centrals) of Lindon pressure, segments and cylinders of motors for the Promex excavators; for the suppliers from chemistry, the adhesive for sticking the rubberized conveyor belts.

The Opinion of the Suppliers of Technological Installations: Improvement in the Use and Maintenance of Equipment

In the investigation carried out among specialists from the suppplier units to find solutions which would lead to speeding up the process for assimilation of appropriate installations for the specific conditions for the exploitation of coal in the Oltenia basin and to raise the level of endurance of the equipment delivered, we discovered some particularly interesting viewpoints. In agreement they feel that the beneficiaries have a contribution which is not at all negligible in the appearance of some shortcomings which reduce the indicators of use of the equipment for exploitation. The machine builders maintain that if some discrepancies appear between the characteristics of the equipment and the specific mining exploitation conditions, this is due to the provisions of the technical-economic operations documents worked out by the Institute for Mining Research and Design,which even is the beneficiary's and which, probably, did not take all the necessary factors into the initial calculations. The examples offered refer to certain digging equipment which deteriorated, since it was made to work under conditions which were 1-4 times more difficult than what was provided in the draft or support poles which were not adequate for the actual tasks, which were much greater ,and this actually led to the equipment's being buried and stopped. Given the fact that the production units respect the provisions in the draft, it is necessary that the work drafts by the beneficiary not contain merely the ideal working conditions at the command of the technological equipment but that account also be taken of the real and complex difficulties involved in the pit operation and the probability of the eventual appearance of some more difficult operating conditions.

With regard to the assimilation of new, improved equipment needed for the exploitation of coal, it should be pointed out that if it is true that some lags in this area are due to the producer, it is just as true that the beneficiaries in turn create some shortcomings. First, it is a question of the fact that they change their options much too often (many times it is even during the plan year) on the quantity and quality of technological equipment requested (particularly, digging aggregates and support poles). Of course, the production plan for the producer is not rigidly fixed, yet, given the long length of time needed objectively for appropriate preparation of the manufacture, it is necessary for the beneficiary to better substantiate the supply need on time through a more adequate utilization of methods of technical and technological prognoses.

Second, it is necessary for the mining units to collaborate more actively with the production enterprises in a more efficient homologuing of the newly assimilated aggregates, because currently there still are cases (for a new digging combine aggregate produced on the basis of Romanian design by the Satu Mare Unio Enterprise, for example) when the technological equipment of Romanian design although being utilized with good results in the exploitation by the beneficiary, which have not been homologated by them in order not to reduce the possibility of having to appeal to a future import.

Not only the producers should be blamed for the inappropriate maintenance of certain equipment, but also the IUTCCR Enterprise should be mentioned; it has in its supply the auxiliary equipment (bulldozers, bucket excavators, graders and so forth). This unit does not always succeed in providing that the operations for the maintenance and repair of the equipment is carried out quantitatively and qualitatively at the level of requirements. The main reasons are lack of spare parts, of personnel, of the capacity for maintenance and repairs, lack of strict respect for technological and for labor discipline, that is, reasons which can be corrected fast. At the same time, it should not be neglected that beneficiary mining units (primarily Rovinari, Jilt and Rosia mining enterprises) of these extraction and transport equipment do not provide conditions for normal operation everywhere: Many roads are improvised or not built and maintained properly, in other cases they are missing altogether and sufficient technical assistance is not being given in carrying out work in the pits and so forth.

A possible solution which deserves to be taken in the specialists' analysis in order to eliminate these shortcomings could be for the auxiliary extraction and transport equipment to move into the supply of the mining units, which would bring more concern with their appropriate exploitation and maintenance, reduction in technical, scientific and administrative personnal and auxiliary personnel by around 30 percent, a halt to the "passing" of responsibilities between the holder and the user of the machinery and so forth. But until then, the question which naturally arises from the analysis of the shortcomings presented is why the efforts of the units which hold and utilize the machinery--and which actually all belong to the Oltenia Mining Combine--are not better correlated. Why does not the combine coordinate the collaboration of these enterprises even more exactingly with a view to the better operation and maintenance of the extraction and transport equipment? In this regard it would be useful for the investments directorate in the combine not to consider closed its mission together with putting into operation or starting into operation the new capacities for exploitation and transport and to provide technical assistance and all the necessary aid with more consistency until the parameters forecast are reached for all the technological equipment as, for example, happens occur at the thermal electric power centrals.

On the other hand, it should be noted that certain teams for the "service" and repair of the supplier have found other lacks at the beneficiaries, too, in the operation and, in particular, the maintenance of technological equipment.

For example, it is a question of the technological conveyor belts for the coal extracted, whose rubberized covers often tear and due to the fact that the beneficiary does not provide clean rolls or keep the heads of the belts clean from a coating of coal which through continual friction wears the conveyor belt out. Really, recently concerns in this direction have increased in the sense that the Rovinari Mining Enterprise through its own supply built installations for cleaning the coal under the belt and the rolls, but they still are not operating continually and there are not enough for the existing number of conveyor belts. For that reason, for the large-saale production and quality production of these installations, broader efforts must be made by the mining units, but also by the machine building units, intended to lead to the generalization of the good experience accumulated until now.

Many shortcomings, at the same time, also create the fact that sometimes in the mining enterprises the technological installations are not appropriately stored, which means that they deteriorate, many times irreparably. An example is graphic: A number of subassemblies needed for the driving combines were stored in this way, so that, actually, access was blocked to the first samples brought into the warehouse, which meant that only the newly delivered ones could be utilized. As a result, since 1976 many of these kinds of subassemblies have remained stored and blocked and their rubber gaskets--indispensable to their good operation--have deteriorated completely, making the entire part inappropriate for use.

In the end, it is felt that a much greater effort is needed in all mining operations to raise the qualification of the personnel, which would lead directly to recovering some lags in operation at the high indicators of the machinery, to longer life for the equipment and, implicitly, to increasing the volume of coal extracted.

So there is a diversity of opinions which, in our opinion, can be taken into consideration by the factors concerned. First it is necessary to create a spirit of favorable collaboration so that the participation of the suppliers of equipment as well as of their beneficiaries in solving the various problems which appear inherently can be efficient and effective. It is in the interest of everyone that high-performance equipment be built, that the most favorable conditions be created so that they can be used at their full capacity, so that the programs for greater growth in coal production can be achieved totally. In this way the thermal electric power centrals, in turn, having the needed coal, will be able to fully utilize the capacity of the installations in their supply, producing and supplying to the national economy electric energy at the level demanded.

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REPUBLIC FOREIGN TRADE IN FIRST 6 MONTHS

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 8 Aug 80 p 6

[Article by Milorad Urosevic]

[Text] According to the unified projection of the country's balance of payments and foreign exchange balance for this year, by the end of the year the greatest efforts to achieve the planned balance of payments effects should come in Slovenia, Serbia and Vojvodina.

The Resolution on the Unified Balance of Payments of the Country for 1980, which was approved by the Council of Republics and Provinces of the Yugoslav Assembly at the end of July, signified the end of the temporary resolution based on the law passed at the end of last year when agreement could not be reached on the level of the deficit of payments as a part of the resolution for this year.

Even at that time, the Federal Executive Council insisted that the deficit of payments this year should not exceed $2 billion. In the intervening time, there was a change in the dinar exchange rate that will have various effects on exports and imports, depending primarily on the competetive capabilities of various branches of the economy on world markets, and of individual organizations of associated labor, where exports are involved, and of increasingly scarce foreign exchange, where imports are in question.

Trading abroad in the present circumstances and with the likelihood that new unfavorable trends are coming in international markets will not be easy, and therefore the Resolution on a Unified Balance of Payments Policy is an important support. Now each republic and province will know what kind and how much economic activity it is to provide, in order for this national "be confident in yourself" process to prevail.

Points of Departure

Since the Law on the Temporary Projection was in effect fully 7 months, and since immediately before the approval of the resolution in the Yugoslav Assembly the Federal Statistical Office published data on foreign trade in the first 6 months of the year, the points of departure for the republics and provinces can be prepared.

Taking into consideration the planned percentage of increase in exports and increases or cuts in imports, the picture is as follows:

(1) Republika-pokrajina	(2) Ostvareno 1979. u mil. dinara		(5) Projekcija za 1980. godinu			
			(6) Baza 1979, + - %		(9) Plan u mil. din.	
	(3) Izvoz	(4) Uvoz	(7) Izvoz	(8) Uvoz	(10) Izvoz	(11) Uvoz
(12) Bosna i Hercegovina	15.527	27.007	29,2	17,3	20.061	31.679
(13) Crna Gora	1.921	4.987	21,3	34,4	2.330	6.703
(14) Hrvatska	29.720	64.423	32,0	- 6,0	39.230	60.558
(15) Makedonija	6.150	14.248	34,4	- 6,1	8.226	13.379
(16) Slovenija	22.524	37.891	34,7	- 10,0	30.340	34.102
(17) Srbija	28.856	46.046	38,9	- 3,2	40.080	44.573
(18) Kosovo	2.738	5.769	31,6	23,3	3.603	7.113
(19) Vojvodina	8.510	20.394	45,4	18,2	12.374	24.106
(20) SFRJ	103.437	182.286	34,9	0,2	139.537	182.652

Key:

1. republic or province
2. 1979 total in million dinars
3. exports
4. imports
5. projection for 1980
6. 1979 base, + or - percentage
7. exports
8. imports
9. plan in million dinars
10. exports
11. imports
12. Bosnia and Hercegovina
13. Montenegro
14. Croatia
15. Macedonia
16. Slovenia
17. Serbia
18. Kosovo
19. Vojvodina
20. All of Yugoslavia

The table shows that the relation between exports and imports in all socio-political communities, and in the federation, must be much improved at the end of this year over last year, with the percentage of exports covered by imports for the whole country increasing from 0.5 [sic] percent last year to 76.4 percent at the end of the present year. Regarded by republics and provinces, the amount imports are covered by exports is expected to vary from about 35 percent in Montenegro (for which there are justifiable causes) to 51 percent in Bosnia and Hercegovina, 61 percent in Macedonia, 65 percent in Croatia, to 90 percent in Slovenia and Serbia proper. The reasons for these great differences are certainly numerous and not the most objective, and these factors were described in the communique on the approval of the resolution, but they should be seen as a contribution to the agreement process. It should be noted to what degree individual republics and provinces have already achieved their targets as presented in the resolution.

Differences in Achievement

Even if something markedly more unfavorable does not occur in international markets in the remaining 5 months, the first 6 months were certainly less favorable for exporters due to the unrealistically low exchange rate for

the dinar, which supported imports. That had the effect that the growth of exports, while amounting to something more than half of the planned rate, lagged markedly benind the growth in imports above the planned level. It can, however, be hoped that in the second 6 months the deficit will be held within the planned limits because of the more realistic exchange rate for the dinar and other circumstances.

The remaining targets of exports and imports to be reached by particular sociopolitical community in the second 6 months are shown in the following data:

(1) Republika-pokrajina	(2) Ostvareno za 6 meseci				(3) Ostaje da se ostvari			
	(4) mil. dinara		(5) % od plana		(6) Izvoz		(7) Uvoz	
	(8) Izvoz	(9) Uvoz	(10) Izvoz	(11) Uvoz	(12) Mil.	%	Mil.	%
(13) Bosna i Hercegovina	11.261	17.976	56,1	56,7	8.800	43,9	13.703	43,2
(14) Crna Gor	1.025	2.539	44,0	37,9	1.305	56,0	4.164	62,1
(15) Hrvatska	19.196	36.064	48,9	59,6	20.034	51,1	24.494	40,4
(16) Makedonija	3.400	6.758	41,3	50,5	4.826	58,7	6.621	49,5
(17) Slovenija	16.505	24.823	54,4	72,8	13.835	45,6	5.279	27,2
(18) Srbija	18.604	27.045	46,4	60,7	21.476	53,6	13.035	39,3
(19) Kosovo	1.774	3.509	49,2	49,3	1.829	50,8	3.604	50,7
(20) Vojvodina	5.929	15.486	47,9	64,2	6.445	52,1	8.620	35,8

Key:

1. republic or province
2. 6-month results
3. remaining quota
4. million dinars
5. percent of plan
6. exports
7. imports
8. exports
9. imports
10. exports
11. imports
12. millions
13. Bosnia and Hercegovina
14. Montenegro
15. Croatia
16. Macedonia
17. Slovenia
18. Serbia
19. Kosovo
20. Vojvodina

Compared to the approved unified balance, Bosnia and Hercegovina and Kosovo have very equal rates of exports and imports, with about 56 percent and 49 percent respectively, so that in the second 6 months they will only have to continue to fulfill their export and import quotas as they have in the first 6 months. Montenegro is the only sociopolitical community that has, in relation to its position, fulfilled a larger part of its export target than of its projected imports; all other communities have the opposite record.

Croatia has fulfilled 48.9 percent of its export target, but has imported just under three-fifths of its annual quota, indicating that in the second 6 months it will have to practice considerable forebearance, as will Macedonia where 41.3 percent of the export quota, and 50.5 percent of the import quota, have been fulfilled. Slovenia has exceeded its export target for the first 6 months by 4.4 percent, but on the other hand, it has used 72.8 percent of its annual import quota. Serbia has exported 46.4 percent of its yearly

quota, and imported 60.7 percent of its annual allotment. After Slovenia the situation in Vojvodina is the least favorable: in 6 months it has fulfilled 47.9 percent of its export target and 64.2 percent of its imports.

Judging from all these data, in the remaining 5 months foreign trade will require maximum efforts to fulfill the agreement and hold deficits within the planned limits.

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2 October 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2047

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CONTENTS

BULGARIA

Industrial Activity During January-July 1980
(IKONOMICHESKI ZHIVOT, 13 Aug 80) 1

Survey of Varieties for Higher Wheat Yields
(Todor Rachinski; ZEMEDELSKO ZNAME, 29 Aug 80)..... 4

CZECHOSLOVAKIA

Industries Adapting 'Measures' to Local Conditions
(Vaclav Filip; HOSPODARSKE NOVINY, 8 Aug 80)..... 8

Ministry-VHJ Financing Problems Evaluated
(Vaclav Maly; FINANCE A UVER, No 6, 1980) 15

VHJ as Basic Management Link Evaluated
(Jaroslav Kratochvil; HOSPODARSKE NOVINY, 15 Aug 80) 32

HUNGARY

Socioeconomic Components, Contradictions of Structural Change Viewed
(Jozsef Bognar; KOZGAZDASAGI SZEMLE, Jul-Aug 80).... 39

Enterprises Finding Cooperative Solutions To Increase Productivity
(Judit Kozma; NEPSZABADSAG, 16 Aug 80) 58

Farms Attempt To Offset Higher Cost of Inputs
(Laszlo Nemeti; FIGYELO, 20 Aug 80) 63

Enterprise Struggles To Prepare New Five-Year Plan
(Janos Polonkai; NEPSZABADSAG, 3 Sep 50) 67

POLAND

Text of 1949 Trade Union Law Published
(DZIENNIK USTAW, 15 Jul 49) 71

INDUSTRIAL ACTIVITY DURING JANUARY-JULY 1980

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 13 Aug 80 p 4

[Article: "Industry of People's Republic of Bulgaria during January-July, 1980"]

[Text] The plan on monetary return from industrial production for the 7-month period of the year was 99.7 percent fulfilled. It was fulfilled as follows at some of the ministries:

Ministry of Energy--102.2 percent, Ministry of Machine Building--102.1 percent, Ministry of Light Industry--102.1 percent, Ministry of Metallurgy and Mineral Resources--101.1 percent, Ministry of Electronics and Electrical Engineering--100.9 percent, Ministry of Chemical Industry--101.0 percent, Ministry of Internal Trade and Public Services--100.5 percent.

In July the rate of production growth increased 6.2 percent, whereas in the 7-month period 4.6 percent more industrial production was realized over the same period of the past year.

The production of some basic commodities was:

Products	Measure	Output in Jul	Output in Jan-Jul	Jan-Jul 1980 in percent as to Jan-Jul 1979
Electric Power	Mil. kW/h	2,484	20,004	106.5
Coal	Thous. tons	2,569	17,864	105.4
Coke Briquets	" "	79	806	109.6
Rolled Ferrous Stock	" "	260	1,766	101.6
Hot Rolled Iron Sheets	" "	120	741	110.8
Plastic Coated Iron Sheets	" "	1.3	9.3	120.4

[Table continued on following page]

Products	Measure	Output in Jul	Output in Jan-Jul	Jan-Jul 1980 in percent as to Jan-Jul 1979
Steel Tubes	Thous. tons	20	140	103.1
Electric Instruments	Thous. Units	24	164	112.5
Lathes	Units	753	5,328	134.6
Electric Telfers	"	10,075	67,100	106.7
Motor Trucks	"	1,895	12,863	106.0
Soda Ash	Thous. tons	125	862	100.6
Nitrogen Fertilizers	" "	51	433	111.9
Polyethylene Foil	" "	1.6	10.9	123.2
Chemical Fibers and Silk	" "	8.7	57.0	108.6
Roofing Bricks and Shutters	Thous. Units	7,567	44,125	103.7
Plywood and other Presswood Sheets	Thous. cub. m.	25	181	106.2
Paper	Thous. tons	26	178	98.0
Plate Glass	Thous. sq. m.	1,395	15,127	96.8
Household Glassware	Thous. leva	1,598	14,999	117.0
Ceramic Tiles	Thous. Units	20,312	144,600	158.6
Household Procelain	Thous. leva	2,844	20,873	106.7
Wool Fabrics	Mil. m.	3.2	22.1	110.1
Silk Fabrics	" "	2.8	19.5	108.8
Knit Outerwear	Mil. Units	3.3	23.4	110.7
Meat	Thous. tons	40.3	250.4	98.8
Edible Vegetable Oils...	" "	5.9	90.3	129.6
Tobacco Products	" "	4.2	44.3	103.3

Committee on Unified System
of Social Information

Commentary

Production grew in July at a higher rate than during the first 6 months of the year. It should be pointed out, however, that the production in July

was smaller than in June. The July plan for commodity production was fulfilled 99.8 percent with 358 industrial branches not fulfilling this indicator.

The Ministry of Construction and Construction Materials, the Ministry of Forests and Forest Industry, the National Agro-Industrial Union and other organizations have been lagging behind in the production plan for the January-July period. This affected their total revenue and their allocation of means needed for their funds for the economic organizations and their branches.

There was a drop in the production of some important products as sheet iron, phosphate fertilizers, automobile tires, lathes, motor trucks, cement and others.

According to the analysis of the reasons for nonfulfillment of the plan, the drop in production was caused mainly by not fully utilizing the production capacities as well as the labor force due to:

--poor technical conditions of some of the machines and equipment and frequent stoppage of the production process caused by unexpected repairs;

--irregular supply of raw and other materials and noncompliance with the contractual obligations concerning cooperative supplies;

--poor labor organization, and violation of the labor and technological discipline.

These shortcomings are most typical for the beginning of the month when in many enterprises work time is lightheartedly wasted without adhering to the production program. During the first 10 days of July, for example, the commodity production plan was fulfilled 95.3 percent whereas during the 20 days period, only 92.8 percent. In many of the economic organizations and departments almost half of the monthly output is produced during the last 10 days; in July it reached 46 percent. Therefore, a better production rhythm continues to be the main factor for guaranteeing the fulfillment of the production plan and reaching the goals of industry. The production rhythm should be observed each workshift, each single day, week, and month.

Furthermore, production agreements should be made to involve a shorter period of time as concerns the supplies for production which on its part will speed up fulfillment of the plan for transferring the monetary returns to industry.

1010
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SURVEY OF VARIETIES FOR HIGHER WHEAT YIELDS

Sofia ZEMEDELSKO ZNAME in Bulgarian 29 Aug 80 p 2

[Article by Senior Scientific Associate Todor Rachinski, director of the Wheat and Sunflower Institute in General Toshevo: "Optimum Wheat Strain Structure!"]

[Text] This year wheat production in Bulgaria marked a new considerable success. For the first time the average yield for the country exceeded 400 kilograms of grain per decare. Once again the leading okrugs obtained over 500 kilograms per decare while the best brigades, and masters in the production of grain crops reached yields in excess of 600 kilograms per decare. A general upsurge and a marked aspiration to go forward and upward in wheat production is visible. What is most important is that the results which were achieved have triggered new ambitions and searches in the area of mastering the fine points and details of the production process.

Unquestionably, these successes are the result of the application of modern highly intensive growing technology, consistent with natural and agroecological conditions. They are the result of the extensive application of scientific knowledge, of a specific approach, greater experience, and higher technological discipline and, not least, the exceptional care with which our people are growing this crop.

We must also properly acknowledge the importance of strains.

The Most Important Biological Fertility Factor

The effect of all agrotechnical measures and natural influence factors is refracted through the quality of the strains. The more intensive wheat production becomes, and the higher our objectives are set in terms of high yields, the more the production process becomes dependent on heredity characteristics and strain genotypes. It is universally acknowledged that the greatest reserves for increasing yields may be found in the biological improvement and increased variety of the strains. This is particularly important to our country in which the specific nature of natural conditions limits the effect of increasing the dosage of the basic intensive factor--fertilizers.

A great advantage of our wheat production is also based on the fact that it is being developed with a richer strain structure. Today the ability to use the positive qualities of the strains means not only knowledge of how to raise the individual strain but also how to combine strains under specific soil, topographic, terrain, and production conditions. Each agroindustrial complex, brigade, or production sector has microrayons with specific conditions considered suitable or less suitable in terms of individual strains.

That is why one of the important requirements of modern scientific and technical progress in wheat growing is the accurate and practically confirmed microzoning of the strains.

Claims that we should "squeeze out" to a maximum the possibilities of a given strain before looking for another one are not only unscientific but represent a hindrance to the utilization of the advantages of the most successful strain combination. These claims are dominated by the theory of the "ideal" strain, which could hardly ever be developed. They turn us back to the use of a single strain despite all its disadvantages. They try to extend the monopoly use of a single strain even though other equally good or even better strains exist. Should we adopt such a strange structure for wheat we would be deprived of a considerable and still insufficiently used possibility for further yield increases.

We have an adequate and adequately tried selection of wheat strains whose genetic potential meets modern production requirements. We are raising about 20 strains. However, two are of leading significance: Sadovo 1, which is basic for southern Bulgarian, and Dobrudzha 1, for northern Bulgaria. In northern Bulgaria Dobrudzha 1 offers a substantial advantage because of its better resistance to diseases and its ecological plasticity. Currently this strain is displaying the best possible qualities for a mass type of wheat, with great stability and reliability of yields, equally displayed in both bad and good years. Under the conditions of southern Bulgaria, where wheat diseases are lesser, Sadovo 1 is displaying very great resistance to drought and yield reliability. Naturally, the peak of the Balkan Mountains should not be considered the boundary dividing the areas where the two strains are raised. Results have indicated that Dobrudzha 1 has high yields also in Burgas, Sliven, Pazardzhik and Sofia okrugs, while Sadovo 1 gives high yields in Varna and Shumen okrugs.

The Slavyanka strain is acquiring ever greater production significance. This is a high grade strong wheat with very good productive possibilities. Areas planted in this strain will be concentrated mainly in southern and northwestern Bulgaria. The tendency is to convert it into one of the basic strains used in these areas. The production of high quality grain, for the time being, will involve mainly the use of the Slavyanka strain. The most suitable areas for its use must be defined and suitable agrotechnical and technological methods must be applied to boost the quality

of the grain and insure the growing of the necessary quantities of strong wheat grain for the country.

Production intensification calls for broadening the area's short-stalk strains whose productive possibilities are higher. The Vratsa, Yubiley, Trakiya and Ogosta strains have already passed their extensive industrial tests and proved their high productivity. Yields in excess of 650-700 kilograms per decare from such strains were obtained over large areas. Currently, such wheats account for about 15 percent of the area in wheat. It would be expedient, however, to expand this area in the next few years to 30-35 percent. The Vratsa strain has shown extensive ecological adaptability and the possibility to be used in all parts of the country. It is particularly promising in the intensive wheat areas of sourthern Bulgaria. Yubiley has proved to be a strain yielding stable high crops with noted advantages compared with remaining strains in the case of moist and more disease-ridden wheat seasons. Trakiya is proving to be the proper strain for dryer and warmer areas with rich soils. The great possibilities of the Ogosta strain are being confirmed in the area of carbonate chernozems, along the Danube and in the plains of northeastern and southeastern Bulgaria.

The intensive short stalk strains do not have the great ecological plasticity of the Dobrudzha 1. However, it is mainly they that yield over 650-700 kilograms per decare, providing that strain agrotechnology requirements are strictly observed.

Even though showing greater yield fluctuations, the early ripening Vega and Zlatoklas strains offer us good possibilities to advance the harvest season. Vega is more suitable for the plains with higher soil fertility, while Zlatoklas is better for slanted and eroded fields with less fertile soils.

The Kaliakra 2 strain has yielded very good results in the higher and cooler plateaus. Under similar conditions and with poorer soils, the use of the Kiten strain offers very great possibilities.

Phytosanitary considerations are prevailing to an ever greater extent in the selection of strains and in optimizing the wheat strain structure. This year's results as well have indicated that strains sensitive to the brown rust have had the lowest yields. Such yields were reduced by over 100-150 kilograms of grain per decare. The Yubiley, Ogosta, Trakiya, Kiten, Charodeyka and Zlatna Dolina strains have shown high and stable resistance to this disease, while Dobrudzha 1 and Vratsa have shown very good such resistance. The Sadovo 1, Trakiya, Yubiley, and Ogosta have proved to be very resistant to the yellow rust, while the new Kubrat 1, Tervel and Terter strains have shown very good resistance to the black rust.

The Yubiley, Vratsa, Trakiya and Charodeyka strains are the most resistant to flattening and suitable to high altitudes. Bezostaya 1, Sadovo 1, Slavyanka, Yubiley, Trakiya and Vega are the most resistant to frosts. Slavyanka, Ludogorka, Ogosta and Vratsa are highly resistant to grain casting.

Thanks to intensive and purposeful selection-improvement work with wheat, our strain structure is becoming steadily richer and better. A new increase has been achieved in the production potential of the strains. The Charodeyka strain, with a potential of over 800 kilograms of grain per decare, is already being rapidly used.

Determining the best strain structure of wheat is an important and exceptionally responsible problem. Its solution cannot be accomplished by passing decrees, or through indifference or subjective ideas. The best strain structure will be achieved by those who are steadily searching and experimenting with new developments, who acquire personal experience and impressions, who study strains under specific conditions, and who are best informed of their qualities. Let us sow the best strains and let us develop for each strain the best possible conditions so that it could yield its highest output. It is with such increased exactingness that we must enter the Eighth Five-Year Plan in order to conquer new peaks in the production of more wheat grain.

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INDUSTRIES ADAPTING 'MEASURES' TO LOCAL CONDITIONS

Prague HOSPODARSKE NOVINY in Czech 8 Aug 80 p 3

[Article by Eng Vaclav Filip, employee of the Secretariat of the Governmental Committee for Problems of Planned Management of the National Economy: "Set of Measures: Its Applications in Industrial Branches--Upgrading the Planned Management System"]

[Text] Specification, discussion and endorsement of the application of basic indicators of the plan and other tools of management according to the conditions in individual branches of our industry have represented an important stage in works connected with planning and implementation of the Set of Measures for Improving the Planned Management System of the National Economy after 1980. One of the basic principles in the planned management system has been applied: namely, a diversified approach to individual branches and sectors of industry.

Applications to conditions in individual branches are necessary because the Set of Measures was planned mainly for industry and does not reflect the specific characteristics of the nonindustrial branches, as well as of certain industrial branches, particularly basic production (the type of technology, natural conditions, concentration of production and management, seasonal character of operations, biological conditions, foreign relations, etc.). At present central organs are preparing specifications for the Set of Measures to be applied in the management system of their ministries.

In the first place, contradictory and divergent demands had to be eliminated from proposals presented for specific solutions, and solutions with equal validity for various branches had to be selected from such proposals.

General Standards

Organizations of the same type (industrial, construction, scientific research centers, marketing, etc.) will follow identical regulations irrespective of the ministry of VHJ [economic production unit] in which they are organizationally incorporated.

The sales value indicator for consumption in production will be applied step by step, and serve at first for orientation, in agreement with the State Planning Commission. It has become evident that the plan thus far has not created preconditions for the determination of this indicator; if introduced, this indicator could even negate to some extent the interest in reducing material consumption in production. Thus, in the next stage of the solution of this problem, attention must be focused on mandatory material indicators in order to guarantee supplies for consumption in production.

Tasks related to deliveries for capital investment, broken down according to selected sectors, will be determined gradually, according to agreements between branch ministries and the State Planning Commission, which will gradually create the preconditions and foundations for the plan.

Mandatory technical economic parameters will be stipulated in all ministries on individual management levels as a part of assigning each task of the technical development and its implementation, tasks in planning, etc.

A ceiling of 2 percent of wages payable is valid for allocations to the fund for cultural and social needs, with the provision that another quota of up to 0.4 percent may be allocated from preferential pricing of technically advanced goods, first-quality products, and fashion and luxury goods. If the type of production or of the activity of the VHJ excludes preferential pricing, another indicator characteristic for conspicuously improved quality of work or efficiency may be adopted by agreement. Another contribution of 0.4 percent (i.e., up to 2.8 percent) may be allocated only pursuant to the regulations applicable for export incentives. The opportunity to achieve the 2.8 percent ceiling is open exclusively to the exporting VHJ and stipulated intentionally so as to give priority to foreign trade.

The fund for development will be established in nonindustrial organizations, if the organization in question participates to a significant degree in industrial, construction or repair programs (this principle does not apply to organizations managed by national committees, because as a rule, the fund for development will not be organized in that economy in view of the general planning and financial attitudes toward the national committees as a whole).

Peculiarities of the Industry

As for the adaptation of the Set of Measures to the conditions in individual ministries, I present here only the most important applications in individual central organs and in the economy managed by national committees.

In the branch of fuels and power engineering, the applications respect the idiosyncrases of natural conditions, the limited resources of raw materials, the deteriorating mining conditions, the impossibility of storing electric power, and also a high share of the labor value added. In the production and sales areas, unlike in other indistrial branches, the plan will not

stipulate the task of the share of technologically highly advanced products. The growth of per kg prices will be stipulated to a limited extent. The ceiling for the number of workers may be exceeded in cases of hiring persons with altered work capacities.

The main component of wage funds will be set absolutely by the VHJ and, unlike in general solution, it will not be reduced in case of nonfulfillment of production goals. The incentive component of wage funds in the production of fuels will not depend on the profitability of the means of production, but created according to transferred natural units. In power and gas generation the correlation with the profitability of the means of production is replaced by the indicator designating efficiency and quality (for instance, specific fuel consumption per kilowatt). The conditions for the achievement of the above-plan incentive wage component are then selected so that the interest in the material volume of production will be complemented by efficiency--which, in case of fuels, means a selected indicator (for example, costs required), and in power engineering, for instance, available capacity.

Diverse natural conditions call for redistribution of profits by the ministry. The development fund will be established in organizations where such opportunities exist in terms of production of their own financial resources, i.e., primarily in machine engineering and assembly enterprises. Centralization of credit relations in the VHJ for subordinate enterprises will depend on the extent of centralization in capital investment, supply, and other areas of management, which will be stipulated in statutes and regulations valid within that particular VHJ.

In organizations of the Federal Ministry of Metallurgy and Heavy Engineering, General Engineering and Electric Industry, the deviations from the Set of Measures are minor. Partial specifics are respected in machine engineering organizations with higher supplier functions and in marketing and supply organizations where a risk fund may be established to cover certain multiple costs.

In ferrous metallurgy the incentive wage component will be created differently; it will be determined by cost requirements instead of profitability of means of production, and furthermore, the qualifying indicator of sales structure will be replaced by structure of production in material units (coke and pig iron). In engineering metallurgy it is exceptionally permitted to stipulate the limit for external rejects in order to determine the extent of inferior products. In the Ore Mines and Magnesite Works VHJ, certain deviations will be in effect (for example, profits instead of profitability of means of production, the basic component of wages payable absolutely unrelated to outputs, analogically as in fuels). In planning and implementation, the Set of Measures will be further adjusted so as to control price limits and to stipulate the increase of per kg prices and the opportunity to exceed the limits imposed on the number of workers by hiring persons whose ability to work has changed.

In organizations of the chemical and consumption industries no specific deviations have been approved.

Adjustment in Other Branches

In construction industry the Set of Measures will be applied analogically as in industry, with adjustments reflecting the type of operations in the construction industry, which differ from industrial production. This leads to frequent changes in the organization of work, and to a more pronounced role for transportation in the construction industry. Also, profitability of production thus far and the financial base of the organizations themselves are taken into consideration. Profitability of operating assets (after modification by clearing the unfinished construction production), profitability of factors of production (to be tested in selected VHJ of construction materials), and profitability of costs will be applied as summary indicators expressing the overall activity of the organizations. In addition, the questions concerning the establishment of the development fund and concerning the so-called "debt removal" of construction organizations on the basis of submitted quantifications are still under discussion.

In forest and water economy its specific character will be applied in several directions. In view of the scope and character of capital investment, the development fund will not be established here. The output in these branches is expressed by the so-called planning prices (in forest economy, value added; in water economy, outputs) which will comprehensively affect the operation of those organizations. Furthermore, outputs in planning prices will then serve as the base for the control of the basic wage factor.

In forest economy profitability of the operating factors will be applied in lieu of profitability of operating assets; in correlation with this adjustment, the incentive wage component is then linked with the adjusted indicator of factors of production (instead of profits, the volume of value added will be applied in planning prices). In water economy the basic wage component will be controlled by total outputs with regard to the lowest possible material consumption.

In transportation and communications the distinct character of operations--satisfaction of the needs in other branches--is respected; reduced capacities here (in transportation) may mean a social contribution, so long as the demands of the transport workers are met. Moreover, the fact is taken into consideration that the production of the utility value of goods is completed in freight transport. However, no material utility value is created there.

In output plans the indicators expressing specific aspects of transportation and communications services are applied, and the indicator of profitability of operating assets has been replaced by profitability of costs.

In state agricultural organizations specific natural conditions and the effect of biological laws on production are taken into consideration. The indicator of total outputs is retained in view of the time factor of investments in the land and of the seasonal character of agricultural operations. At the same time, however, the switch to the units of manpower consumption or some other appropriate indicator (for evaluation as well as for wage control) will be experimentally tested in 1981-1982.

Profits which will constitute the basic indicator of the financial plan will serve as a basis for the creation of the incentive wage component. By the same token, the principle was adopted that the results achieved by agricultural organizations will be adjusted on a nonaccount basis by the effect of abnormal weather conditions. The development fund will not be established here; profits may be redistributed within the ministry.

In the food industry the indicator of value added and profitability of operating assets (or factors of production in seasonal production) will be applied. Naturally, they will be modified so that, for the purposes of evaluation of plan fulfillment and for wage control, the indicators will be adjusted by the effect of nondeliveries of agricultural raw materials and of control measures on the part of governmental authorities. When converting the amount of supplies for the purposes of profitability of operating assets and of their turnover rate, the seasonal character of the branches of food industry will be taken into consideration, and supplies of a seasonal type will be excluded. Specific objective tasks of the plan will replace the qualifying indicator of the marketing structure for above-plan wage resources.

Rather than the value added, the basic component of wages payable in railroads will depend on operational outputs assessed by constant labor costs, and in civilian air transportation and in water transportation by the share of receipts. The incentive wage component will depend on a suitable qualitative indicator other than profitability of operational assets (for instance, profitability of costs and exploitation of the rolling stock and engines).

The development fund will not be established in either branch; investments will be stipulated as directives in the plan. Profits may be redistributed on the level of the ministries, with regard to the financial situation of the organizations.

In domestic trade, i.e., in the branch serving to circulate the goods, retail turnover remains the basic indicator characterizing the operation of the organizations, although the negative aspects of its effect as a volume indicator are well-known. It has been retained because no other solution is available. The task of studying potential alternatives for evaluation of the fulfillment of the plan and wage control, other than retail turnover (for instance, the trade span), before the end of this year has been assigned to appropriate organs.

Profits and the share of total costs will be applied instead of profitability of operational assets, the development fund will not be created, and all investments will be financed from the construction fund.

In foreign trade organizations the monopoly of foreign trade is respected and furthermore, a system of tools that has been introduced will affect the volume of exports and imports and their structure, as well as their efficiency. For that purpose, planning of exports has been intensified in entries in the state plan, and specific investment units will constitute its part. Profits and the share of total costs in outputs (without direct foreign trade costs) will be applied in lieu of the mandatory indicator of profitability of operating assets.

Basic wages payable will not be regulated by value added, but determined absolutely, without any reduction, on the basis of actual outputs. The incentive wage component depends on actual exports in prices quoted; the achievement of an above-plan incentive component will depend on the achievement of the differential indicator stipulated in the plan for the socialist countries and for the nonsocialist countries. Redistribution of profits on the level of the ministry is permitted. The development fund will not be established in foreign trade organizations, and the volume of investments will be determined in a detailed breakdown of the plan.

In health services the Set of Measures will be applied according to each individual organization. In organization of production the type of medical production is respected first of all by the stipulation of mandatory deliveries of supplies for health services; furthermore, in the interest of health care, a reserve fund will be used to balance economic shortfalls, if any, stemming from the regulated production. In organizations managing spas and mineral springs, and in services supplying health care organizations, certain tools of management will be adjusted. For instance, the development of the incentive wage factor will be stipulated in relation to the development of profits, etc.

Specifics of National Committees

An economy managed by national committees is specific in its differentiation, the extent of its services to the population, its diversity and its narrower technical-production base. As a rule, general principles of the Set of Measures are applied here with the deviations states below. Indicators of the plan are adjusted according to the appropriate operations in individual branches.

The regulation of the basic factor in wages payable will deviate from the adjusted value added only in case of restaurants and dining services (correlation with retail turnover, however, the criterion for testing another indicator, applies in the same way as in the case of domestic trade), water economy (outputs in planned prices), in the KNIHA [Book] enterprise (indicator of sales of goods), in local industry and communal services (labor and service indicator).

The incentive wage component is determined on the basis of profitability of total costs, except for municipal mass transportation (on the basis of losses), for restaurants and dining services, the KNIHA national enterprise, and the Coal Storage enterprise (economic results), water economy (costs of materials), and the CSAO [Czechoslovak Automobile Repair Shops], local construction, bakeries and confectioneries (usually profitability of operational assets). The development fund will not be introduced in enterprises managed by national committees. The supply turnover rate will be differentiated, and the enterprises will pay the contributions to the state budget.

Unlike the situation in centrally managed branches (with some exceptions, for example, the Transport Enterprises VHJ in Prague), the enterprise is regarded as the basic unit.

Furthermore, some unification will apply in the economic and legal forms of the kraj organizations for the development of technology in local economy and of engineering investment organizations, which will be organized individually as administration of health and cultural organizations.

The application of the Set of Measures has been adopted in other national economic branches as well, for instance, in planning and engineering organizations, in organizations of the scientific research base, and in geological, educational and cultural organizations.

The above-stated application, approved for whole branches by the Governmental Committee for the Problems of Planned Management of the National Economy, do not fully exhaust every opportunity for the adaptation of the Set of Measures. The Set of Measures also allows partial adjustments in individual regulations which may be applied in individual VHJ's so long as their character justifies them. For instance, in economic production units an indicator other than adjusted value added may be introduced, if it can better express the effect of labor value added. Analogically, profitability of operational assets may be replaced by another indicator that expresses better the efficiency of work for the society. The Set of Measures allows for partial adjustments of specific demands also in other areas.

9004
CSO: 2400

MINISTRY-VHJ FINANCING PROBLEMS EVALUATED

Prague FINANCE A UVER in Czech No 6, 1980 pp 395-403

[Article by eng Vaclav Maly, CSc]

[Text] At the present time increased attention is being paid to finding ways to improve the Czechoslovak economy's management system. By so doing economists are fulfilling the tasks set for them in this area by the 15th Congress of the CPCZ. In addition to efforts aimed at coming up with improved planning procedures, since these are the primary methods used in the management of a socialist economy, a great deal of attention is also being paid to improving and increasing the effectiveness of indirect economic management methods. At the 15th Congress of the CPCZ Comrade Gustav Husak made the following statement: "We are linking the drive to improve the quality of management work with the demand calling for the more effective utilization of financial, price and wage planning levers. In line with the goals of the plan and in conjunction with the fulfillment of substantive tasks the role of these planning levers needs to be expanded."[1]

A number of specific results were already achieved in the past in connection with the drive to solve the problem of finding ways to improve the management system of the Czechoslovak economy. A comprehensive experiment of efficiency and quality management, one of the key programs of the planned management system of the past few years, was devised and put into practice. In accordance with the rules of this experiment the effectiveness of the economic levers of indirect management is being enhanced. In 1977 the impact of economic planning levers in the area of financial management was also bolstered and upgraded through the passage of legislation that introduced modifications into the system of levies and taxes paid by economic organizations into the state budget and the national committees budget, legislation which went into effect on 1 January 1978.[2]

These taxation law amendments are a direct result of the restructuring of wholesale prices on 1 January 1977 and mark the culmination of readjustments of financial management instruments used for the Sixth Five-Year Plan.

These trends, which are clearly visible in the process encompassing the refinement of the management system of our socialist economy, are the focal point of this article; in this article we will be discussing certain aspects of financial management at the branch-ministry level.

Financial Policy as a Management Tool

One of the important tools used by the branch ministry to carry out its economic management functions vis-a-vis subordinate economic organizations (primarily VHJs) is its financial policy which is defined most concretely in the system employed for the formation and utilization of so-called ministry funds and in the system used to redistribute financial resources.

The existence of funds at the branch-ministry level and, most importantly, the system used for the redistribution of financial resources has its progressive aspects, but, at the same time, this arrangement also poses certain theoretical and practical problems.

The financial resources redistribution system is a very effective tool for managing the formation and spending of financial resources at any management level. But at the same time, speaking from a theoretical standpoint, there is something about this arrangement which in a system of management controls points to the existence of imbalanced financial relations, with all of the drawbacks inherent in these relations.

However, the redistribution system is above all a management tool. And as with any tool its effectiveness is primarily a function of the way in which it is used. If redistribution is used to balance out the uneven economic performance records of various organizations without bothering to analyze the causes of these discrepancies, then this tool is in fact being wielded in a manner that contradicts the principles of khozraschet management and, in the final analysis, diminishes the effectiveness of the management system as a whole.

On the other hand, if the redistribution system is used by managers in an active way, i.e., in conformity with the goals of the system as a whole, then this concept goes a long way toward limiting conflicts with the principles of khozraschet management and turns out to be an active lever of economic control in the management system. This concept of redistribution is influenced in a major way by certain factors, i.e., primarily by:

--the ways in which funds are generated for redistribution and the rules governing their allocation;

--the determination of the order by which financial resources are allocated for redistribution (profits, depreciation allowances) in organizations that generate funds for redistribution;

--the determination of the amounts of funds slated for redistribution;

--the determination of the areas in which these resources will be used.

It goes without saying that at individual levels of management these factors will play different roles (in terms of redistribution within the ministry framework, redistribution within the VHJ framework, and so on).

In this article we will be talking about the problems associated with the generation of financial resources, and in order to illustrate these problems we will be analyzing concrete empirical data for individual VHJs in the jurisdiction of the Federal Ministry of General Engineering and for the ministry as a whole covering the period 1976-1978. Based on our analysis of these figures, we will attempt to come up with some conclusions and recommendations which might help to make the utilization of the financial levers of economic management in the engineering industry more efficient.[3]

We will use the volume of financial resources and the structural breakdown of their formation and allocation as a point of departure for our assessment of the importance and effectiveness of the use of economic management levers in the area of branch-ministry finance policy.

The volume of financial resources generated by the Federal Ministry of General Engineering [FMVS] during the period 1976-1978 is shown in Table 1 below.

Table 1 was compiled in a way that enables us to break down total revenue funds into funds received from the national budget, the VHJs and directly managed enterprises and concerns, and within this framework the table also shows the breakdown for types of revenues.

In a certain sense and by way of analogy we can regard the funding received from the national budget as "outside" funds and the other two categories of funds as "internal" resources.

Table 1 shows that most of the funds available to the FMVS come from internal sources (the actual ratio for 1976 being 71.5 percent, 78.6 percent in 1977 and 25.6 or 91.9 percent[4] in 1978), which goes to show that this branch ministry has a solid foundation on which to conduct its own active financial policy.

The other tables reproduced below show how these funds were allocated and are therefore a concrete reflection of this policy.

Of the three most important spending categories (i.e., profit-margin subsidies, working capital subsidies and capital investment subsidies) it is mainly the last two that reflect the specific planning goals of the branch ministry and are indicative of its managerial role.[5]

Table 1. Revenues of the FMVS During the Period 1976-1978 by Types

(in percent)

	(6) období	(7) státní rozpočet (8) předpoklad	(9) skutečnost	(10) VHJ předpoklad	skutečnost	(11) podniky přímo řízené[a] a koncerny předpoklad	skutečnost	(12) celkem podle druhů předpoklad	skutečnost
příděly ze státního rozpočtu (1)	1976	100,0	100,0					26,5	28,5
	1977	100,0	100,0					20,4	21,4
	1978	—	—					71,7[b]	74,4[b]
odvody ze zisku (2)	1976			20,6	21,3	59,6	60,3	18,0	18,3
	1977			25,0	24,9	64,9	63,8	22,3	22,0
	1978			32,3	25,8	51,6	50,9	9,5	7,1
ostatní odvody ze zisku (3)	1976			—	—	—	—	—	—
	1977			0,3	0,3	0,6	0,6	0,3	0,3
	1978			—	—	—	—	—	—
odvody na vrub fondů (4)	1976			27,6	30,9	17,6	16,9	19,5	21,0
	1977			22,1	23,6	25,2	22,1	17,7	18,6
	1978			27,3	31,7	23,9	24,2	7,7	8,0
odvody odpisů (5)	1976			51,8	47,8	22,8	22,8	36,0	32,2
	1977			52,6	51,2	9,3	10,1	39,3	37,7
	1978			40,4	42,5	23,8	24,1	11,1	10,5

a) In the Czechoslovak economy concerns are in fact a type of VHJ, but they are considered to be separate institutions for statistical purposes and we are taking this distinction into account in this article.

b) The high percentage figures for national budget appropriations during 1978 are the result of the granting of special government appropriations to be used as interim loans in 1977 that were recorded in financial statements for 1978. The fact that these special appropriations were made is a highly unusual case. If we subtract from national budget appropriations the amount granted in the form of interim credits, the percentage of revenues coming from this source is reduced to 8.1 percent.

Key:

(1) National budget appropriations
(2) profit taxes
(3) other profit levies
(4) levies chargeable to funds
(5) depreciation taxes
(6) period
(7) national budget
(8) estimate
(9) actual
(10) VHJ
(11) enterprises managed directly by the FMVS and concerns[a]

In absolute terms the biggest spending category (see Table 2) covers capital investment subsidies; during the 3-year period under review the ratio of capital investment subsidies to total spending rose steadily, i.e., 33.8 percent in 1976, 59.6 percent in 1977 and 81.7 percent in 1978.

Table 2. The Breakdown of Funding Appropriations Within the FMVS

(in percent)

	(6)	(7) státní rozpočet		(10) VHJ		(11) podniky přímo řízené a koncerny		(12) celkem	
	období	(8) předpoklad	(9) skutečnost	předpoklad	skutečnost	předpoklad	skutečnost	předpoklad	skutečnost
odvody do státního rozpočtu (1)	1976	—	—					—	—
	1977	—	—					—	—
	1978	—	—					—	—
dotace k zisku (2)	1976			26,5	26,5	2,6	2,6	25,6	25,6
	1977			44,5	42,4	18,0	16,3	39,7	34,6
	1978			15,5	15,5	29,2	29,2	16,0	16,0
dotace na investice (3)	1976			32,7	32,7	60,3	60,3	33,8	33,8
	1977			52,2	54,2	81,8	83,5	57,6	59,6
	1978			82,2	82,2	68,5	68,5	81,7	81,7
dotace do provozních fondů (4)	1976			40,4	40,4	36,7	36,7	40,3	40,3
	1977			—	—	—	—	—	—
	1978			—	—	—	—	—	—
ostatní položky účelově financované (5)	1976			0,4	0,4	0,4	0,4	0,3	0,3
	1977			3,3	3,4	0,2	0,2	2,7	2,8
	1978			2,3	2,3	2,3	2,3	2,3	2,3

Key:

(1) taxes payable to the national budget
(2) profit margin subsidies
(3) capital investment subsidies
(4) working capital subsidies
(5) miscellaneous earmarked funding categories
(6) period
(7) national budget
(8) target
(9) actual
(10) VHJs
(11) enterprises managed directly by the FMVS and concerns
(12) total

Redistribution of Branch-Ministry Financial Resources Among VHJs as an Integral Part of the Funding of VHJs

The financial resources of a branch ministry (in our case the FMVS) which are drawn upon by that ministry as a means of conducting its financial policy in relation to its subordinate enterprises still account for only a portion of the total funds that are used to influence the financial position of the VHJs.

The VHJs receive funds not only from their superior organ (branch ministry), but also directly from the national budget, and most of their funding comes from the latter source as is shown in Table 3 below.

Table 3. Subsidies Granted to VHJs (in percent)

(1) období	(2) ze státního rozpočtu		(5) z FMVS		(6) celkem	
	(3) plán	(4) skutečnost	(3) plán	(4) skutečnost	(3) plán	(4) skutečnost
1976	73,2	76,9	24,8	23,1	100,0	100,0
1977	86,0	75,1	14,0	24,9	100,0	100,0
1978	72,9	52,5	27,1	47,5	100,0	100,0

Key:

(1) period
(2) national budget subsidies
(3) planned
(4) actual
(5) FMVS subsidies
(6) total

At the same time, however, Table 3 documents the increasing contribution of the branch ministry to the total funding of the VHJs during the period 1976-1978. The size of this contribution has increased sharply especially in 1978. Nevertheless, the appropriations paid out to the VHJs by the FMVS are still smaller than the appropriations from the national budget.

At this point several questions naturally come to mind. Namely, is this an ideal situation in terms of the apportionment of the management workload in the managerial hierarchy of the Czechoslovak economy? What were and what are the reasons for this funding pattern? Is it a good idea to keep doing things this way, or would it be advisable to act on proposals calling for the modification of this system?

A long-range, specialized study in the area of economic theory and practice will have to be completed before we can come up with a thorough answer to these questions. And it may be that even then the answers will be inconclusive, rather they may have to be qualified by taking into account the then prevailing level of development of productive forces and relations at the then given stage of our socialist economy.

Nevertheless, we will try to provide some answers to these questions. In the first place we will have to make a more thorough analysis of the aforementioned statistics before we can come up with any answers to these questions. Accordingly, we will focus our attention on the trends revealed in the way these funds are allocated to the VHJs, trends which are illustrated by Table 4 below.

An examination of Table 4 reveals that the largest appropriations of funds to the VHJs during the period under review were intended to be used for capital construction purposes, i.e., 64.2 percent of total appropriations during 1976, 67.4 percent in 1977, and 83.8 percent in 1978, while the average for the whole period was 71.8 percent. We have included the categories listed under items a), d) and h) in the figure for total capital investment subsidies.

Table 4. A Survey of Subsidies Granted to VHJs in Individual Years Ranked According to their Average Amounts (in percent)[a]

	druh dotace	1976 (16) plán	1976 (17) skutečnost	1977 (16) plán	1977 (17) skutečnost	1978 (16) plán	1978 (17) skutečnost	(18) průměr za 3 roky (16) plán	(18) průměr za 3 roky (17) skutečnost
(1)	a) dotace na investice[b]	59,4	63,1	80,2	64,6	74,2	70,7	71,3	66,1
(2)	b) limit prostředků na úkoly rozvoje vědy a techniky[c]	14,1	12,6	11,2	14,0	17,5	11,0	14,3	12,5
(3)	c) ostatní dotace k zisku	13,1	12,1	3,6	5,4	1,4	2,3	6,0	6,6
(4)	d) dotace na investice z redistribuce[d]	3,–	—	0,6	1,–	3,9	12,8	2,5	4,6
(5)	e) ostatní dotace k tržbám	—	—	—	—	—	—	—	1,9
(6)	f) dotace na doplatky obratového fondu	3,0	3,4	—	1,8	—	—	1,0	1,7
(7)	g) intervence při nákupu	5,4	4,3	—	—	—	—	1,8	1,4
(8)	h) dotace na investice ze státních fondů[e]	1,1	1,1	0,6	1,8	0,4	0,3	0,4	1,1
(9)	i) dotace na úhradu plánované ztráty	—	—	2,0	2,8	2,3	0,6	1,4	1,1
(10)	j) ostatní potřeby účelového financování	—	2,2	—	0,4	—	0,3	—	1,0
(11)	k) dotace do ostatních provozních fondů	—	0,9	—	0,2	—	1,3	—	0,8
(12)	l) dotace na řešení podnikových a oborových úkolů technického rozvoje[f]	0,2	0,2	0,2	1,6	0,3	0,4	0,2	0,3
(13)	m) dotace z redistribuce a z fondů	0,5	—	1,6	0,6	—	—	0,7	0,2
(14)	n) dotace do fondu odměn	0,2	0,1	—	—	—	0,2	—	0,1
(15)	o) dotace na Rudé prapory	—	—	—	0,1	—	0,1	—	—

a) This table was compiled on the basis of the exact figures for appropriations from the national budget and from the FMVS to VHJs and their subordinate enterprises during the period 1976-1978.

b) VHJs report all capital investment subsidies, including both those received from the national budget and those received from the FMVS, with the exception of capital investment subsidies received from state revenues and from the sectoral and ministerial account for the redistribution of depreciation allowances.

c) VHJs submit figures on the fixed limit of funds received for the reimbursement of invoices recording the fulfillment of tasks provided for under the terms of the state or ministry plans covering research and development work and also figures on the actual reimbursements received and chargeable to these fixed limits. The plan target figures cited here refer to the financial plan.

d) This refers to capital investment subsidies received from the sectoral or ministry capital construction fund and from the ministry account for the redistribution of depreciation allowances.

e) This refers to capital investment subsidies received from state revenues, subsidies which do not fit into the above categories a) and e) and for which separate provisions are made in the financial plan.

f) This refers to subsidies received for the fulfillment of enterprise and sectoral research and development projects and for the support of the activities of research and development organizations or offices.

[key to Table 4]

(1) capital investment subsidies[b)]
(2) fixed-limit funds for spending on research and development projects[c)]
(3) miscellaneous profit margin subsidies
(4) capital investment subsidies derived from redistribution[d)]
(5) miscellaneous revenue subsidies
(6) subsidies for supplemental payments into the revolving fund
(7) financial aid related to the procurement of materials
(8) capital investment subsidies derived from state revenues[e)]
(9) subsidies for the reimbursement of planned losses
(10) miscellaneous earmarked funding requirements
(11) subsidies for miscellaneous working capital requirements
(12) subsidies granted in support of the fulfillment of enterprise and sectoral research and development projects[f)]
(13) subsidies derived from both redistribution and state revenue accounts
(14) wage fund subsidies
(15) Red Banner subsidies
(16) planned
(17) actual
(18) 3-year average

Another large share of these appropriations was supposed to be spent on scientific and technological research and development work in support of the fulfillment of tasks assigned by state or sectoral authorities, i.e., 12.8 percent in 1976, 15.6 percent in 1977 and 11.4 percent in 1978, whereas the planned ratio for the latter year was 17.8 percent. These percentages represent the sum total of appropriations under items b) and e).

Miscellaneous profit margin subsidies (item c) accounted for 12.1 percent of total appropriations to VHJs in 1976, 5.4 percent in 1977 and only 2.3 percent in 1978. On the average these 3 categories of subsidies accounted for 91.2 percent of all appropriations made during this period.

The structural breakdown of the subsidies granted to the VHJs is a reflection of the varying degrees to which the management of individual areas has been centralized. In a socialist economy central organs are most concerned about the management of capital spending and technological development.

These areas of economic activity have always been a prime concern of our highest ranking state and party organs. In this connection it is also interesting to analyze the priorities assigned to the appropriation of funds to VHJs from the branch ministry and from the national budget.

This analysis has shown that subsidies paid for out of the national budget are concentrated mostly on the funding of capital construction. These subsidies are covered by the 2 items listed in Table 4, i.e., capital investment subsidies and capital investment subsidies derived from state revenues, which in 1976 amounted to 71.0 percent, in 1977 to 75.3 percent and in 1978 to 80.4 percent of total subsidies paid for out of the national budget.

If we evaluate the structure of these funds, we will find that they were supposed to be used for two main purposes, i.e., for capital construction and as miscellaneous subsidies to funds for redistribution within VHJs. In percentage terms these appropriations can be described as follows (see Table 5) (the sum total for all subsidies = 100 percent):

Table 5.

(in percent)

	(3) plán			(4) skutečnost		
	1976	1977	1978	1976	1977	1978
dotace na investice (1)	46,8	46,9	83,2	41,5	43,0	87,7
ostatní dotace k zisku (2)	38,1	25,3	5,0	28,8	21,7	4,8

Key:

(1) capital investment subsidies
(2) miscellaneous profit margin subsidies
(3) planned
(4) actual

The figures given in Table 5 clearly show that there was a positive trend toward a decline in the share of miscellaneous profit margin subsidies during the period 1976-1978.

An analysis of the individual subsidy categories also produces some interesting findings. On the basis of this analysis it is possible to reach some indirect conclusions as to the focal point of the branch ministry's work in this area.

Table 5 shows that most subsidies received from the national budget are concentrated in the capital investment area. In terms of absolute amounts the capital investment subsidies paid for out of the national budget during the years 1976 and 1977 were 6 times greater than the same kinds of subsidies paid for with FMVS appropriations. It was not until 1978 that the capital investment subsidies paid for out of the national budget and out of the budget of the FMVS proved to be more or less equal. Considered solely from this standpoint, this would mean that either a majority of these capital spending projects exceed the bounds of the ministry's jurisdiction or that the ministry's involvement in this area is minimal. Is this a desirable situation? After all, the Federal Ministry of Finance [FMF] and the FMVS are both central agencies which are charged with the

responsibility of promoting the fulfillment of general public needs and uniform government policies. A branch ministry's overall responsibility for promoting the development of the industries in its jurisdiction should also encompass the exercise of control over capital investment policy, including control over the expenditure of funds allocated for the purpose of implementing this policy.

We believe that the distinctions made with regard to the methods used to finance capital construction should not be viewed in strictly procedural terms, rather it is important that we should also acknowledge divisions of authority and responsibility among branch ministries and central agencies with economy-wide jurisdictions. It would seem that in recent years (witness the figures quoted above) some initial steps have been taken toward putting this principle into practice.

The subsidies allocated by the FMVS to the VHJs in its jurisdiction are concentrated in two main categories, i.e., capital investment subsidies and miscellaneous profit margin subsidies.

We have already discussed subsidies for capital investments. The other category of subsidies actually represents a kind of "balancing" mechanism used by the superior organ on behalf of its subordinate organizations. These subsidies are supposed to compensate subordinate organizations for lost profits, losses which are the result of decisions made by higher authorities. These losses are in the interest of the ministry as a whole, but in the short run they may have an adverse impact on the profitability of subordinate VHJs.

Under no circumstances should these subsidies be used solely in order to place poorly managed and well-managed VHJs on an equal footing. In our view the branch ministry should have complete control over the allocation of these subsidies. But in 1976 the national budget played a rather major role in the allocation of these subsidies, i.e., in that year subsidies financed out of the national budget accounted for 81.8 percent of all subsidies allocated by the FMVS. Even though it is obvious that the point of all this is that we should put a stop to undesirable interventions in the profit-and-loss situations of the VHJs on the part of central authorities, the authority for making these interventions should be confined to the responsible branch ministry, and this organ should have complete control over the marshaling of funds for the payment of these subsidies. The validity of this principle is substantiated by the analysis that was made of the relevant statistics for the next 2 years. In 1977 the contribution of the national budget to these subsidies amounted to only 5.8 percent, and in 1978 it contributed no funds at all to these subsidies.

On the other hand, the subsidies paid for out of the national budget under the heading "fixed-limit funds for the reimbursement of costs related to the fulfillment of tasks provided for under the state scientific and technological development plan" are entirely justified, even though this claim

does not appear to be overly warranted in light of the funds actually allocated for this purpose during 1976 and 1977. But during 1978 we witnessed a noticeable improvement in this area.

The financial policy of the FMVS vis-a-vis its subordinate VHJs, taking into account the position of the VHJs and their general directorates as mid-level management components in the engineering industry, is graphically illustrated by Table 6 below. To some extent this table also describes the position of the trust-type VHJs and their general directorates together with all of their inherent problems.

Table 6. Subsidies Allocated to VHJs by the FMVS (in percent)

		(4) plán			(5) skutečnost		
		1976	1977	1978	1976	1977	1978
GŘ VHJ	(1)	70,4	73,5	68,1	90,4	79,6	60,9
podnikům VHJ	(2)	29,6	26,5	31,9	9,6	20,4	39,1
celkem	(3)	100,0	100,0	100,0	100,0	100,0	100,0

Key:
(1) VHJ general directorates
(2) VHJ enterprises
(3) total
(4) planned
(5) actual

Table 6 clearly shows that the branch ministry's finance policy toward the trust-type VHJs governs both its relations with the VHJ general directorates and, in a direct way, with VHJ enterprises.

This situation is similar to that which prevails in the case of relations between the national budget and branch ministries and in a direct way between the national budget and the VHJs that fall within the jurisdiction of this ministry.

We believe that this situation is to some extent also the result of the ambiguous economic position of VHJs, primarily trust-type VHJs, in the Czechoslovak economy.

These problems, though the most important are those that pertain to the relationship of the national budget to the VHJs and directly to the enterprises that comprise these VHJs (in principle these problems are one and the same), problems which at the present time have been partially resolved through the experiment on efficiency and quality management, are still indicative of a certain degree of vagueness in the status of the branch ministry (and hence indirectly in the status of the system of economic branch management) in the Czechoslovak economy and, at the same time, of problems plaguing the so-called middle management level of the economy.

From a strictly economic standpoint it would be reasonable to conclude that all funds allocated by the branch ministry to VHJs should be channelled

into their general directorates. However, Table 6 shows that this is not the case. The end uses of funds allocated by the FMVS to VHJ general directorates and directly to their subordinate enterprises are revealed by figures deduced from an analysis of the hard statistics for the period under review (see Tables 7 and 8).

Table 7. Most Common Spending Categories of Funds Allocated to VHJ General Directorates (in percent)

		1976	1977	1978
(1)	dotace na investice	45,9	38,2	86,9
(2)	ostatní dotace k zisku	30,7	27,2	7,9
(3)	dotace na doplnění obratového fondu	16,2	9,2	—
(4)	dotace na ostatní prostředky fondů	4,—	1,1	2,8
(5)	dotace na úhradu plánované ztráty	—	14,3	0,29

Key:
(1) capital investment subsidies
(2) profit margin subsidies
(3) subsidies for supplemental deposits in revolving fund
(4) subsidies for miscellaneous capital funds
(5) subsidies for the reimbursement of planned losses

Table 8. Primary Uses of Funds Allocated Directly to VHJ Enterprises (in percent)

	1976	1977	1978
(1) limit prostředků na úhradu úkolů státního plánu rozvoje vědy a techniky	65,4	25,4	7,02
(2) ostatní potřeby účelově financované	17,1	—	0,01
(3) dotace na investice	—	42,32	19,46
(4) dotace na investice z redistribuce	—	—	69,07
(5) dotace na Rudé prapory	—	19,37	0,14
(6) dotace z redistribuce a z fondů	—	10,76	—
(7) ostatní dotace k zisku	11,0	—	—

Key:
(1) fixed-limit funds to reimburse costs associated with the fulfillment of tasks provided for under the state scientific and technological development plan
(2) miscellaneous earmarked funding requirements
(3) capital investment subsidies
(4) capital investment subsidies derived from redistribution
(5) Red Banner subsidies
(6) subsidies derived from both redistribution and state revenue accounts
(7) miscellaneous profit margin subsidies

The figures cited in tables 7 and 8 can be referred to to point out some interesting facts and to draw certain conclusions.

First, it is evident that, with one exception (capital construction during 1977 and 1978) funds were allocated to the VHJ general directorates for different purposes than the subsidies paid out by the ministry directly to VHJ enterprises.

Second, it is apparent that the subsidies allocated by the ministry directly to the VHJ enterprises during the years under review covered a wide range of spending categories.

The question arises as to whether these findings are desirable and what kinds of conclusions should be drawn from them.

It is our belief that the first finding can be welcomed as a positive development. The reasons for this assessment are as follows.

The funds channelled into the VHJ general directorates are the result of the redistribution of central revenues at the ministerial level in conformity with ordinance No 151/75 of the government of the CSSR.

These funds are used as subsidies for VHJ sectoral funds, and the relevant general directorate is legally responsible for overseeing the management of these funds and, wherever applicable, their redistribution to subordinate enterprises.

The assessment of the second finding will be somewhat more complicated. The funds allocated by the ministry directly to VHJ enterprises have a dual nature. On the one hand, we are talking about funds for strictly earmarked accounts, while, on the other hand, we are talking about expenditure categories which allow some leeway for the selection of alternatives. In the first case the VHJ general directorates obviously have no say in how these funds are to be spent and their direct allocation to VHJ enterprises is justified. This is primarily in reference to items 1, 2, 3 and 5 as listed in Table 8. In the case of the final spending category [item 7 in Table 8] we are, of course, dealing with a situation that is analogous to that described above (the relationship of the national budget to the VHJs), since the reasons for granting these subsidies have to do with the falloff of enterprise profits as a result of decisions made at the ministerial level. Nevertheless, it is our view that the VHJ general directorates should have complete control over the allocation of these funds. Therefore, we believe that these subsidies should be channelled into the VHJ general directorates.

Similarly, when it comes to those categories of expenditure which involve the redistribution of financial resources (per items 4 and 6 in Table 8), we believe that by their very nature they ought to be ranked among those subsidies which are allocated by the ministry to the VHJ general directorates.

If in reference to the above table we compare actual values with projected values, we will find that our conclusions and theoretical assumptions on this score are, in fact, substantiated by economic experience (represented by actual figures), frequently in contrast to plan projections (the exception being the 1978 capital investment subsidies derived from redistribution accounts). We also analyzed the impact of the national budget and the branch ministry on the financial position of individual VHJs in the jurisdiction of the FMVS during the period 1976-1978. This analysis too provided us with some interesting findings which supplement our analysis of the role of the branch ministry in the management system of the Czechoslovak economy.

For example, it is interesting to note that the VHJs ELITEX AND CHIRANA, i.e., the only two concern-type VHJs in the FMVS, are included among those VHJs which received the smallest subsidies during this 3-year period. In 1976 they received the lowest subsidies of all, while in 1977 they were among the 4 and in 1978 the 3 least subsidized VHJs.

At any rate, it is impossible to say whether the relatively superior "self-sufficiency" of these VHJs is a result of the establishment of the new concern-type VHJ, whether this "self-sufficiency" necessarily paved the way for the transition to concern-type VHJs, or whether it is an outgrowth of other circumstances. The only way to explain this is by making a further detailed analysis of the management practices of individual VHJs.

Assuming that the first hypothesis turned out to be correct, then from the standpoint of financial management this might tend to lend support to the acceleration of the process whereby the trust-type VHJ is being transformed into a concern-type VHJ and at the same time uphold the spirit of the comprehensive experiment which is bringing the management practices of the trust-type VHJs closer into line with the management practices of concerns, especially so in the financial area.

It was also interesting, for our purposes, to analyze the channels through which funding appropriations make their way from the FMVS or the national budget to individual VHJs, funding channels which lead both to the VHJ general directorates and directly to their subordinate enterprises. At the same time, we must, of course, remember that the total amount of funds going to the VHJ general directorate amounted to 29.9 percent in 1976, 34.7 percent in 1977, and 41.7 percent in 1978 of the funds transferred directly to VHJ enterprises from the national budget and from the FMVS.

This analysis revealed that during the period 1976-1978 VHJ general directorates received funds from the FMVS and the national budget according to the following percentage ratios (see Table 9 below).

Table 9.

(in percent)

	1976	1977	1978
z FMVS	90.8	76.7	98.2
ze státního rozpočtu	9,2	23.3	1.8

Key: (1) from the FMVS (2) from the national budget

These percentage relationships are completely reversed in the case of VHJ enterprises (see Table 10 below).

Table 10.

(in percent)

	1976	1977	1978
z FMVS	2,1	6,8	26,3
ze státního rozpočtu	97,1	93,2	73,7

Key: (1) from the FMVS (2) from the national budget

These figures are a reflection of the current status of trust-type VHJs, i.e., at a time when, as far as financial relations are concerned, the national budget maintains direct ties with VHJ enterprises as state economic organizations and separate direct ties with VHJ general directorates, which are also classified as state economic organizations. These figures also reflect the positive trend represented by the growing influence of the branch ministry in controlling the financial policy (and influencing the financial position) of subordinate VHJs (including both VHJ general directorates and VHJ enterprises).

This positive trend has already been encouraged in a decisive way by the comprehensive experiment in efficiency and quality management, in accordance with which the VHJ has consistently been regarded as a discrete economic entity regardless of its organizational and legal forms. This conclusion is fully substantiated by the findings of our studies.

The underlying principles of the Set of Measures for Improving the Planned Management System of the National Economy After 1980 also call for the building up of economically powerful VHJs that conduct all of their business in accordance with the principles of khozraschet management and also maintain relations with the national budget that are consistent with their status as discrete economic entities.

Conclusion

In light of what has been learned so far from economic theory and practice in the area of economic management it follows that during the years that lie ahead, especially so during the Seventh Five-Year Plan, it will

continue to be necessary to address ourselves to the task of insuring the uniform and comprehensive impact of all economic planning levers geared toward encouraging the fulfillment of qualitative performance indicators related to the capital replacement process.

In this article we have made certain recommendations aimed at improving the management of financial policy at the branch ministry level. We have been discussing for the most part problems associated with the development of VHJ financial resources in relation to their redistribution at the branch ministry and national budget levels. To be sure, this is only one aspect of financial policy. In a future article we would like to discuss the related problems of developing financial resources at the ministerial level and current problems of profit taxes in relation to the financing of capital construction.

FOOTNOTES

1. "Report on the Work of the Party and the Development of Society Since the CPCZ 14th Congress and Other Party Tasks" presented to the CPCZ 15th Congress by Comrade Gustav Husak.

2. Law No 62 (SBIRKA ZAKONU, 26 October 1977) on Revisions in the System of Organizational Levies and Taxes.

3. The following tables were compiled on the basis of figures taken from the statistical reports of Min. Uc. [expansion unknown] 7A-04, VHJ Uc. 6A-04 and Uc. 4A-04.

4. See footnote (b) for Table 1.

5. To some extent this also applies to profit margin subsidies, since to a certain extent these subsidies are intended as compensation for the consequences of branch ministry decisions which might have lessened the profitability of specific subordinate VHJs, but which were necessary in the interest of the ministry as a whole. Moreover, the profits earned by a VHJ also have an impact on its working capital and capital investment requirements.

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VHJ AS BASIC MANAGEMENT LINK EVALUATED

Prague HOSPODARSKE NOVINY in Czech 15 Aug 80 p 3

[Article by Jaroslav Kratochvil, J D: "The VHJ (Economic Production Unit)--Basic Management Link"]

[Text] The gradual transformation of the VHJ into a basic management link is associated with two interconnected processes. In the first place it is the formation of the VHJ as a comprehensively equipped and internally specifically integrated economic unit, and it is also the transformation of external conditions and relations of the VHJ to its politico-economic milieu, such as organizational, socioeconomic, legal relations, etc. Even though the formation of a whole framework of legal forms of the VHJ and the corresponding position of enterprises are important and certainly necessary, it must constantly be emphasized that the legal form alone does not of itself deal with the essence of the transition of the VHJ into a basic management link, because the decisive factors are the actual forms of management and their gradual transformation in the spirit of the principles applied in the current stage of development of productive forces. Connected with this is a great number of problems to be dealt with.

Problems, Opinions, Experiences

So far, neither in theory nor in practice has the position of the socialist enterprise been fully clarified, since it is ceasing to be an enterprise in the (relative) concept of an independent legal entity. Some economists admit that we do not yet have a sufficiently universal and precise designation for the enterprise as an economic category. This gradually evolving new type of enterprise will more and more be characterized by its social integrity, manifesting itself in ever greater involvement with the whole organism of the national economy, and thus not at all in its detachment as an "independently" operating unit. To be sure, problems are arising whose solution goes beyond the bounds of the enterprise. To effectively direct the socioeconomic development of society it will be ever more necessary to solve problems of matter, space and time which considerably surpass the dimensions of institutional systems organized up to now.

VHJ - Enterprise Relations

Although for several years now the process of transition to larger economic production complexes has been proceeding in all the socialist countries, the chief reason for their emergence was the solution of problems of central management, rather than the actual organization of a technical production base. That is also why the majority of various forms of VHJs usually resulted from one-time reorganizations, and mostly on the sectoral principle of homogeneous production. Even that is, to a certain extent, not a very stable basis, because with certain developments in techniques and technology the relevance to the homogeneous sector could change substantially.

I am of the opinion that, in spite of this definite tendency, we should continue to foster, within certain bounds, the concept and position of the enterprise and we should not disregard it, because the enterprise usually has very important relations with local bodies and all its surroundings which cannot always be fully replaced by "new" relations to the economic production complex. At the same time, the management of especially remote VHJs must, even with a societywide approach, deal with certain problems connected with local conditions; although even practical aspects of the management of large units dictate that certain operations will have to be left to the enterprise.

It must also be realized that with the growing number of conditions requiring the formation of their own management systems it is impossible to find specific, well-defined organizational solutions, especially with regard to legal forms. These conditions directly call for even greater diversity of the actual management structures.

Practical experiences of development up to now show that the fixed and customary concept of the management mechanism as a sum total of single bodies responsible for every specialized management function will no longer suffice, and that it will be necessary, even in spite of certain definite advantages of the functional approach, to gradually go over to a goal-oriented program of management. Thus the result will be that the object of management in the VHJ will not be mostly individual enterprises, as is largely the case now, but rather the focus of management will be shifted over to the basic and conceptual problem complex of the entire integrated VHJ. At the same time, however, it is necessary to see that the solution of ever more complicated problems of the economy does not intensify the mutual separation between individual units, and particularly that the management of economic complexes does not split off from the production base and subordinate organizations.

The gradual transition of the VHJ's organization of its management system and mutual relationships into a basic management link will be carried out be degrees so that it will correspond to the necessary changes which can realistically be made in people's thinking, especially that of supervisory workers of the enterprises, because existing organizational structures

(and especially the fading concept of the enterprise as a basic management link of the enterprise sphere) are deeply rooted in the conscience of the people and are also associated with certain prestige prositions, social standing, pay allocations, occupational specialties, etc.

It is not always easy to overcome the steady influence of existing organizational systems one has become accustomed to and persuade working collectives and individuals not only to passively accept the new organizational arrangements, but even to take the initiative in inculcating them into people's thinking. That is why the transition of the VHJ to a basic management link (especially in concern organizations) also calls for timely political-economic and social-psychological preparation, systematic instruction of all workers about the reasons for and goals of the new organizational setup, and the changes in actual forms of management.

It must be admitted that so far the economic sphere has not had an adequate conception of the essence and depth of changes associated with the transition of the VHJ to a basic management link (especially from a trust form to a concern form of VHJ). The essential activity of general management must be directed toward the VHJ as a whole (not, that is, above individual enterprises). The administration of the general management of the "new" type of VHJ will not take over the activities which independent enterprises have performed up to now, but rather will deal with new tasks of a higher order, assuring high levels of efficiency in all work which the individual enterprises would not even have been capable of by themselves. Thus it would also be absolutely wrong to try to contrast the strengthening of the VHJ as a basic management link with the full utilization of the activity and initiative of enterprise collectives and intraenterprise units, because the VHJs and the enterprises must work on qualitatively distinct, though mutually complementary, levels of managerial and organizational work.

We must guard against critical observations indicating that with the standards of certain VHJs their current style of management does not solve material or specific problems, but only shifts them over to other management links, so that the VHJs are becoming places where tasks are written out and assigned administratively, often without any essential differentiation, rather than being really effectively and comprehensively dealt with. However, there should be an objective investigation to find the causes for the subjective shortcomings and inefficient forms of management, whether perhaps they are due to the general system of management or whether the general management of the VHJ has the material, cadre and financial resources to meet its new assignment.

Basic Objective

Let us, therefore, try to identify at least the main principles of the basic requirements and activities which the actual VHJ management as a basic link, must carry out:

--First of all, ensure consistent orientation toward the criterion of social efficiency;

--Goal orientation--that all processes taking place in the VHJ are directed toward the goals which are based on overall developing trends with due consideration for the actual status and potential of the national economy;

--Application of scientific-technical developments as the basic source of efficiency and future development and acceleration of the innovative cycle aimed at ensuring global standards of production and high quality of products and export capability;

--Closer and more purposeful systematic integration with the international division of labor;

--Increased flexibility and adaptibility, which means reacting promptly to changing conditions of world markets and anticipating future changes in advance;

--Fulfilling the integrating function of the VHJ in order to prevent the development of individual areas of activity in an isolated manner without mutual consistency;

--Purposeful and balanced division of authority and responsibility, especially in relations with subordinate enterprises and the conditions created to centralize critical activities (in practice one of the most difficult problems);

--Improved utilization of the human factor and effective motivation, together with the development of informal participation of workers in management;

--Effective and closer association of the handling of problems of social development of the collectives with economic development.

In spite of this clarification of the basic objective of the VHJ as a basic management link (as opposed to its former position as an intermediate management link) the concept of the VHJ as a basic level of management is not yet clearly enough formulated either in theory or in practice. But it can be said that it is that organizational level where the necessary material resources and authority capable of ensuring the development of basic factors of production are concentrated, where economic processes are directed comprehensively, and where objective conditions are developed for finalizing production, even on the level of the VHJ, where socioeconomic indicators of the plan are transformed into technical-economic indicators and composite indicators are transformed into forms of enterprise management, and where supplier-consumer relations are concentrated possibly to their original status.

Therefore, in assessing the overall work of the VHJ we cannot go only on the basis of fulfillment of plan indicators, even though that is an

important political and economic objective, but rather we must consider the criteria of substantial improvement and intensification of conceptual and prognostic activity, the efficacy and comprehensiveness of the management of investment, technical, commercial, financial and personnel policies, greater continuity and flexibility in supplying the national economy and fuller integration of social and economic development. Another important aspect is efficiency of management processes within the VHJ.

Application of Khozraschet Principles

The 15th session of the CPCZ formulated for the general management of the VHJ as a basic management link the specific task of consistently applying the khozraschet principles and a system of norms, costing and budgeting, especially in the area of intensification of intraenterprise management. This, however, did not involve any new requirement because these principles have been included in a number of documents, since the very beginning of the management of socialist industry. But it will not do to simply talk about these questions, especially in general terms. Every VHJ must immediately, according to its specific circumstances, proceed to develop and apply the khozraschet principles as a natural part of current working obligations so that the results will be accessible to every worker.

And it is precisely in the practical application of the khozraschet principles of management at individual organizational levels and in their full utilization that general management has not yet carried out its task, especially in the direct (not only methodical) management of integrated subordinate units. In this connection it appears that, with respect to concern forms of VHJs, the method of handling the concern khozraschet has not yet been fully clarified, especially the relationship between the VHJ khozraschet as a whole and the khozraschet of individual concern enterprises. We can also consider as inadequately settled the important problem of effective stimulation of concern enterprises with respect to results of the entire VHJ as well as the actual fulfillment of planned objectives.

We must also not overlook the mutual connection of forms of management of VHJs and enterprises with the development of organizational structures of the actual technical production base of industry. Even though since 1945 we have gone through several mass reorganizations, it can be said that up to now no profound analysis of the production structure of our entire industry has been made and that in essence they have been based on the sectoral principle. These one-time organizational changes involved the concentration of organizational functions and a greater or lesser centralization of certain management functions which lacked practically any character of concentration of production. That is why even at this point certain no longer desirable chance situations and aberrations persist in the actual organization of the production base and the ensuing organizational relationships (a considerable imbalance even of certain VHJs and especially enterprises, a large number of small enterprises, plants and separate operations).

Whereas economists and theoreticians in nonsocialist countries are forever seeking the best or even "ideal" organization, nothing like that is being attempted by either the theoretical front or in practice in socialist countries. That is to say, here we maintain the necessary dialectical-materialistic approach toward seeking optimal organizational forms and the corresponding styles of management as a matter of continual development and progress connected with the expansion of the material base and productive forces of the socialist community.

Experience so far with the transition of the VHJ to a basic management link indicates, however, that even with the existing legal basis in the form of the concern or sectoral enterprise, it will undoubtedly be quite a long process, depending particularly on the creation of conditions for a basic change in existing forms of management. It also appears necessary to examine more closely and evaluate the relationship between the size of the economic production complex and effective forms of their management from the point of view of exercising practical control, a factor which cannot be underestimated for attaining optimal operational results. This depends on a precise definition of the extent of necessary general or operational activity in order to prevent dilution of the conceptual comprehensive management functions of the VHJ. According to the concept of the VHJ as a basic management link, operational activity should be performed here only -

--if it is required to implement societywide interests;

--if it is necessary to support the integrity of the VHJ system of management;

--if it facilitates more efficient performance of certain (especially joint) activities at the VHJ.

The Influence of Legal Forms

The requirement set forth at the 15th session of the CPCZ that the VHJ become a basic management link undoubtedly corresponds to current trends of organizational development in all socialist countries. It must, however, be stated that this transformation of the VHJ was at first primarily connected with the question of the most suitable legal form of the VHJ for which the sectoral enterprise, and particularly the concern one, was designated. Experience has shown, however, that the essence of the shift of the VHJ to a basic management link depends primarily on a basic change in management forms and a more effective mutual division of authority and responsibility among the ministry, general management and the enterprises according to the various specific conditions of individual sectors.

It was also gradually recognized that with a certain modification of the legal form of the trust (such as that with experimental VHJs) the trust, too, could become, also with a certain change in its management system, a basic management link (particularly with the broad spectrum of the sector

or diverse character of subordinate units). It could be characterized thus--that with constant pressure to raise management standards in order to achieve full efficiency the enterprises should probably reach the level of the former well-managed VHJs, while the VHJ as a basic management link should, from a societywide and comprehensive point of view, go over to a qualitatively higher form of VHJ management as a whole.

The intent of this article was to point out the urgency of solving a great number of problems concerning the position of the VHJ. In this connection the provisions of the Set of Measures for Improving the Planned Management System of the National Economy After 1980 are welcome suggestions since they incisively clarified the position of the VHJ as a basic management link and the corresponding position of the enterprises. At the same time this problem complex is considered also from a necessarily different objective and time interval.

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SOCIOECONOMIC COMPONENTS, CONTRADICTIONS OF STRUCTURAL CHANGE VIEWED

Budapest KOZGAZDASAGI SZEMLE in Hungarian No 7-8, Jul-Aug 80 pp 797-813

[Article by Jozsef Bognar, director of Research Institute for World Economy: "Socioeconomic Components and Contradictions of Our Structural Change"]

[Text] The 12th congress of the MSZMP raised to the rank of national action that economic policy conception which matured in the course of past years concerning a structural reordering of the Hungarian economy. Its maturation was made possible by a careful analysis of the external and internal situation and of the economic relationships which represent possibilities for and limitations on rational economic action, and by the conclusions and debates which followed this analysis. The credibility of some of the more radical conclusions was reaffirmed by those negative results and experiences which the economic leadership achieved or acquired by their habitual or symptomatic treatment of the new problem world which has developed since the world economic change of epoch. The signs are that this shock effect was needed in order for the economic leadership to be able to break with a few conceptions and methods, which have been overtaken by time, which in the preceding decade still represented a source of many economic achievements and successes.

Naturally this economic conception has not yet been transformed into a program encompassing an action system and mutual relationships and effects which would solve (from above!) all of our developmental dilemmas. (In any case it is probable that it is not possible today to prepare a medium-range program which would solve every dilemma "from above." But even if it were possible it would not be rational because on the basis of uncertain hypotheses it would tie up too much economic energy and thus would make difficult an adaptation to the changes in a period in which development has accelerated and the effects on us of events cannot yet be known clearly because their effects have multiplied.) The resolutions of the congress, however, indicate those basic principles and behaviors (individual, enterprise and economic leadership behaviors) which constitute preconditions for restoring the balance and for a more advantageous adaptation into the world economy. The resolutions have stressed certain

fundamental goals and preferences to which other action--in so far as economic conditions make it possible--must be adjusted. The congress adopted as useful and progressive in regard to the future those methods and components of economic thinking and analysis--supplementing or replacing earlier ones--which constitute the value judgments needed for formulating the conception. Finally, it established and emphasized that the rational action system included in the conception--which arose from an objective analysis of real economic relationships--represents even theoretically a further development in the self-development of the socialist society and economy (appearing in the form of concrete relationships).

It is well known that the development of a new economic policy conception was made unavoidable by a number of developments and requirements which appeared simultaneously and involved both similar and contradictory effects. I would like to stress three of these centers of effect or motivating forces.

Concerning the Intensive Type of Economic Development

A switch to an intensive type of economic development has become necessary and even unavoidable. Such a switch can be initiated even at a time when the extensive type still functions relatively satisfactorily but when a careful and profound scientific analysis indicates that we have already passed the peak. From the economic viewpoint this moment is the most favorable for the gradual introduction of changes but difficulties are caused by the fact that economic policy public opinion is not yet convinced of the unavoidability of the change and so resists it or holds it back. The switch could have had this character here if we could have grown into the present "reform epoch" by an organic and gradual expansion of the frameworks of the mechanism reform.

In the present situation, however, neglecting the switch would lead to economic collapse because due to the prolongation of the extensive growth type and in the course of it there have arisen balance deficiencies which cannot be liquidated in this form of growth, indeed they are created anew in an expanded form. The intensive growth type, however, has different driving forces and so the movement system of the society and of the economy must be ororganized in such a way as to permit the implementation of these driving forces. Of these driving forces we should mention needs satisfaction requirements (instead of a shortage economy), the technical development, rationalization and innovation tied up with structural change and the external economy.

Experience proves persuasively that needs satisfaction is not only a quantitative and qualitative problem but also an organizational problem of an economic policy nature because the vertical profile of our producing enterprises is unjustifiably narrow and to a large extent operations and activities suitable for offering services are missing from the economy. Such a situation could develop because the economic organizations here were built

up "downward" exclusively from production and never "upward" from needs (the market and sales). Similarly, the technical development tied up with structural change and a swift product change demands not only a transformation of the "product structure" but also presupposes substantial social policy changes.

It must be emphasized in connection with external economic factors that they play a growth encouraging role in every economy now, from the side of both import and export. The Hungarian economy was not sufficiently prepared for this organizationally. Since the world economic change of epoch, which extraordinarily strengthened the system of mutual dependencies and determinations among economies, the system of interdependence, we will have to develop in our economy capabilities and properties in regard to our link to the world economy which only "competition economies" have had thus far in the development of economic history.

(The reference to "competition economies" means that, as in the past, socialist economic science rejects that interpretation of competition according to which it is an automatism of the economic cycle which selects among economic units in the interest of the common good. Since the second half of the 19th century such an interpretation of competition or of a competition economy has changed even in capitalist economies because counterpoles to free competition [cooperatives, associations, trade unions, etc.] and organizations striving to put an end to competition have come into being.)

There can be no doubt that with the development of the socialist economy in past decades the idea of the unavoidability and even positive nature of competition has won ground in connection with supplying the populace with consumer goods.

The increasing significance of external economic factors brings up the necessity of providing to our economic undertakings on the world market those conditions and supports on the basis of which they can compete successfully with those undertakings behind which stand the flexible mechanisms of the capitalist economy.

Concerning the Effects of the World Economic Change of Epoch

The world economic change of epoch represents and will represent in the future also the second center of effect. By world economic change of epoch I mean the totality of those epochal, fundamental economic and non-economic (demographic, social, political, scientific, international, etc.) changes which will decisively influence the living conditions and economic circumstances of mankind in the decades ahead. Of these fundamental and epochal (long-range) changes I am thinking primarily of such things as the new relationship between man and nature (a symbiosis on the basis of modern science and technology), the limits and uneven distribution of natural resources in an interdependent and very sensitive world, the problems of feeding the world (in the form of an approaching crisis), the danger of technology (for the first time mankind has a technology with which it could

destroy the conditions for its own existence), the arms race which takes the form of "mutual terror", the backwardness of international political and economic relationships as compared to the general interdependence and problems of a world scale, etc. We can say without exaggeration that even in the decade just behind us mankind entered the spoch of extreme alternatives.

These enormous changes are not only economic ones; they extend to the entire area of human-social and international relations. This will mean a new scientific challenge and it will gradually mature new modes of thinking. This is absolutely necessary because if we relied on our old methods and our old knowledge we would be incapable of adequately understanding the new relationships.

Naturally certain components and manifesting forms of these enormous, epochal and fundamental changes already appear in present economic relationships. Let us only think of the price explosion (price revolution) and of inflation as persistent phenomena of the economies appearing in a new form, of the serious balance deficits, of the decrease in the rate of growth, of the shortages appearing in resources, of the increasingly anarchic phenomena of the international financial system, of such threats to international economic contacts as the American embargo and similar things.

The long-range and fundamental effects of the world economic change of epoch also mean for us that in the course of conversion to the intensive development type we can develop only goals (or goal systems) which are in harmony with the requirement system of the change of epoch and we can select only those methods and forms of action aimed at attaining them which are not antagonistic to this powerful requirement system.

The Problematics of the Balance Deficit

I want to mention the economic balance deficit as the third of the centers of effect. Several factors have contributed to the development of the balance deficit, including:

--the circumstance that in the course of the economic cycle we generate a greater demand than we produce the conditions (assets) for satisfying it;

--the overestimation of the ability of the state budget to bear the burden;

--the swift growth of import needs in the course of switching to the intensive development type;

--the development of the international terms of trade in a way unfavorable for us; and

--the lag behind what is required of capacity suitable for economical export production.

There is a unique action system to put an end to the balance deficit. In the beginning the factors of the necessary action are more or less of a limiting character because putting an end to the deeper causes generating the balance deficit requires a longer time and coordinated action. The unavoidable limitations must be applied with great circumspection and after careful consideration lest our temporary regulations hinder the development of those energies, capabilities and capacities with the aid of which the balance could be restored over the longer run.

Weighing, on the one hand, the extraordinary importance of the internal and external interests attaching to a more perfect functioning of our own society and economy and, on the other hand, the elemental strength, intensity and persistence of the currents flowing from the great centers of effect mentioned, it is obvious that our tasks in connection with a structural reordering of the Hungarian economy are extraordinarily great and complex.

What is involved is not a simple switch-over or the elimination of merely temporary problems; rather, what is involved is a radical transformation of the functional, action and guidance system of the Hungarian economy so that it should be capable of a flexible accommodation to the swift changes of uncertain sign which can be expected later. It is obvious, however, that transforming the functional, action and guidance system of the socialist economy to adapt to the new requirements is not only an economic question but also a social, political, cultural, scientific and ideological (systematic) problem.

The Present Phase of Reorientation as Compared to the 1968 Reform

It could be especially instructive to compare the breadth, depth and substantive problems of the social actions necessary to realize the present economic policy conception to the factors set in motion in the course of the 1968 reform. In the economic history sense our economic reform of 1968 was of outstanding significance in the history of socialist management.

This reform gave full recognition to the significance of economic relationships as opposed to a conception of the economy which was projected from a vision (a vision of the future). (Let me note only in parentheses that it thus gave back the true object of economic science--an analysis of real economic relationships and interdependencies. It is thanks to this that since 1968 Hungarian economic science has achieved even internationally recognized results, has developed new methods and encouraged the development of schools.) It was also an important starting point that it replaced the hierarchic system of individual interests' group interests and general social interests with a conception of interests in which these types presupposed and complemented one another thus making it possible, under appropriate economic conditions, for individual and group interests to become driving forces for the realization of the common interest. There was also significant effort to put an end to the shortage economy and to satisfy needs more fully by means of competition and material interest. Special

mention must be made of that sphere of measures which the reform took in the interest of economic undertakings for only within this framework did the enterprises become economic units instead of branch departments of the ministry.

One could continue at length a list of the achievements of the 1968 reform, but this is not the subject of this study. There can be no doubt, however, that the 1968 reform deliberately concentrated only on the problems of the economic mechanism (the guidance system) while it affected questions of economic policy or the institutional system only indirectly. There were decisive political reasons for this. Later, many criticized the "one-sidedness" of the reform, pointing out that it would have been more correct to introduce a more complete reform (embracing economic policy and the institutional system as well). I do not want to start a debate with the critics; but the idea that the introduction of a more complete reform would have been more correct does not mean that in the situation at that time the introduction of such a reform would have been possible or even useful. (Let us only think that after 1968 the scientific efforts and preparations taking place in the interest of economic reform (froze solid for a few years everywhere!)

What is now essential from the viewpoint of a comparison is that the action zone and depth of the present economic policy (strategic) conception will be substantially greater than that of the 1968 reform and the changes to be expected will extend to economic policy (including foreign economic policy) and to the institutional system too. Even by itself entering the intensive epoch means economic policy changes but the requirements of the world economic change of epoch also strengthen the quantity, intensity and quality of the necessary economic policy changes. Because of the external economic character of the new economic policy conception--which is strengthened by the new circumstances (for example, the increased interdependence) defined by the world economic change of epoch--the abilities, foresight, flexibility, decision and reaction speed, etc. of our institutional system will become part of the economic competition taking place on the world market. I will return to this question in this study; in this place it is enough to emphasize that under such circumstances a reform of the institutional system can no longer be postponed.

I would like to point out one more essential difference in connection with a comparison of the 1968 economic reform and the present economic policy conception (which has been accepted in its basic principles). The "degree of freedom" of the 1968 reform was much greater because we had to contend with fewer constraining factors. The economy was relatively balanced--although the balance was at a substantially lower level--we did not yet have any significant foreign debt, our foreign economic dependence was smaller, our supply of energy and raw materials seemed assured, the world economy still enjoyed its "golden age." At present, however, we can rationally choose only the economic policy conception formulated in the guiding principles; our alternatives are to be found within this conception.

The Transformation of the Basic Principles and the Guiding Principles into Social Action

The chief task in guiding a socialist society and economy is to transform the various basic principles, guiding principles and aspirations, taking into consideration the interest relationships and structures and with an awareness of the real social-economic relationships and the trends to be expected in the future, into an interdependent system of social movements which will finally lead to attaining the desired goals.

But in the course of outlining the social-economic movements we must always reckon with the fact that the relationships socially created and the relationships economically desirable do not coincide. The reverse is true also--it can be imagined that a different sort of economic relationships and situations might be more desirable from social, political, security, cultural or ideological points of view.

When working out action programs, however, a full awareness of the real social-economic relationships is needed and these relationships must be analyzed in their dynamics. In every sort of political system the social-economic relationships have more flexible components capable of greater changes and they also have more static, more conservative and more rigid elements. Naturally, these factors deriving from the real relationships must be taken into consideration when working out action programs.

The question arises: Is contemporary socialist economic science capable of transforming the various scientifically founded basic principles and aspirations into a system of social movements while taking into consideration the interest relationships and structures?

The best abilities and methods of economic science find expression in a system of adequate information about economic reality, relationships and interdependencies. Naturally, the relationships, circumstances and situations themselves change too and thus their nature, character, effect and linkage systems are transformed also. Experiences become more numerous, methods of examination are refined (this refinement takes place in the internal workshops of science) and there are changes in the world surrounding the economy. But these changes do not change the fact that the primary goal of economic science was and is a recognition of economic relationships in the dynamic sense.

This knowledge--as in the case of other branches of science--is abstract (to put it more precisely, it has the character of being abstractable); that is, it starts from the hypothesis that only economic factors influence economic relationships and processes.

(It is well known that the starting point in political economics--in contrast to this conception--presupposes a basic analysis of political, social, cultural, etc. factors too. But the practice is different. In recent decades there has hardly been a work in economic science which examined the

economic situation in conjunction with politics, the capabilities of the social structures which have developed or the concept of public opinion in a dynamic way, in the midst of action.)

From the viewpoint of action this hypothesis is of an abstractable character, but it has great significance; for it means that economic relationships can be changed only with the aid of methods which are in harmony with these relationships. This statement is of special significance in the case of political systems known for their desire for action, their optimism and their strong value systems because they are often inclined toward a "transformation" of the economic relationships dynamically interpreted by means of administrative (state administrative) methods which usually leads to the development of serious economic situations and the forced actions which follow therefrom.

This is not a new phenomenon historically because the development of the modern economy was preceded by centuries in which there were not yet any independent economic relationships. The first economic theories (cameralism and mercantilism) felt that intervention in economic life by the state using non-economic (administrative-power-public administration) methods was necessary and rational. Classical economic science was born in the intellectual struggle against these ideas; classical economics attributed self-regulating forces to the internal movement relationships of the economy which led to the realization of the common good.

According to our conception, however, intervention and guidance are needed in addition to an adequate knowledge of the economic relationships. In the event of intervention and guidance, however, an adequate knowledge of the economic relationships is not sufficient because economic and non-economic factors are mixed together in the real conomic processes and phenomena. In such a case the economic phenomena do not appear in their original forms; they have other properties, effects and abilities to receive effects. For this reason contemporary economic science, and even more so the economic science of the future, must move on to multi-disciplinary methods, for without these guidance and influence are not possible.

The activity groups (state, social, security, cultural and ideological) mixed with the economic phenomenon world have their own conceptions, value relationships and (within the structure) institutional centers. These conceptions, values and (institutional) interest relationships can further or hold back or reverse the realization of economic policy conceptions. Thus, the approach to economic problems on an interdisciplinary basis must give an answer to the question of whether the movements and behaviors characterizing the institutions and activities most interdependent with the economic conception will further or hold back the realization of the economic policy goals.

To speak more precisely and more practically, is it possible and in what way is it possible to transform the movement of the various activities, institutions and value systems so that they will aid and further one another, solve similar tasks in a more co-ordinated and more cooperative manner

(for example, the problem of intensive department means a new situation and new requirements not only for the economy), harmonize in time and in content their mutually supporting efforts and mitigate the possible conflicts? These requirements prove that it is not enough for economic science to become multi-disciplinary; it is also necessary for the other branches of science (legal and state science, sociology, defense policy, educational policy, ideology and science policy) to find linkage points leading to the economy. They must strive with common and coordinated research, a harmonization of conceptions, debates and agreements to concentrate the actions of the various sciences and institutions on the attainment of the chief social goal or goal system.

In what follows I would like to illustrate with a few examples what sort of clashes and conflicts could be caused by the economic policy conception adopted in the resolution of the 12th congress and what transformations are made necessary in order to transform the basic principles accepted into social movements. I would like to emphasize, however, that the clashes and conflicts are potential ones, that is, they can be mitigated in the event of rational action by those interested. In our structure conflicts among conceptions are generally "hidden" because those participating in the action can follow the "customary" (previous) logic and reflexes of their institutional system without anyone objecting or taking exception to it. But conflict does occur--by the nature of the matter--if one of the actors proceeds in a customary but obsolete way.

Clashes and Conflicts in the Course of the Transformation

It is difficult to "discover" conflicts because most people feel that customary action is conflict-free a priori and in general, although such a judgment depends on the situation and the time.

Clash Between Ideology and Economic Policy Aspirations

At the time of the socialist transformation ideology represented a form of the political struggle against the internal and external enemies. After the building up of the socialist society and the development of its structure ideology can become a form for recognizing and analyzing reality which encourages society to recognize new problems and solve them in a modern way. This possibility has not been realized here, for which there are various reasons--connected with the peculiarities of our development. Since the ideologists and other theoretical experts had not developed a picture of the present on the basis of an analysis of concrete relationships but rather by projecting on the present various elements of a picture of the future it was obvious that the renewal of socialist economic science (after 1953) had to take place without them, indeed with their silent or vociferous resistance. In what followed an antagonism and mutual distrust arose between the economists striving for a concrete analysis of economic relationships and the ideologists who were building a present out of a picture of the future; it followed that some of the theoretical experts were

inclined to recognize as ideologically justified only the changes which had already taken place. The situation was made worse by the fact that the non-economists (political, security, cultural and council experts) got their economics culture from this stratum.

The antagonism which has arisen between the economists starting from an analysis of economic relationships and the cultivators of theory largely frustrated or made possible only at the cost of much loss of time the introduction of economic reforms which were due. It is obvious that in a "competition economy" we cannot permit ourselves the loss of time which would result if a reform could be introduced only when the conservative (rigid) solutions have precipitated a shock effect by their partial failures. I would like to emphasize that we are anxious not only and not even primarily for the reforms, because according to experience they must be realized in any case as soon as the solutions opposed to the economic relationships fail, at least in the form of a crisis.

It is primarily the socialist economy we are concerned about lest, as a result of clashes within its structure, much time is lost in an epoch when competition (the critical situation) is again putting the national economies to the test and when development has so accelerated that the loss of a few years could be fatal.

Clash with the World Economy

In what follows I want to deal primarily with those clashes and problems inside and outside of the economy which are connected with the inclusion of the Hungarian economy--and naturally those of the other European socialist (CEMA) countries--in the world economy from the export side. (In earlier articles I have already noted that this inclusion from the import side already took place in the 1960's.)

Fitting into the world economy from the export side is a difficult economic and social problem in itself because it makes necessary the discovery of new energies and driving forces and the development of new capabilities. Today, however, this fitting in must be realized in the complex, contradictory and uncertain condition system of the world economic change of epoch.

Adapting to the new world economic conditions is a complex task even for those technically and scientifically developed countries with great material resources and reserves which are not only included in but even influence the world economy.

We must calculate that due to the brake on the dynamics of economic growth the growth in foreign trade and in imports will slow down around the world. As a result the competition for markets will sharpen to an extraordinary degree. Two types of economic strategy danger threaten us, the Hungarian economy, in this competition. The first danger consists of the

fact that the technical development of the capitalist countries and the transformation of their scale of needs will be faster than the improvement in the modernness of our export structure and export products. This would mean that the profitability and economicalness of our export would stagnate or decline. This situation, naturally, would mean a deterioration in the terms of trade since the prices of fuels and raw materials will increase further--with cyclic variations and temporary price reductions arising from over-speculation--and the most developed technology will be increasingly expensive because the producers of it will be striving to make up the losses they suffer in the import of energy and raw materials. The second danger consists of the fact that the developing countries are making great strides on the world market--especially in the export of finished products. This process is justified economically even if it sometimes takes extreme forms. But it is possible (or more precisely, it can be imagined) that this conquest will take place--in part--at the cost of the socialist countries. The objective conditions for this are given because the affected part of the population of the developing countries making advances in the export of industrial articles is learning rapidly, they have or can easily obtain the raw materials, costs are lower (due to the low level of wages), and the developing countries enjoy many preferences on the markets of the developed capitalist countries.

Naturally, in the event of a clever and active trade policy the potential competitors could become cooperative partners.

But it is questionable whether we can find the organizational and cooperation forms which would be sufficiently advantageous for both sides (to be more precise, more advantageous than other possible solutions) and offer sufficient protection against the consequences of temporary political tensions and cyclic changes.

Concerning the External and Internal Components of World Market Competition

World market competition extends to very many types of interdependency, including:

--recognizing (forecasting) in time the needs, situations and possibilities and decisions which will transform the recognition into social-economic action;

--the technical level, quality, prices, variety, the primary materials used, the abilities and experience of the labor force, accommodation to the special needs of the customer, delivery time limits, reliability (reputation), follow-up supply, service and other services;

--marketing (sales) innovations. (I think that it is not necessary to prove that innovation, the modern and the backward, are possible in marketing methods too and that marketing methods have a strong effect back on production.)

If world market competition extends to so many types of factors and interdependencies and if our economic development depends to such a significant degree on its development then it is obvious that the real competition takes place not only in regard to goods and services, prices and quality, modernness and accommodation to the needs of the user (customer) but also between those national economies the dynamic capabilities of which are reflected by the aforementioned goods and services. Under socialist circumstances this interdependency is open and direct; in the case of capitalist countries it is more transposed and less direct. (In this study I do not want to go into an analysis of the differences and deviations in connection with this because they do not affect the message and conclusions of this study.)

Speaking of national economies I am not thinking in this connection primarily of the material goods created thus far and accumulating in the course of development but rather of those dynamic capabilities the level of which is reflected by the goods and services appearing on the world market. I mentioned dynamic capabilities because great significance must be attributed to the tasks set by situations and requirements because it is obvious that there must be a harmony between capabilities and tasks. The dynamic capabilities of national economies derive from a broad background; they include those components, interdependencies and mutual effects of social, political, cultural and ideological capabilities which are connected to the economy.

In addition to the significance of interdependencies and mutual effects one must also emphasize that naturally the capabilities mentioned have functions, situations and effects which are independent of the economy too, and vice versa; components which are not "purely" economic play a substantial role in the development of the capabilities of national economies. But the interdependencies and mutual effects are not limited to those cases where the capabilities mentioned (social, political, cultural and ideological) are put into motion in connection with economic questions; they also exist (in an indirect form) at times and in situations where these capabilities are being expressed within the framework of their own immediate functions. It is also obvious that the goals, tools and structures created to take care of the immediate functions also have an effect on the social fitting in of the economy. Naturally social activity is a substantially broader and more complex concept that the economy because a society also has non-economic functions, movement systems and aspirations. But it is obvious that the basic principles and structures, or the concrete movements thereof, adopted by society in the form of the political system, have, in the interdependencies and mutual effects of social activities, a strong influence on the place and role of the economy in society. The education and training system has a great effect on the abilities and preparedness of the labor force; the guidance and decision system defines the zones and frameworks for economic movements; the order and development of scientific research influence the innovation capabilities of the economy. It is obvious that the level of development and the zones of the information systems influence the ability of the economy to survey the expected development of world economic processes.

The foreign policy movement scope of a state and its place within the international political system substantially influence the foreign economic possibilities of each national state.

These references to interdependencies and mutual effects--far from complete--also prove the correctness of the proposition that national economies participate in world market competition not only on the basis of economic capabilities and processes in the stricter sense. Via the economy or via the effects (mutual effects) on the economy the competition is participated in by all those social, political, cultural and ideological activities (factors) which set or influence the frameworks, zones and conditions of the economic processes. This proposition should be supplemented by noting that different economic power relationships and developmental levels stand behind the competitors appearing on the world market. It is obvious that a small country with relatively limited economic strength--having a small share of the market--is not able to influence world market conditions or supply-demand relationships, is not able to acquire new markets or offer to its customers the advantageous credits needed to force out competitors. From the strictly economic viewpoint undertakings or economies at a middle technical level have a disadvantage to start with as compared to their competitors with greater economic and technological power. They must make up for these disadvantages in those spheres and activities which are in large part not strictly economic. These include greater flexibility, which depends on the action zones guaranteed to the economy; the ability to make speedy deliveries, for which suitable free capacity and swift decisions are needed; better preparedness and capabilities of the labor force, which depend on the education system; better innovation capabilities, which depends on the information flow of society. On the basis of what has been said it is obvious that in strengthening the competitiveness of the Hungarian economy greater significance attaches to the non-economic components of competition than is the case for countries and undertakings which are economically stronger.

Factors Endangering Our Competiveness

In what follows I would like to speak about a few components of the functioning of our economy and of the social condition system defining it which especially endanger our competitiveness in the world economic or world market sense.

a. As is well known, our economic organizations were formed in a period when we did not yet have sufficient experience, when we did not yet know the nature of socialist economic relationships and when, as a result, the projection of the picture of the future still played a crucial role in the development of the organizational forms. The projection of the picture of the future was accompanied by an underestimation of commodity, money and market relationships and by a schematic interpretation of the role of production. As a result the economic organizations which were created were centered on production; they did not recognize needs, the market, the

marketing possibilities as the starting point for economic organization; they were organized horizontally (and not vertically). In addition, there has been a revolution in the theory and practice of economic organization in recent decades which, naturally, was only accelerated by computer technology.

Thus one of the crucial conditions for maintaining or improving our competitiveness is the development of organizational forms which are in harmony with modern organizational principles, technology and marketing methods.

b. We excessively tie down production capacity at the beginning of the (medium or short-range) economic periods. This phenomenon is interdependent in part with the shortage economy psychosis and in part with a schematic (false) interpretation of planning and economic security. Shortages lead to the logical seeming conclusion that all capacity must be used to a maximum in order to overcome them. But this argument would stand up only if capacity and needs coincided. But in our case a significant part of the shortages can be attributed to the fact that we do not have economic organization units and forms suitable for satisfying the broad range of demands on the service and commodity market. The full burdening of production capacity makes the economy inflexible and insensitive to changes. In addition, there is an attempt to more completely burden capacity not only in regard to plants producing finished products (assembly plants) but also in the entire vertical structure producing semi-finished goods, subassemblies and parts.

It is obvious that foreign economic organizations backed by such an inflexible production background cannot be capable of flexibly satisfying world market demand (adjusting to the competition in delivery times and other respects).

c. As a result of the state guidance of the economy our decision making system is slow, through-put times are extraordinarily long, the decisions are made at a very high level far from the real economic processes and there is much parallelism and duplication in them, which washes away the responsibility not only of the individuals participating in the decisions but also of the institutions. After the beginning of the plan period the organs making the decisions do not have at their disposal either real material assets (credits and capacity) nor manpower. According to their subject the decisions are economic ones but according to their motives they are not because the organizations making the decisions are not acting under the influence of economic relationships; they do not have the interest, they cannot make a profit, they do not undertake risk, and at most they have only a moral interest in the outcome. It is obvious that such a decision making system does not aid but rather holds back the work of those economic undertakings which must participate in the world market competition. For this reason the decision making system must be re-examined--keeping in mind the economic requirements and conditions.

d. In the past the political-ideological requirements and the expectations of public opinion encompassing and influencing the economy did not always ensure to the economy the movement scope needed for rational action. In the course of our economic development thus far the rational action (naturally in the dynamic sense) based on economic relationships was not always in harmony with the various political-ideological requirements and social expectations. These requirements and expectations derived from a projection of the future and not from an analysis of the economic relationships and possibilities. These requirements and expectations represented limitations, prohibitions and forced situations for economic action. Thus, in the course of development, there often occurred steps which were hurried or which went beyond the real possibilities--from the economic viewpoint--and these produced deficits, balance problems and "lost profit" (profits which were missed).

(Most recently this has happened primarily when cautious economic leaders, fearful of a temporarily or locally unfavorable political judgment, postponed taking steps which could have led to considerable profit.)

From the nature of things there are there will be in the future "politically sensitive zones" for economic action. But it would be a serious mistake to think that in the event of a clash or apparent clash of political and economic interests the economy must automatically give way and make concessions--under the consolidated social relationships. In a consolidated society political aspirations can be successful only if they are economically well founded and supported. On the other hand, in the event of balance deficiencies and the inadequate functioning of the economy the needs of the populace and of the economic cycle cannot be satisfied and sooner or later this will lead to political complications.

In our day the opinions and ways of thinking about the relationship of politics and the economy are more realistic but for this very reason we must remember that there will be politically sensitive zones for economic action in the future (in the decades ahead) so it seems proper to predict and clarify these problems and situations--with the aid of appropriate scientific research.

Concerning A Few Non-Economic Components of Economic Development

In conclusion I would like to talk about a few non-economic factors of economic development. If our relationship to the economy is to come closer to what is desired there is need for a rethinking of the possibilities and limitations hiding in the nature and movement system of the non-economic factors too.

There is an especially burning need for such an approach today when economic development has become so complex and contradictory, when epochal changes are taking place in the world economy and when the dependence of our development on that of other economies has reached a magnitude never before known.

Among these factors I would like first to touch on questions interdependent with the state guidance of the economy.

The abolition of the direct plan directive system represented a gratifying turn in the relationship of economy and law; from the nature of things this system had placed the coercive elements of the law in the foreground. Since then we have found that the more developed (and more complex) relationships which have been created have given room for a more progressive interpretation and functioning of the law. (Naturally, I am thinking of legal questions interdependent with the economy because this is interdependent with what I have to say.) But to a significant extent the guidance of the enterprises is realized amidst state administrative forms--via regulations. It is a peculiarity of the situation that we--unlike other socialist countries--do not have middle level guiding organs. At first approach these middle level guiding organs appear desirable economically because in this way the regulation of economic processes would be realized via economic organs. From the side of law this situation is called "decentralization." But if we go more deeply into this interdependency we see that the middle level guiding organs embody a very great, bureaucratic--monopolistic--economic power and not only do they endanger enterprise independence but also they prove slow and clumsy in satisfying needs, in adapting to changing conditions, in flexibility and in the speed of their decisions. In addition, they are not built "upward" from the economy but rather are built "downward" from state administration.

There can be no doubt, however, that state guidance of an accelerated economic development and model oriented toward the world market raises many objective problems. In the present situation, and in the decades ahead, we can only start from the following:

a. the economy today is a source not only of possibilities but also of internal and external dangers;

b. in this situation not a single essential question can be solved with the old approach; and

c. the guidance, leadership and decision making system must adapt to the nature and situation of the economy and to the requirements of competiveness.

Starting from these basic principles it seems justified to re-examine the relationship of state guidance and the economy, making use of joint scientific efforts and interdisciplinary methods. The question arises: How can one, indeed can one at all separate statehood, in the political and economic sense, so that the decision making and guidance system will accommodate to the nature of the economy while maintaining the unity of the state or statehood?

The Tasks of Education and Training From the Economic Viewpoint

It is well known that in certain areas and tasks labor and capital can rationally replace one another. Foreign studies prove that there is a weak

correlation between productive ability and intelligence. It is obvious that in countries poor in capital and raw materials a highly qualified labor force (that is, one with the best capabilities) can have an especially great role in structural change, in technical development and in adapting to the international economic circumstances. It must also be noted that building up mechanized systems for certain intellectual work, operating them according to needs and possibilities, understanding complex world economic interdependencies and surveying the interdependencies and mutual effects among various activities require more not only quantitatively but also qualitatively.

These requirements suggest that it would be justified to review in a comprehensive way our education and training system from the economic viewpoint (that is, from the side of social needs).

The social-economic role of education can be formulated in different ways. There are those who stress that the diploma (the training) is proof of having acquired professional knowledge and gives one title (the right) to filling higher level positions. Others--this is a rare formulation in socialist countries--regard education and training as a selection (filtering) tool even if the selection is not tied to excessively high or firm requirements. I feel that the most modern formulation, the one most useful from the viewpoint of society, is that the chief task of education is to develop those abilities and talents which will make it possible for the members of society to be able to act and live rationally with the accelerated development amidst the increasingly complex political-economic relationships. The development of abilities and talents represents the only humane and rational possibility for a highly trained labor force to renew itself and others in thinking and behavior through four decades (the time served after winning a diploma) amidst the conditions of accelerated development, the swift obsolescence of information, the increasing social mobility and the change of generations which is accompanied by significant tensions. This also means that it is not useful to choose a career too early (at the age of 14 years) and that we must build within the school system channels which link one system to another.

Special care must be given to the free unfolding of abilities. The socialist society and economy will need more and more creative talents who think independently, and understand the relationships surrounding them in order to overcome their historically inherited backwardness and adapt in a modern way to the changes of history, world politics and the world economy.

Naturally the education of talent cannot be the exclusive viewpoint in a socialist society and education system. In addition to ensuring equal opportunity care must be taken--for humanitarian and necessary reasons, in accordance with the nature of the system--to protect and aid the weaker. An atmosphere made more creative by those with talent can help even the mediocre to rise to a higher level.

In any case, from the viewpoint of the economy it must be emphasized that it is not possible to stand one's ground in the economic competition without creative, enterprising experts ready to take risks and thinking in a combinative manner!

A New Place for Science in the Social Structure

The role of science must be conceived of in a new way in a system of new economic and social structures and needs too. No longer can the taks of science be limited to the mere development of knowledge, explaining and interpreting the situations which have developed or proving the coherence of various theories. Its chief task is the preparation of action systems serving the interests of society. There will be much greater need to carry out this task than there was earlier when sensible routine actions could still be useful. Now we stand before an age in which we must approach the phenomena and interdependencies which have developed in a creative spirit because they differ from former ones in their components and effects. Cooperation in the preparation of action systems--as I have already said in my comments on economic science--will require the development of interdisciplinary methods, not only among the several branches of the social sciences but also between the social sciences and the natural sciences. In the solution of social-economic problems one must always consider the entire range and effects of problems extending from the symbiosis with nature through the geological location of raw materials to the increasing application of technology. In addition, the utilization of the achievements of natural science and technology raises very many social-economic problems which appear not only in the industrial branches (economic branches) cooperating in their application but also in problems interdependent with the fundamental operational conditions and order of value of society and the economy.

Taking into consideration that we must maintain ourselves in the world economic and world market competition and the fact that the conditions for so maintaining ourselves depend primarily on science, we come to the conclusion that in the decades ahead science must play an orienting, renewing and creative role.

It must know, directly and indirectly, the needs of society and it must help in planning the actions directed at improving the situation. It must also be noted that thousands and tens of thousands take part in action; as a result of this we must build up new channels for transmitting information lest a gap arise between science and public opinion which cannot be permitted in a democratic society.

It must also be noted that the propositions and conclusions of the social sciences serve the interests of all society but often, even in a socialist society, they clash with developed or even rigid structures, well established particular interest relationships, which are protected by a combination of power and ideological methods. This circumstance always

represented a disadvantage to the cultivators of the social sciences whereas everyone (including the power and the structures) regarded the discoveries of natural science as useful--since the industrial revolution. (In part this was interdependent with the fact that they did not yet recognize the social effects of the natural science-technical discoveries, or felt them to be distant in time.)

So everything must be done in the interest of the freedom of social science research because otherwise we may be 5-10 years late with the introduction of every new factor and this cannot be permitted under present international and economic circumstances.

Society and the political leadership must see clearly what can be expected from science. The dialectic of social-economic development proves that there is no "problem-free" society. The solution of every mature problem is accompanied by the appearance of new problems. The greater our knowledge, the more interdependencies we recognize; so action becomes more complicated. Increasing knowledge and development are accompanied by increasing uncertainty; progress has dangers and risks. This very complex situation, however, requires greater responsibility and cooperation from science.

So realizing the economic policy basic and guiding principles outlined by the 12th congress will require great and coordinated efforts from scientific research, from the economy and from the institutions which influence the situation and movement system of the economy. We are coming to face the problematics of a mature socialist society which wants to achieve a higher degree of development, taking into consideration the requirements of world economic competition. But solving the complex problems and interdependencies of a mature socialist society requires not only and not even primarily enthusiasm and optimism; rather it requires understanding, expertise, a comprehensive knowledge of relationships and value systems, a many-sided overview of international economic interdependencies, creativity, an enterprising spirit and similar things.

But the economic action program in the process of formation is sober and realistic in the sense that it is clear about the possibilities and the limitations on action. There are no unlimited possibilities even in a socialist society, although it was believed that there were in that romantic age which led into terror. The possibilities in the economy are never unlimited; if they were there would be no need for management. Goals must be set in the interest of development (although even these limit one another) and the goals must be compared with the means available, which can never be limitless in this finite world. We do not have to be "chagrined" because of the limits--whether they be the limits of the economy or the limits of the political power--because without limits there is no rational action. I believe that the present stage of self-awareness, the maturity of the socialist society, the comprehensive knowledge of our relationships and the abilities and readiness of society provide a foundation for renewal so that we can hope for the realization of the great national action program which has been mentioned.

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ENTERPRISES FINDING COOPERATIVE SOLUTIONS TO INCREASE PRODUCTIVITY

Budapest NEPSZABADSAG in Hungarian 16 Aug 80 p 3

[Article by Judit Kozma: "Productive Associations"]

[Text] "Do it yourself if you don't have a servant," goes the saying, and, seeing its wisdom, we are sometimes obliged to undertake tasks which we would much rather entrust to professionals. However, if they are simply not available, for example, if the electrician has promised to come five times and never comes, what else can a man do: join the "Do It Yourself!" movement. It will probably be done less skillfully, and in addition will take longer to do, but at any rate it will be done.

If all of this happens with a simple citizen, it can be disregarded. But if the "Do It Yourself" movement offers industrial enterprises the only possible route to finish certain work, it can cause a great deal more concern.

Conspicuous Backwardness

Still, a good many enterprises are unavoidably forced to do this. After all, uninterrupted production unconditionally needs, for example, components, machinery, and work performance which can simply not be ordered from anyone. Or, if there were such a possibility, he would not make shipments in time or not in the necessary quantity and quality. If by chance someone accepts an order, he will refer to the economy of large-scale production and will only be ready to sign a contract for several times the needed quantity.

However, the absolute lack of assurance of contractual ties and definite services inevitably forces the enterprises to become equipped for activities which do not fit their profile. For example, they are forced to produce cogwheels, bolts and axles, and more than once to prepare special components, to repair carts, to wind coils, and this series could be continued for a long time.

Naturally these are very detrimental situations. Actually in the majority of cases the proper industrial background, production techniques and expertise are lacking for side activities of this type. Work of this sort is thus not so much production as "makeshift" in which more than enough men are really kept busy, so that production is considerably impaired.

The international comparative inspection, which the heavy industry enterprises carried out in 1976, unanimously showed these consequences. In the first place they showed that the production of our domestic plants is considerably behind the leading enterprises of the industrially developed countries, by a much greater extent than the Hungarian industrial technical level and technical equipment would justify.Among other things, it is very clear that our backwardness is not primarily in direct production processes, but rather is striking in the production servicing areas. For example, a comparison of the Hungarian-GDR chemical industries will show this graphically. In the GDR approximately 55-60 percent of the enterprise staff participates in the direct production process, while 40-45 percent provide the other service activities, shipping, maintenance and other work. In our country the proportion is the reverse of this, and the proportion of those performing direct productive work is relatively small.

Promising Programs

Thus, it is not so much a lack of modern technology which is lying hidden behind the production differences, since our most productive factories produce just as many products with a much larger staff than the foreign enterprises serving as a base for comparison, but rather the improper organization within the enterprises and the ties between enterprises.

These observations have established the 10-year programs to raise production, developed by the heavy industry enterprises. The enterprises set up the goal of reaching the current leading international production level by 1985 at the latest. According to calculations the time portion of the program has materialized, and although the development of the enterprises has naturally not been of an identical extent, altogether in 1980 30,000 fewer are working in this branch, compared to the original calculations of the fifth 5-year plan. Along with this the activity of a number of enterprises, including the Bakonyi Bauxitbanyak, Dunai Koolajipari Vallalat and Tiszai Vegyi Kombinat, was striking, and is already approaching the best foreign factories today.

Most of this is due to the fact that the enterprises took seriously technical and organizational solutions, and assigned an important role to those things by means of which the personnel demands of production could be reduced and the special auxiliary processes could be better organized. For example, a good number of enterprises, with the assistance of foreign organizers, have significantly increased their productivity, and in many places have developed wage systems to stimulate better production, have applied ingenious small machinery and have implemented effective innovations.

Something has happened in almost every enterprise, and heavy industry is no exception to the general phenomenon. These methods have been mentioned at various exchanges of experience, but the majority of them have continued to remain outside the factory gates, although their application elsewhere would have brought a great deal of utility.

Naturally there have been exceptions. For example, some enterprises have established maintenance cooperation, within the framework of which they help each other with personnel, machinery and equipment in the case of peak repair times or unexpected deficiencies. Cooperation between bauxite and coal mining has also been successful. The use of the chamber-face methods applied in bauxite mining increased productivity in coal mines of a similar nature to a large degree. The lack of similar initiatives by themselves do not markedly interfere with an increase in productivity, but these few examples do show that there are very large reserves in closer collaboration between enterprises.

Let Good Methods Spread

Recognition of this fact led to the implementation of a specific organizational form in heavy industry: the productive association. The first was established on the other side of the Danube 1 year ago with the cooperation of 16 heavy industry enterprises, 2 foundry and machine industry enterprises, 2 construction enterprises, research institutes and the Veszprem Chemical University. The second came into being 1/2 year ago in Budapest with the participation of 16 enterprises, while the third was established in the recent past in the northern Hungarian areas. The last is worthy of special mention because the narrow branch barriers were successfully crossed here, and 16 plants belonging to other departments joined 12 heavy industry enterprises.

This specific development of enterprise cooperation was also aided by foreign experience. Organizations which regularly follow the development of productivity attentively and help in raising the productivity of enterprises are coming into existence in almost every developed country. The European Association of National Production Centers regularly reports on productivity, and this was a good point of departure for specifying the technical area of domestic associations and for developing their organization.

On the basis of voluntary participation the productive associations organized have undertaken a wide range of tasks, with due attention to foreign experience and naturally to domestic needs and possibilities. For example, they regularly follow the development of the international and domestic level, make comparative inspections, take part in developing scientific methods and spreading them, and in general strive in every possible way to encourage closer connections between enterprises.

One of the most obvious possibilities is the acceptance and spread of successful methods worked out in individual enterprises. There have been many examples of this in the past year. Not only have the enterprises studied the so-called event-oriented maintenance method, which reduces maintenance time and expenses by 10-15 percent, developed in the Szekesfehervari Konnyufemmu, but a number also want to implement it. A great deal of interest was shown in the conference dealing with a review of four kinds of wage systems, organized in the association on the other side of the Danube. In more and more places they are reviewing and applying experience in energy economy, and Taurus, for example, will achieve an energy saving of about 300,000 forints in the second half of this year by applying technical control methods developed within the association framework,

But there are not only applicable methods in other places, but useful equipment can also be found elsewhere in individual enterprises. For example, the Koolajipari Gepgyar is buying a plasma-cutting machine which will then be jointly used by three other factories. Thus these three enterprises will avoid buying the machine, and the owner will be able to operate the machine more economically.

"Let's Do It Together!"

Of course for all of this it is necessary to know what is needed, or what the possibilities are in another enterprise. Thus in the Fejer megye the Bauxitbanyak and the Bakony Muvek "became acquainted." The result was the Multicar mine vehicle. The bauxite mine and the Autokozlekedesi Tanintezet developed the vehicle together. It requires little room, is manueverable, self-loading, and suitable for carrying both freight and personnel. In this way it can be used, not only in mines, but in enterprises, as a material-handling machine. However, the Bauxitbanyak in the Fejer megye was unable to undertake the production, but the Bakony Muvek had the necessary conditions, and it is already in large-scale production.

There are also less striking results of mutual acquaintanceship. For example, the Egyesult Vegyimuvek handed its unused and superfluous scaffolding equipment over to the Budapesti Koolajipari Vallalat, where investment work would have slowed down without it. The Vegyepszer, the Kobanyai Gyogyszerarugyar, the Dunai Koolajipari Vallalat and the Egyesult Vegyimuvek transferred various iron sheets, tubes and collecting elements worth 300,000-400,000 forints to one another, and assisted in their maintenance. Aid of this type rendered daily is at least as significant for the association work as the form of cooperation already mentioned with its substantial usefulness.

This aid provided daily, most of it really nothing more than fire-fighting and overcoming sudden difficulties resulting from a lack of organization, inevitably revives the suspicions following the formation of associations: What is this newer organization for? Why is there an association for the work which should proceed by itself according to the normal order?

While there is close cooperation between enterprises, the joint work of experts working in individual plants does not yet in general belong to the daily order of things, although this is the only way that the "Let's Do It Together!" movement can replace the "Do It Yourself!" slogan, and is one of the indispensable conditions for an increase in productivity. The productive associations can serve as an example of this.

6806
CSO: 2500

FARMS ATTEMPT TO OFFSET HIGHER COST OF INPUTS

Budapest FIGYELO in Hungarian 20 Aug 80 p 11

[Article by Dr Laszlo Nemeti: "Cost and Revenue Ratios in Agriculture"]

[Text] The production increase attained in agriculture is realized from year to year at a greater material expenditure and a greater investment of fixed assets. The cost of materials used in agriculture between 1968 and 1978 rose about three-fold, while the gross stock of assets doubled. The ratio of material cost in 1968 was 68 percent of gross production value, and in 1978 it was 65 percent. But the material cost ratio of agriculture on state farms reached 80 percent by the end of the period under study, and on cooperatives it also approached 70 percent.

The ratio of net production values, including wages and individual incomes as well as net income, declined from 48 to 35 percent. But in the agricultural activity of state farms, this ratio was only 21 percent, and in the common production of cooperatives, 31 percent.

Why the Decline?

In the ratio decline of net production value a role is played, of course, by the rapid erosion of the number of agricultural workers and the lower net income content in agricultural producer prices. The wage income content of agricultural producer prices is about one-third of the national economic average. Thus the increasing use of industrial materials, because of the varying revenue content, further limits the revenues of agricultural production.

The change in the cost and revenue ratios is also indicated by the fact that the net income content of the agricultural operations' gross production value is gradually declining. While in 1968 the net income content in 100 forints' worth of gross production value came to 10.7 forints--an outstandingly high 15.2 forints in 1969--it did not come to even 10 forints in the excellent production year of 1977. In 1978, it declined to 8.9 forints. The revenue decline is even more significant if we compare it to material costs. Net income per 100 forints of material cost

fell in the 10-year period under study from 20.4 to 13.7 forints. Thus, with the change in the cost structure, the profitability of agricultural operations gradually worsened.

In 1968, agriculture used about 2 billion forints' worth of driving and heating fuel. In 10 years this has doubled, and meanwhile prices also rose twofold. Thus the agricultural operations had to spend about four times as much, about 8 billion forints, to acquire these products. Fertilizer costs tripled, while the cost of herbicides rose nearly sixfold.

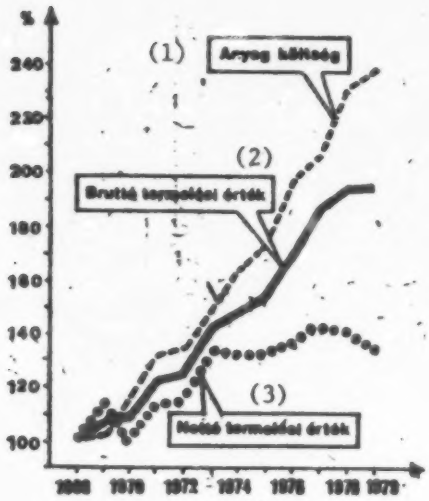
Fodder has a 44 percent share in agricultural material consumption. The volume of consumed fodder increased 43 percent in 10 years, but in the meantime foddering costs increased almost twofold.

Table 1. Gross and Net Production Value and Material Costs of Agriculture in 1978 (1968 = 100)

	Gross Production Value	Crop Production	Livestock Breeding	Material Costs	Net Production Value
State farms	200	180	223	228	137
Privately owned agricultural producer cooperatives, joint	197	187	217	236	144
Other farms	188	163	208	233	158
Total	194	179	214	233	150

In all three agricultural sectors, the development of the material- and means-intensive livestock breeding branches was faster than in other sectors of agriculture. The more rapid increase of material costs than of gross production value was also expressed by the slow change in net production value, which is shown in the following graph. [see next page]

In the foreseeable future we can count on a further price increase in material costs and particularly in industrial materials. This is also indicated by the fact that as a consequence of the 1980 price changes, as compared to the 11 percent rise in producer prices for agricultural products, the price of fertilizer rose by 16.6 percent, herbicides by 21 percent, parts by 24 percent, energy by 36.5 percent, and irrigation water by 500 percent. Thus in the future the efficiency of agricultural production will be most strongly influenced by the price of industrial materials, their quality and their rational and economic utilization.



Key:

(1) material cost
(2) gross production cost
(3) net production value

But the cost and revenue relations of agriculture are influenced not only by the individual sectors, but also by the varying cost and revenue ratios of the branches as well.

In the period under study the yield of wheat and corn has increased significantly, and thus the increasing production costs have been largely countered by the rise in yields, and there was a lesser need for price increases. At the same time in the case of sunflower and sugarbeet, given the slight rise in yield, the provisions for a return of the increasing material costs and the profitability of the producer incentive had to be assured primarily through price increases. As is evident from the data in Table 2, the profitability of wheat and sunflower has declined significantly while that of corn and sugarbeet has increased. With this, however, only the earlier imbalances were evened out, and in 1978 the revenue per 100 forints of cost was approximately equal in the 4 branches.

Table 2. Profitability of Certain Arable Land Crops in 1978 (1968 = 100)

	Wheat	Corn	Sunflower	Sugarbeet
Yield	165.4	168.9	116.1	103.2
Production value	162.5	185.9	176.3	178.4
Production cost	217.1	178.1	222.8	148.8
Revenue per 100 forints of cost	46.9	125.0	51.9	257.1

Material cost has increased in a noteworthy way. At the same time, as a result of large-scale technical development and industrial material consumption, live work utilization declined within 10 years by 93 percent in the case of corn, and 73 percent in the case of sunflower and sugarbeet.

Agricultural production which is based on modern technology depends more and more on industrial production. With the present price policy--when an increasingly greater share of industrial materials and means become free price products--the rapid price increase of materials of industrial origin may cause difficulties in agriculture, since 85 percent of the products that belong here, precisely because of the price stability of the basic consumer items, fall under the category of maximum or fixed price commodities. Thus we are unable to pass on the greater share of the price increase in agricultural operations and industrial materials and means.

The Production Structure

One of the most important problems of our economic policy is the development of an economic production structure. In view of the fact that in agriculture the cost and revenue relation of grain and several well-mechanized crop production branches are still more favorable than average, it may be expected that their production will be able to be stabilized in the coming years. This is also justified by the more favorable world marketing possibilities and the economy of these products. With the rapid production cost increase and the significant narrowing of machine price supports, the 1980 price measures may hinder technology replacement in the most machine-intensive branches of corn and sugarbeet production. Therefore, improvement in the profitability relations of these crops remains a central task.

We must analyze in greater detail the problem of the development of the livestock breeding branches since the increasing industrial means and material prices are strongly influencing their profitability. The increase in the crop production costs through fodders will also burden livestock breeding. Since the price of the products is defined primarily by costs, the rapid rate of increase in industrial means and material prices will in this way continue to lead to a rise in the purchasing prices of agricultural products.

The stability of prices of food, which form the most important part of total consumption, is also a function of the development of agricultural production costs. Therefore, the domestic industry can be of service through the manufacture of inexpensive and good quality resources and materials, while agriculture can be of service with their utilization in an economic way.

6691
CSO: 2500

ENTERPRISE STRUGGLES TO PREPARE NEW FIVE-YEAR PLAN

Budapest NEPSZABADSAG in Hungarian 3 Sep 80

[Article by Dr Jaros Polonkai: "Enterprise Is Preparing a Five-Year Plan, Experiences of the Ganz Electrical Works"]

[Text] In the third quarter of 1980, planning operations to set the enterprise management goals at the Ganz Electrical Works for the Sixth Five-Year Plan will be completed. The change in the economic environment, principally the worsening of the terms of trade and the intensifying international competition, have modified the requirements for medium-term planning, and it demands of us a new outlook and methods.

If I were to compare planning work to target practice, the change of circumstances is characterized by the fact that while in the previous five-year plans we had to aim at a slowly moving target, we must now fire at objectives that pop up unexpectedly. (We must become accustomed to the fact, for example, that export-import prices and foreign exchange rates as well change frequently, and sometimes significantly, and more and more these factors influence the domestic profitability of these products.) Now in our plans we need to work minimally with firm figures, and seek rather to define clearly the range in which we can flexibly adjust to changes.

The Upper and Lower Limits of Demand

Greater flexibility is also made necessary by the fact that in 1979 a total of 22 percent of the production at the Ganz Electrical Works went for export on capitalist markets, 10 percent for socialist export, and 68 percent for meeting domestic requirements. Several years ago our total export hardly came to 10 percent, that is, the enterprise produced mainly for the domestic market. Under the Fifth Five-Year Plan the development was dynamic; the annual rate of production growth was between 10 and 15 percent, and between 1977-1980 it realized an investment of 750 million forints.

In the initial phase of planning a year ago, we came up with preliminary development ideas which were useful in that we had to examine the technical-economic situation and marketability of our product groups and search for the possible main lines of development. In the following phase of our planning work the emphasis was on establishing market requirements.

The survey of domestic market requirements is now substantially more difficult than before because most of the purchasers from the Ganz Electrical Works do not know how much money they will have in the next 5 years, although in this case we are speaking of investment products with a long completion time, energetics equipment, electric railway equipment, etc. Therefore, in indicating domestic requirements in advance, we have used methods different from the usual. First of all, we researched those products for which our biggest buyers, that is the electric energy industry and MAV [Hungarian State Railways], will definitely have a need. (Without replacing equipment that must be discarded without further delay, the economy's circulation would be stopped, its supply of electricity and railroad transportation would cease). We can regard this as the lower limit of demand. The upper limit in our plan is that sum which our customers are for the time being planning to invest if they have enough money for the investment.

The difference between the lower and upper limit accounted for in the planning of the enterprise varies by product groups. For example, while the variation in products required by MAV was within 10 percent, it reaches 30 to 40 percent in some kinds of energetics products. In the course of planning we sought, and are still seeking, gradually to reduce this difference with the acquisition of new information. We believe that in the survey of domestic demand we can within 5 years tolerate a difference of 10 percent, but not more. In demand we also measure, of course, whether we can meet import competition in price.

While domestic demand can be estimated relatively exactly and the buyers' intent is quite recognizable, it is not possible, because of its dimensions and unpredictability, to measure the capitalist market with such methods. To be sure, we have called on experts to make market surveys for us, and we have acquired foreign trade enterprise information, but we did not regard all these things as reliable enough for us to base our planning on them. In the course of specific analyses we came as a matter of fact to the conclusion that our export possibilities are limited not directly by the magnitude of the market demand, but decisively by the competitiveness of the enterprise. According to our calculations, it is on one hand through primary cost reduction based on technical development, and on the other hand through broader primary contractor activity that we can improve the competitiveness of the enterprise to the extent that it will make it possible to increase the exports of the Ganz Electrical Works by about 10 to 15 percent. The market will not set up barriers to such an increase, but we must count on annual fluctuations in export possibilities.

Domestic marketing and the minimal volume of planned capitalist export will together make it possible to exploit adequately the fixed assets of the enterprise, and the free capacity above the basic load we will seek to use to meet favorable cyclical market demands that cannot be foreseen.

Trends in Price Changes

Some problems are encountered by planners attempting to realistically establish market demands, but most planning headaches are caused by the numerical planning

of complex economic indexes like profit or means efficiency, for example. From prices through foreign exchange rates to economic regulators we must here take into account many such factors that are very difficult to plan. Therefore, we decided to leave out of the plan estimates all such factors where future development cannot be deduced from basic technical-development, and economic political trends. Thus we do not plan for changes in exchange rates and we do not count on such changes in regulators as directly modify profits. The above two factors we can regard as only "surface" phenomena which as effects reflect the changes of deeper economic interconnections. A foreign exchange rate change can be ignored because the unfavorable effect it may have on profit can be reduced to the minimum with rate of exchange insurance.

Regarding price changes, we count on two lasting trends in our plan. One of our assumptions is that energy prices, and the prices for energy-intensive materials (for example, chemical goods) will be relatively more expensive in the Sixth Five-Year Plan period as compared to other materials. The other trend that promises to be permanent is that the price index for finished products, with reference to the same technical parameters, will rise less than the index for materials and energy sources. This latter trend means, for example, that if a product line is produced with the same technology and the same cost expenditure as several years before, then the increase in material prices will not be recovered in the sale price, or profits will decline. This can be guarded against by the producing enterprises only by changing the product line and the production technology (and the related plant and work organization) as well as by modernization. The Sixth Five-Year Plan of the Ganz Electrical Works was also prepared in this manner, and we are counting by product groups on a specific material reduction of 10 to 15 percent.

The enterprise plan has two variants. In one variant, starting from a lower market demand, the annual rate of growth is 4 to 5 percent. In the other variant, assuming a brisker market demand, the average annual rate of growth is 7 to 8 percent. We regard the two variants as the lower or upper limit of our possibility for mobility. Our main task is to assure, even in the planning, such a flexibility in enterprise undertaking as will make it possible to move from one variant to another in accordance with the market change. We must also count on the fact that there may be further fluctuations both on the domestic and export markets.

Of course, two investment and technical development variants also belong to the above-mentioned two marketing variants, but these are closely related to each other. By this we mean, for example, that the larger investment variant can be developed from the smaller by making further additions (machinery and equipment) as, for example, with variable modern furniture where a three-part bureau series can be expanded with a fourth element if the needs of the family grow. In both cases, the planned investment is intensive, that is, we do not plan to create new production areas through construction; whereas machine investments, substantially machine replacements, we can adjust to the actual rate of growth by the above-mentioned method. By installing high-performance machinery we can reduce the number of work places as well.

Establishing the manpower demand was a hard nut to crack in the planning work. After a many-sided study, we are planning on a 2.5 to 3 percent annual reduction in our Budapest factory, and in our provincial factories we are counting on maintaining our present average number. On the enterprise level the annual reduction comes to about 2 to 2.5 percent. The sources of productivity are: technical development (for example, investments installed in the Fifth Five-Year Plan), changes in the product structure, and work organization and wage measures.

Organizational Measures

The plan will remain a dead letter unless we buttress it with organizational steps. Our enterprise is planning, for example, the following, more important measures:

--shortening of the chain of command within the enterprise, that is the development of a guidance oragnization that adjusts better to the work process, is less fragmented, and is more suitable to the profit incentive;

--putting internal information on continuous computers in the course of automatic accounting development, above all in the field of material management and production perparation;

--institutional expansion of work methods that promote management, including value analysis;

--realization of a smoother, internal manpower regrouping (from one work shop to another, or from one trade to another, a so-called related trade).

In the coming weeks we shall open the Sixth Five-Year Plan of the Ganz Electrical Works to debate in the democratic forums of the enterprise. The social control of our plans will make it possible to filter out any faults and to have the active collaboration of the workers in developing and realizing the common goals included in the plan.

6691
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TEXT OF 1949 TRADE UNION LAW PUBLISHED

Warsaw DZIENNIK USTAW in Polish No 41, 15 Jul 49, Item 293 pp 853-854

[Law dated 1 July 1949 on trade unions]

[Text] Part I. General Regulations

Article 1. For the purpose of the statutory securing of the most favorable conditions by the people's authority in Poland for the development of the trade unions with the intention of consolidating the victory and achievements of the working class, strengthening people's authority and the construction of socialism in Poland and also for the purpose of creating the most suitable conditions for further activity being developed by the trade unions in the field of representation and defense of the interests of the workers and white-collar employees, concern for the systematic and continuous improvement of the material and cultural situation in the world of labor, mobilization of the working class to carry out the production plans, increasing work productivity and developing competition, and permanently raising the national economy to a higher level:

1) the workers and white-collar employees are guaranteed the right to voluntarily organize in trade unions as well as to most actively participate in administering people's authority,

2) all regulations remaining as a legacy after the capitalist governments, which limited the right of the workers and white-collar employees to voluntarily group themselves in trade unions, which subjected the activity of the trade unions to the supervision of administrative authorities and also contributed to the breaking up of the trade union movement, are abolished.

Article 2. Workers and white-collar employees who are employed in enterprises, offices, and institutions, as well as other persons who are working on the basis of a work agreement, an apprenticeship agreement, or public authority appointment, have the right to voluntarily organize in trade unions.

Part II. Tasks, Goals and Scope of Activity of the Trade Unions

Article 3. The statute of the Association of Trade Unions (Zrzeszenie Zwiazkow Zawodowych) in Poland as well as the statutes of the trade unions which are entering into the composition of the association, describe in detail the tasks, goals and scope of activity of the trade unions. The Congress of the Trade Unions in Poland votes on the statute of the Association of Trade Unions.

Part III. Rights of the Trade Unions

Article 4. Paragraph 1. The trade unions through their statutorily-specified managerial echelons and union organs cooperate with the authorities and institutions in the field of public administration, the national economy, and supervision within the scope and manner prescribed by legal regulations.

Paragraph 2. In the area of the implementation of their statutory tasks, the trade unions represent those who are organized as well as those who are not organized in all matters which pertain to the general interests of the workers.

Part IV. Organization and Authorities of the Trade Unions

Article 5. Paragraph 1. The principal representation of the trade union movement in Poland is the Association of Trade Unions.

Paragraph 2. The Association of Trade Unions in Poland is a legal entity.

Article 6. The highest organs of the Association of the Trade Unions in Poland are:

1) The Congress of Trade Unions

2) The Central Council of Trade Unions.

Article 7. The procedure and manner of electing delegates to the Congress, their number as well as the dates for convening the Congress of the Trade Unions is described in the statute of the Association of Trade Unions in Poland.

Article 8. The Central Council of Trade Unions is answerable for its activity only to the Congress of the Trade Unions.

Article 9. Paragraph 1. The Central Council of Trade Unions maintains a register of the trade unions.

Paragraph 2. Each trade union becomes a legal entity at the moment of registration.

Part V. Interim and Final Regulations

Article 10. The rights of the Association of Workers' Trade Unions in Poland and the Central Commission of the Trade Unions, ensuing from the legal regulations in force, pass respectively to the Association of Trade Unions in Poland and the Central Council of Trade Unions.

Article 11. Rescinded are:

1) The decree dated 8 February 1919 on the subject of provisional regulations--on workers' trade unions (Dz. U. R. P. [Legal Gazette of the Republic of Poland] No 15, Item 209);

2) Article 7 and Article 11, paragraph 2, of the Decree of the President of the Republic, dated 27 October 1932 on the Law on Associations (Dz. U. R. P. No 94, Item 808), and in Article 9, point c), of that decree, the words: "with the exception of the provisions contained in Article 11, paragraph 2, and Articles 15, 17 and 19" are deleted.

Article 12. The Chairman of the Council of Ministers and the Minister of Labor and Social Affairs are charged with carrying out of this law.

Article 13. This law becomes effective on the date of promulgation.

President of the Republic: B. Bierut,
Chairman of the Council of Ministers: J. Cyrankiewicz,
Minister of Labor and Social Affairs: K. Rusinek.

CSO: 2600 END

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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2048

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2 October 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2048

CONTENTS

ALBANIA

Dode Stresses Need To Improve Planning Activity
(Petro Dode; ZERI I POPULLIT, 10 Jul 80) 1

Shortcomings in Activity of Savings Banks Cited
(Fadil Kepi; BASHKIMI, 17 Jul 80) 8

CZECHOSLOVAKIA

Construction Industry Present, Future Evaluated
(Vladislav Kmoch; PLANOVANE HOSPODARSTVI, Nos 5, 6, 1980) 11

HUNGARY

Assignments, Transfers, Biographical Data on Foreign Correspondents Published
(MAGYARORSZAG, 27 Jul 80)..... 51

Enterprises Meeting Challenge of New Demands, Regulations
(NEPSZABADSAG, 23 Aug 80) 53

Success Formula at BRG, Sandor Stenczinger Interview
Over the Hump at DIGEP, Sandor Enekes Interview

DODE STRESSES NEED TO IMPROVE PLANNING ACTIVITY

Tirana ZERI I POPULLIT in Albanian 10 Jul 80 p 3

[Article by Petro Dode, chairman of the State Planning Commission: "The Perfecting of Planning and Its Methodology--Continuing Objective of a Profound Scientific Work"]

[Text] The level attained in the economic and social development of the country, the special historic conditions under which our country builds socialism, surrounded by imperialist and revisionist enemies, as well as the great tasks of the coming 5-year plan which is being discussed and drafted by the working masses of the city and the village under the party leadership, require that now and in the future, the research-scientific, creative and transforming activity, be raised to a higher quantitative and qualitative level, so as to transform science and technological progress into still more powerful social factors, which should contribute further and with greater effectiveness in the maintenance of high rates of economic development and the comprehensive strengthening of our socialist homeland.

The great tasks presented by the Eighth Plenum of the Party Central Committee require the further concentration of attention, care and work of the state and economic organs in the field of the development of the social and economic sciences and, in this framework, of the perfection of planning, so as to further raise its role in the entire process of socialist construction of the country on the basis of the party guidelines and directives. Planning and its methodology as a science of socialist economic organization and management in our country, have been and are the object of a continuous study to perfect their various aspects in accordance with the economic and social development of the country. The broad scientific work carried out in this direction, on the basis of the tasks set by the Seventh Party Congress, has influenced the further perfecting of the system of planning and the strengthening of its scientific character, by better solving and implementing, in the practice of the planned management of the economy, the problems of expanded socialist reproduction, in accordance with the demands of the objective economic laws of socialism.

The basis of the studies carried out for the perfecting of planning and of methodology has been the generalizations applied by the party and Comrade Enver to the revolutionary experience of the economic and social development of our country, as the only country in the world which builds socialism and develops the economy on the basis of a single and general state plan. The drawing up of the 1979 and 1980 plans and the achievements in the field of their fulfillments, through total self-reliance, as well as the work which is presently being carried out in drawing up the Seventh Five-Year Plan, are living proof of the important steps made during recent years in perfecting planning.

In our country where socialist relations have been established throughout in the city and in the village, no economic-social activity whatever can be understood or carried outside the plan and planning. However, the science of planning and methodology itself is made up of principles, criteria, methods, methodics and rules which must be rigorously implemented in every link. This is being stressed because often it is proven that various state and economic organs, as well as their apparatuses, are not, everywhere and in all issues familiar with, the requirements of planning methodology nor do they implement them properly. We must continue providing, especially, greater effort and help to the grassroots, because the scientific character of the plans at the center, their correct rates, dimensions and so forth, depend on the scientific level of planning in the enterprises and cooperatives. It is necessary for all the ministries and other central institutions to better deal with these tasks in order for the entire process of planning, from the moment of the drawing up of the draft plan at the base, the examination at various levels, the execution of the plan approved for the enterprises, cooperatives, and down to the smallest units of production and its implementation, to be carried out in accordance with the methodology of planning.

The dynamic and intensive development of the economy and the expansion of the economic dependencies and relations which originate from them, necessitate the constant perfecting of planning, thus turning the methodology and all other documents and norms which regulate planning into permanent study objects. This is necessary because life and practice confirm this and new problems are coming forth which require the perfecting of the planned management of the economy. Regarding this issue we must bear in mind the recommendations made by Comrade Enver at the Eighth Plenum of the Party Central Committee, that "Science and technology have progressed and developed in the direct service of the requirements of production and of social life, in the same manner that these in turn have been permanent stimulating factors also for the development of science and technology itself... The practice of society is a source of development of sciences and the criteria which confirms the justness of its theses."

The experience gained so far in implementing the methodology of planning presents problems in connection with the best possible implementation of

established principles and norms, as well as the need to further perfect some of the various aspects of our system of planning. In accordance with the implementation of the tasks assigned by the 7th Plenum of the Party Central Committee, and the speech of Comrade Enver at the meeting of the Politburo of the party Central Committee on 22 April of this year about economic-financial problems, as well as the recommendations and the tasks of the 8th Plenum of the Party Central Committee, currently a series of problems are being studied in cooperation with the districts, the ministries and the scientific institutions of the country, to further perfect the methodology and some other questions of relations in the field of distributions and compensation, related to the further strengthening of the planned management of the economy.

The perfection of the planned management of the economy today and in the future is related to the further deepening of the struggle against tendencies of globalism in the field of planning and to the fulfillment of the plan tasks which continue to be encountered in the practice of the organizational and management activity of the various state and economic organs, a practice which reduces to some extent the scientific level of planning. Therefore, during the study, special attention is being devoted to the seeking of the most suitable roads and forms which assure the perfection of planning in enterprises and cooperatives, in order to implement the established methodological criteria for planning in kind. The fullest possible solution of this fundamental issue of our socialist planning must be found by defining the ways and the measures to further perfect planning according to quality, productivity and cost per unit of production.

The aim of all these is that the plan define as correctly as possible the tasks of production in quantity, assortment and quality for the enterprises and the cooperatives, especially those which have a wide range of products and assortments so as to better fulfill the needs of the people, of the economy and of defense; by coordinating these also with the tasks of conserving as much as possible live and material work, not only in global terms, but, above all, also per unit of production and assortment.

Also, means of obtaining a fuller coordination of the indicators of the financial plan with the economic indicators where gaps are to be found today in the practice of planning work of the enterprises and cooperatives, and ways to better solve the problems related to the perfection of the norming of the means of circulation, of bank crediting and so forth must be studied more concretely. These issues require the best possible solution of the problems of methodology and of methodics which are related to the utilization of expenditure preventives and of crop accounts in the enterprises and cooperatives, so as to arrive at a better coordination and evaluation of the units of the economic plan with the indicators in value, especially of the expenses in the field of production and in other socioeconomic activities.

But planning in kind, and the entire scientific planning and management of the economy, cannot be put in practice successfully without further perfecting control over plan implementation in every link of the economy and without the fullest and most precise records of the entire economic-productive and financial activity of the enterprises and cooperatives. The improvements to be made in the system of statistical and accounting records in every link of production, must aim not only at enforcing quantity and assortment of production, but at the same time must have knowledge of the quality and quantity of the work time used for every product, the cost required to produce them, and to create the best possible conditions to deal with the problems arising in the field of their realization. The objective must be to strengthen the control and the pursuit of plan fulfillment everywhere, to confront the phenomena and to take measures at the right time, so that the plan tasks are realized properly in all indices.

On the basis of this must be improved the forms of accountability of the highest and lowest organs through systematic analyses and broader operational, statistical and accounting records, and for shorter time periods, of all the achievements in plan fulfillment, by taking into consideration here also the completion of thorough study analyses on the basis of the experience gained regarding the issues in connection with progress in expanded socialist reproduction.

The perfecting of planning requires not only the perfection of criteria, methods and so forth, which are related to the documentation and planning of tasks in the field of the development of productive forces, but also the perfection of socialist relations in production, especially in the field of distribution, exchanges and consumption of social product. The more correct use in the process of planning and plan fulfillment of the economic categories and levers, as well as the continuing perfection of the various aspects of expanded socialist reproduction which are an expression of relations in management in the field of distribution and of exchange of material goods, in accordance with the present level of development must guide the economic and social development of the country. The question here is to determine the best ways to use the wage system in the state sector and work compensation in agricultural cooperatives with greater effectiveness, in order to turn them into true incentives, into more powerful levers, in order to mobilize the workers in the fulfillment of the plan, but at the same time not permit the creating of great differences in income which would be of great consequences to our socialist economy.

Also, the studies which are being carried out must aim at solving the problems to be found in the field of contractual relations, of finance and of other relations between the enterprises and agricultural cooperatives, as well as between them and the bank, by also defining the measures to overcome the shortcomings which exist, and which in many cases become a hindrance to scientific planning and the fulfillment of the plan.

The tasks presented by the further perfection of the organization and management of the economy, and the further development and execution, in all the spheres of the country's life, of a broad and comprehensive research and scientific work, have also made it necessary to make improvements in the organizational structures of the various links of management in the economic and social sectors. Through the studies being carried out in this direction, we aim at achieving a more complete implementation of the recommendations issued by the party to further raise the effectiveness of management in all the links. This must be achieved entirely through a more rational use of the quotas approved in the existing structures, by improving the ratios between laborers and office workers, and not by resorting to exaggerated and unsound increases, as is the case in regard to tendencies evident in some state and economic organs.

Therefore, the improvement of organizational structures must be achieved through measures to strengthen the work organization of the state and economic organs and of their apparatuses, by assigning to each a full task, by improving the workers' skills, and by introducing machines in the work of accounting, statistical recordkeeping, of bookkeeping, and so forth.

The plan, in itself, is the result of a creative scientific work. Hence, all the state and economic organs must correctly understand and execute the measures which must be taken continually, so that the work in drawing up the plan, from the enterprise and up to the economic cadre, is preceded by studies carried out by all the branches of science and all the state and economic organs and their apparatuses.

Although the established methodological criteria make it necessary for the scientific studies to precede the plan, and in spite of the progress made, especially in recent times, in research and scientific work, the studies do not adequately respond to the tasks which the party has presented and presents in the development of the economy and culture for a number of issues and in some directions. This situation arises not so much because the possibilities do not exist, but because of the erroneous concept of some management organs and cadres that the planning process is more an administrative activity, by relying on some data which are not sufficiently the result of scientific, technical and technological studies and of thorough economic-financial studies and analyses. This is also the source of those manifestations which continue to be observed, in some places more and in some less, in the various links of production and of management, where the specialists and the cadres of various professions are not properly involved in continuing work and long-range studies, for the development of the sectors in which they work.

There are many possibilities in this direction if we keep in mind the fact that in production and in other sectors and in the management of the economy there are currently employed over 46,000 specialists and higher cadres, tens of thousands of other middle-level specialists and exemplary

workers and cooperative members who constitute a large human force for the advancement of production and technical-scientific revolution. Today we have, in addition to the Academy of Sciences and some institutes, many other scientific research institutions and units, technological bureaus and study groups attached to the enterprises and other links of management, as well as a substantial number of educational and scientific workers from Tirana University and other higher schools.

The better management of this great mass of workers of our Albanian science to carry out studies in the various fields of the development of productive forces, the perfection of socialist relations in production and in all the other spheres of endeavour of the country, must lead to the elevation of the level of knowledge, for a more scientific planning and management, to maintain higher rates and greater economic effectiveness in social production, and to solve, by relying on our own forces, the great problems which the full construction of the socialist society presents. Important tasks arise for us, for all state and economic organs and scientific research institutions to expand the completed studies related to the drawing up of the Seventh Five-Year Plan, so that the projected tasks will not only be documented, but also so that their realization will be guaranteed.

Regarding this issue, it is necessary for us state and economic organs to reflect as thoroughly as possible upon the recommendation made by Comrade Enver Hoxha at the Eighth Plenum of the Party Central Committee, that: "The tasks contained in the report on scientific research work, which was presented to the plenum... must be considered as an integral part of the 5-year plan which we are preparing. Science must help the planning of production, must lead production and must open prospects for the development of the economy and culture."

We must also do better work so that economic studies and problems of scientific planning will be the permanent object of the work of the economists, financiers, engineers, agronomists and other specialists, with concrete tasks and with a stronger requirement of accountability for their implementation and for the development of economic thought in the enterprises and cooperatives and in other economic and state organs.

The fulfillment of all the objectives presented by the Eighth Plenum of the Party Central Committee, confronts us with the following tasks: together with the scientific institutions, we must better study and define the roads and the measures which must be taken to perfect the methodology of drawing up the plan of the scientific research work itself, for documentation, with the technical material basis and with the workers needed for the execution of studies as well as with the content itself of the subject and the effectiveness of the problems which will be solved by their study and execution, to better guarantee the objectives which are set in the plan. By drawing our tasks from the materials of the Eighth

Plenum of the Party Central Committee and the pragmatic speech which Comrade Enver delivered to this plenum, the workers of the state and economic organs, and in this framework all the economists, will keep at the center of attention the perfecting of planning and of methodology, so as to always and better serve the raising of their role in the entire socioeconomic activity of the country, from the base and to the center, and for the proper fulfillment of the tasks defined by the state plan.

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SHORTCOMINGS IN ACTIVITY OF SAVINGS BANKS CITED

Tirana BASHKIMI in Albanian 17 Jul 80 p 2

[Article by Fadil Kepi, director of the Institute of Savings Banks and Securities: "Savings Deposits--An Indicator of the Rise in the Well-Being of the Working Masses"]

[Text] As a result of the correct policy of the party, of the uninterrupted strengthening and development of the economy and the continued rise in the well-being of workers, savings deposits have also increased from year to year. All the districts of the country have achieved good results in increasing savings deposits. At the end of 1979, they increased 3.4 times in comparison with 1965, and over 2 times in comparison with 1970. Today, the network of savings banks has been expanded everywhere. Our entire country is served by 26 branches with 100 savings banks and about 3,400 accounting offices in work centers and in agricultural cooperatives.

The number of depositors and the average deposit amount per worker has grown steadily from year to year and in every district. In 1979, the number of new depositors increased by about 72,000, whereas the average amount of deposits has increased continually from year to year. Marked changes have taken place also in the structure of savings deposits. The majority of depositors are workers and cooperative peasants whose numbers have tended to increase from year to year. In 1960, the deposits of workers and of agricultural cooperative members amount to 42 percent, whereas in 1979 they were about 70 percent of all the deposits. In 1979, there was one savings account for less than 3 persons, in comparison to one savings account for about 7 people in 1960.

The savings banks, as important organs of our financial system throughout the country, are used by the people to deposit a part of the temporarily free monetary resources. The savings deposits which are temporarily free are used as supplementary resources to finance and further develop the economy and to accelerate monetary circulation. By taking into consideration the fact that our lek is one of the strongest currencies in the world, which knows no devaluation and inflation so common in the bourgeois-revisionist world, the income which the population earns through the 2-3 percent of interest paid for the money deposited, further contributes to

the increase of well-being. In order to further help the depositors, in addition to the expansion of the network of savings banks and savings offices in work centers, facilities have been set up for the depositors for speedy service. The savings book gives every depositor the right to withdraw his money from any savings bank of the Republic. Even in cases of loss of the savings book, the money of the depositor is nevertheless guaranteed and the deposited money is not endangered at all. The depositor is provided with a new savings book, and he continues to enjoy all the rights he had before.

We are aware that despite the achievements, much remains to be done by the workers in the savings banks and insurance area, both in increasing savings deposits and improving services to the people. We have concentrated our work on improving propaganda to popularize the importance of increasing savings deposits as a means of correctly combining the general interest with the individual interest. This requires that the workers of the savings banks further increase their cooperation with the mass organizations in work centers and in the city quarters, so as to turn the practice of savings in every family into an inseparable part of their daily life. Experience has shown that the best propaganda is the continual improvement in serving the people, for the depositors to be served more quickly, better and in a polite manner, and for the bank workers to waste as little time as possible in carrying out their functions. This problem has been of considerable concern to us, because as is known, today the savings banks perform other activities too, such as issuing paychecks to retirees, collecting bills for communal services which are constantly increasing. Lately, as a result of the closer cooperation with some retirees, financial organs and mass organizations, there has been improvement in paying the checks to retirees by setting up a proportionate distribution system for the savings banks on established days. This form of work has made it possible to expedite payments to the people. But there are greater possibilities for improving the level of our work and continually perfecting it on the basis of the experience gained. All workers of the savings banks and insurance field must therefore try harder to perfect our method of work and management. Despite the improvement in our work, there are still shortcomings and weaknesses, above all as regards the strengthening of internal work, of the precise execution of financial discipline, of the laws and rules established for this purpose. These have been more evident in Puke District, Kruje District and others. From the investigations carried out this year in some branches of savings banks, we have concluded that it is possible to avoid these shortcomings, that they are subjective, and that they are a result of the poor knowledge of the rules which determine the process of activities, and in some cases are also the result of liberal attitudes of some workers. The workers of the savings banks and insurance field, and all the workers of the financial system, must be characterized by correctness and accuracy in their work and all activities.

An important role is also played by the financial investigation and auditing branch. No savings bank or agency can fail to be audited within the established deadlines. The plan of unscheduled auditing and investigation is being practiced and carried out quantitatively and qualitatively, further elevating the role of preventing shortcomings and weaknesses. Last year, Shkoder District, Vlore District and Elbasan District did not fulfill the investigation auditing plan. In the same way, the investigation auditing plan of the savings agencies was also not fulfilled in some districts; this should have been carried out by the auditors of some work centers. Shortcomings have also occurred in work in Fier District, Lushnje District and others. The directorates of these branches, in cooperation with the investigation and auditing sections of the districts, must fight harder so that the investigation of the savings agencies will be carried out within the established deadlines and with good quality, and they must combat the mistaken notion of some auditor of the enterprise or agricultural cooperative that it is not up to him to exercise control. These activities harm the work and open the door to evil-doers.

The closer cooperation with the financial directorates and central ministries, the investigation and auditing and finance sections and the state and agricultural bank, has made it possible for the problems of the increase of savings deposits not to remain problems of the workers of savings banks, but has enabled these organs to monitor them by correctly evaluating them and by considering them as their duties. We are devoting greater attention to the close cooperation with some of the agricultural cooperatives and the peoples councils of the unified villages, where the number of potential depositors is still low. The objective is for all the peoples councils of unified villages to open savings agencies. A good work is being done in this connection in Korce, Erseke, Vlore and Mat districts. In order to implement these duties, we are paying attention to the further improvement of workers' skills through correspondence schools, seminars, and other forms of education, so they can familiarize themselves with and accurately implement our socialist legality.

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CONSTRUCTION INDUSTRY PRESENT, FUTURE EVALUATED

Prague PLANOVANE HOSPODARSTVI in Czech Nos 5, 6, 1980

[Article by Eng Vladislav Kmoch, State Planning Commission: "The Construction Industry in 1980"; passages enclosed in slantlines are in boldface in original]

[No 5, 1980, pp 30-41]

[Text] Currently, political and economic initiative is aimed at fulfillment of the tasks assigned by the 14th KSC Central Committee session and the plan for 1980, and at preparing the draft plan for 1981 and the foundations for the draft Seventh Five-Year Plan.

It was stressed at the 14th KSC Central Committee session that construction industry workers are required to carry out consistently the tasks laid out for them by the Sixth KSC Central Committee session. These involve primarily the activization of potential construction capacities throughout the construction industry and in all spheres of comprehensive socialist rationalization. The necessary conditions for this must be assured both by the investors in and purchasers of construction capacities, of whom timely planning and site preparation are required, and by the other sectors of the national economy which create the material and technical base for construction.

The performance of the 1980 plan concludes the Sixth Five-Year Plan and is the initial basis of the Seventh Five-Year Plan, which makes it necessary that the development of the construction industry be oriented towards the economic conditions of the latter and that a smooth transition from one five-year plan to the next be assured. Implementation of the 1980 plan too must be directed with a knowledge of the basic directions of development of the construction industry in the Seventh Five-Year Plan, in particular as regards adapting the structure of the construction sector to the requirements of capital construction, concentrating manpower and production facilities on the key substantive tasks and geographical priorities, and, in technical development, constantly seeing to it that the consumption of

fuel, energy and metal is decreased and using the reserves of manpower and capital assets more effectively by increasing management and organizational quality.

/It is a basic task of the construction industry to adapt and develop the structure of its capacities in keeping with the requirements of capital construction, reconstruction and repair of capital assets, buildings and structures. This means filling out the production enterprises' production programs with construction projects in keeping with the aims of the state plan and carrying them out in time periods which are in accord with the requirements of the national economy. The Czech and Slovak construction ministries are of key importance in the performance of capital construction. In addition, the state plan imposes on the other central organizations which manage contracting construction organizations the requirement of using construction capacities in keeping with the requirements of the national economy. Thus the structural development of the construction industry has a sectoral character (even when limited to the contractor construction organizations), and its efficiency and flexibility require that specialization and cooperation between construction enterprises within the sector be deepened./

In terms of its organizational structure and the associated division of labor, the construction sector includes construction organizations managed by federal agencies (the Federal Ministry of Fuels and Power, the Federal Ministry of Transport, the Federal Ministry of Metallurgy and Heavy Engineering and the Federal Ministry of National Defense), by the Czech and Slovak construction ministries and by the national committees (District Construction Enterprises and Silnice National Enterprise), and the ministries of agriculture and food. The breakdown of their work in capital construction during the Fifth and Sixth Five-Year Plans and in the plan for 1980 shows the following developmental trends:

	Index: 1980 plan / 1979	Average annual pace: 6th Five-Year Plan	Average annual pace: 7th Five-Year Plan	Percentage of total amount of work: 1980	1975	1970
Capital construction overall	104.2	5.0	7.4	100.0	100.0	100.0
Organizations managed by:						
Federal agencies	98.3	0.3	8.4	9.3	11.7	11.2
Czech and Slovak construction ministries	105.2	5.8	7.9	77.3	74.5	72.9
Czech and Slovak national committees	101.5	5.2	3.3	9.8	9.7	11.8

The share of the construction organizations managed by the Czech and Slovak construction ministries has increased slightly, which is in accordance with the directing of their construction capacities toward key investment programs of the national economy. It appears that the share which they have attained is near the upper limit of efficient division of labor in the sector and that more capacities for the new investment programs must be created by regulating the content of the construction enterprises' production programs for 1980 and by completion of construction projects.

Concentrating the construction capacities of the construction ministries on national economic priorities requires both faster completion of construction projects and the use of the advantages of division of labor in the construction sector. This means in particular that enterprises in the construction ministries are to carry on construction projects amounting to less than 2 million korunas RN [budgetary expenditures] only when they have a technological relationship to projects which have been designated priority tasks of the state plan and are associated with capital construction in areas of concentrated capital construction. Carrying this conception through requires rather consistent coordination of production programs, primarily in the departments which are carrying on capital construction either with their own construction capacities or with those of the construction ministries.

/The sectoral load on construction capacities is specified by the state plan. An important role in preparation for the Seventh Five-Year Plan is played by guiding their utilization in terms of cooperation in the performance of capital construction in the national economy, particularly between construction organizations managed by the ministries of construction and construction organizations managed by the central federal agencies in the performance of their own capital construction. The case is similar for construction organizations managed by the national committees and construction enterprises of the ministries of construction and other departments./

/More thorough specialization and cooperation, not only within the individual departments, but in the supplier and subsupplier system for performance of capital construction, is one way of speeding up the capital construction process and making it more efficient, bringing about a more flexible structural transformation and making more uniform use of construction capacities within the sector.

The state plan specifies the breakdown of utilization of construction capacities for capital construction, export and repair of capital assets, buildings and structures. Maintenance of the main balances between capital construction and utilization of the construction capacities in the state plan for the individual central organs, the middle management levels and the direct investors and suppliers is an extremely complex process which demands maintenance of national economic proportions.

One negative influence of supplier-purchaser relations is the urging by some to carry out construction projects which deviate from the established concept of capital construction of the individual sectors and branches. In this situation, requests in excess of allocated investment resources are primarily explained as a lack of balance in the state plan. The essence of these divergent approaches, however, is the pressing of requests in excess of the planned construction capacities, frequently at the cost of increasing the amount of unfinished construction and lengthening construction time. Another factor in these deformations of the intent of the state plan is the enterprise interests of the suppliers, for it is beneficial to start construction projects given the current breakdown of the machinery inventory and of worker skills. A further factor is hitches in the supplying of construcion projects and performance of specialized work, which slow down progress on uncompleted projects and provide room for increasing the number of starts. In sum we may state that enterprise interests are asserted in conflict with the established proportions of the state plan and the balanced supplies of construction capacity.

These questions gain in importance in preparing for the Seventh Five-Year Plan; discipline and adherence to prescribed limits is one of the most important preconditions for improving the quality of the planning process and management of capital construction. Criteria similar to those for poor-quality products should be used for poor-quality foundations for the national economic plans involving nonadherence to the basic parameters and limits.

In this connection it is useful to recall the decree of the CPSU Central Committee and the USSR Council of Ministers on improving planning and increasing the influence of the economic mechanism on increasing production efficiency and labor quality, which stated that the five-year and annual plans of the production enterprises must be developed on the basis of economic and engineering calculations, i.e. within the framework of the input and output data specified by the plan.

The use of construction capacities in the state plan is guided by the system of balances, priorities and priority tasks, which are specified in a directive manner and form the axis of supplier-purchaser negotiations. A knowledge and understanding of these, in connection with economic policy, is a basic precondition for improving the efficiency of planning work and deepening substantive performance of the state plan.

/The state plan guides the utilization of construction capacities in accordance with the structure and territorial distribution of capital construction. The guideline balance of construction work for capital construction specifies in the plans, and also in the 1980 plan, the amount of work that can be done for the individual central investors by the contractors' central offices. This in essence limits the amount of capacity for specific central investors, while their specification along

the vertical management axis, together with supplier-purchaser negotiations, fulfills the investment program of the state plan./

The state plan for 1980 has been drawn up in accordance with expected plan fulfillment for the preceding year, and it was necessary to allow for possible slippages on individual projects. Accordingly, the 1980 plan allocates some construction capacity for making up shortfalls in projects worth more than Kcs 2 million RN. Thus the state plan creates some leeway in capacities for making up unfulfilled tasks of the previous year and accordingly for holding steady or possibly decreasing the amount of unfinished construction. Thus it is a case of making the performance of capital construction more realistic, and in monitoring plan fulfillment for 1980 it must be consistently required that these reserve capacities be treated in accounting as specified by the state plan.

The large amount of uncompleted construction and the consistently low mobility and adaptability of construction capacity to the requirements of capital construction, together with the limiting supplies of certain materials and products, require that within the overall amount of work, priorities be set in the performance of planned tasks; these are also basic criteria for evaluating plan fulfillment. Long-standing failure to fulfill the capital construction plan in projects worth more than Kcs 2 million RN decreases their national economic effectiveness and requires their priority performance by the construction organizations and the investor departments.

The 1980 state plan establishes the priority task of providing construction work for projects worth more than Kcs 2 million which are subject to regulation of the amount of incomplete construction by means of a limit on budgeted expenditures for construction starts. The total quantity of such work to be provided varies for the different central suppliers and construction enterprises. For Czechoslovakia's construction organizations as a whole, the share allocated for regulated projects worth more than Kcs 2 million RN is 46 percent of the total, with a figure of 44 percent for construction organizations managed by federal agencies, 49 percent for those managed by the Czech and Slovak construction ministries and 24 percent for those managed by national committees. The priority of plan fulfillment in these projects is also expressed through regulation of wages payable. When the planned output quantities are exceeded, the economic organizations may revise planned expenditures only to the extent that they exceed or at least fulfill the delivery figures.

The state plan priority for products worth more than Kcs 2 million RN will continue in force; but in the directives for the 1981 plan it is specified in detail for the totality of projects worth more than Kcs 2 million, other than comprehensive dwelling construction, which has independent conditions. The plan directive gives the construction enterprises basic guidance in the utilization of construction capacities.

Thus, in carrying out this year's plan and preparing for 1981 it is essential to create the technical and organizations conditions for concentrating capacities on these projects.

The increased specificity of the tasks and the heightened directive nature of the employment of construction work in the state plan increases the demands for input information and its analysis, and in this connection the request for stability of the five-year conceptions of the state plan is justified. The use of machine processing of the production programs of construction enterprises in the ministries of construction, and gradually throughout the construction sector (each project has its own card which specifies its characteristic technical, production and economic parameters), will make it possible to tie the national economic balances of construction capacities more closely to the construction system for all levels of planned management of construction work and for the other participants in investment process.

/This system will also be used in drawing up the Seventh Five-Year Plan and will be linked with tested and proven regulation of the structure of construction capacities specified by the guideline limits on the furnishing of construction work to the individual central investors, within which not only all uncompleted construction in the Sixth Five-Year Plan, but in addition all priority tasks, centralized construction projects and selected investment programs being prepared for commencement in the Seventh Five-Year Plan must be covered. The filling out of the performance program with other construction projects will be checked at the supplier and investor level and will be discussed by the central organs both in overall terms and separately for products worth more and less than Kcs 2 million RN within the framework of the above limits./

Past experience indicates that hard and fast delineation of the production program, with a full load on planned production capacities for the five-year plan, has a negative effect on carrying out the construction projects, because an allowance must be made for refining individual production project figures in the annual plans. In particular, full performance on priority projects requires a certain degree of freedom as regards capacities, which must be allowed for in drawing up the 1981 plan and the Seventh Five-Year Plan.

The extent of this freedom will differ with individual enterprises according to the nature of the construction. But the main requirement is that it make possible, in plan fulfillment, an adjustment to the priorities of the national economy, in keeping with designated construction schedules and the deadlines for putting capacities into operation.

The procedural instructions for developing the draft Seventh Five-Year Plan specify that construction enterprise production programs throughout the construction sector should be machine-processed into data structures that will make it possible to arrange basic cooperative relations and

division of labor within the construction sector. The use of these methods in preparing the Seventh Five-Year Plan depends throughout and fundamentally on disciplined, high-quality preparation of the base data, particularly in the organizations in which this system will be introduced. This system, which effects a linkage of the building performance plan with the capital construction plan, is an approach to modeling the comprehensive satisfaction of the requirements of capital construction by means of complete knowledge of the production program and a higher degree of management of the investment process throughout the sector.

Another priority category of the state plan for construction organizations is the quantity of work on construction projects designated priority tasks. Also included in this category starting in 1980 will be the amount of work on centrally reviewed construction projects designated for completion. The capacity committed to these projects out of the total quantity of capital construction work is as follows:

(%)	1976	1977	1978	1979	1980
Construction organizations managed by:					
federal organs	25.2	19.4	18.6	27.1	19.6
CSR and SSR ministries of construction	21.6	22.9	23.3	23.7	24.6

The proportions given characterize the breakdown of utilization of capacities according to state plan priorities; but in addition, the amounts of work in areas of concentrated capital construction are also included as priority tasks.

/The 14th KSC Central Committee session stressed that the construction organizations must more consistently concentrate their capacities on key investment programs. The plan for 1980 designated for the individual priority projects the quantity of work to be done, progress deadlines and the required deliveries of structural members. In addition, the operating conditions needed to assure these progress deadlines and project completion deadlines in accordance with the state plan are worked out for individual projects. Possible adjustments on the amount of work on state plans away from the state plan figures are possible only when the total amount of work required to be provided by the individual central supplier organs for the individual central investor organs is preserved./

In the state plan for 1980, 264 projects are designated as priority tasks; 37 of these are in the North Bohemian Kraj. In additionk the specifications of the amount of work on compulsory porjects includes amounts of work for 116 projects centrally reviewed as regards completion.

Fuel and energy base projects have priority in the performance of these projects.

In the past, even when they failed to fulfill their plans for capital construction work, the construction organizations fulfilled and overfulfilled their assignments for total quality of work on priority projects, but in individual projects this was not always done in a way commensurate with real progress. Accordingly, in evaluating fulfillment of this year's plan during the course of the year, the main stress must be placed on meeting deadlines for handing capacities over and putting them into operation and on completion of projects, including progress deadlines which are critical for handing over selected capacities and putting them into operation. This means valuing substantive fulfillment of the targets for construction progress over fulfillment in value terms. In keeping with the stress on the importance of priority projects, which are mostly critical for expanded socialist reproduction, completion schedules must also be maintained on the other projects, thus decreasing the amount of uncompleted construction.

In keeping with what is emphasized above, the according of priority to key projects cannot be combined with approaching the other capital construction projects as supplementary production, thus making it possible to make up shortcomings in the reproduction process and possibly also poor-quality management and organizational work. The current priority accorded to key projects is not an economic category, but the result of shortcomings in the performance of capital construction. The aim of the management process is to achieve uniform plan fulfillment in accordance with the deadlines laid down in economic agreements on all construction projects included in the production program. The path to this goal is faster concentration of currently dispersed capacities. Experience indicates that this task must be approached with specific measures in the production program of each production enterprise, for we cannot rely solely on the effects of the incentive system.

According to data from the Czech Ministry of Construction, the current structure of the construction enterprises' production programs for capital construction, given in terms of the number of projects in the Czech Socialist Republic, is as follows:

	Total construction	Priority projects	Priority worth over Kcs 2 million RN	Priority worth under Kcs 2 million RN
Overall				
number of projects	7,140	739	2,893	3,508
percent	100.0	10.4	40.5	49.9
Performed by organizations managed by:				
federal organs				
number of projects	1,141	114	512	515
percent	100.0	10.4	44.9	45.1
ministry of construction				
number of projects	3,145	524	1,772	849
percent	100.0	16.7	56.3	27.0
national committees				
number of projects	2,854	101	609	2,144
percent	100.0	3.5	21.4	75.1

The current situation, characterized by dispersion of capacities over a large number of projects, requires development of specific organizational and management measures, in cooperation with the other participants in the investment process and within the planned quantities of work. This will speed up work on projects which are important for the national economy because they conserve energy, improve export capabilities, represent anti-import measures, and the like, possibly at the cost of other projects which, according to these considerations, may be put into operation on slower schedules.

The utilization of construction work in the national economy is specified by the state plan over the organizational structure of the investors and according to the importance of the project (projects worth more than Kcs 2 million RN, priority projects). Also specified is the territorial distribution of construction capacities in accordance with the program for capital construction in the Czech socialist republic and the Slovak socialist republic, and also in the areas of concentrated capital construction, which include Prague, the North Bohemian KNV [Kraj National Committee] as priority tasks; their fulfillment is a criterion of fulfillment of the enterprises' planned tasks used in running evaluation of plan fulfillment, while the recomputation of planned wage expenditures for overfulfilling the planned quantity of production is linked to it.

The territorial specification of priorities is a result of the fact that the current distribution of construction capacities is not in accordance with the geographical requirements of capital construction, and that these disproportions must accordingly be made up by transfer of construction capacities.

The essential aspect of the transfer of construction capacities is relocation of workers to projects outside the area of their permanent residence. The existing distribution is the result of historical development and it has not been possible to overcome it in the time required through planned regulation or to relocate capacities in accordance with the requirements of capital construction. The basic task is that of building local construction capacities and creating mobile capacities which can equalize supply and demand, particularly as regards specialized trades and types of work within the oblasts and republics, or sometimes nationwide.

/The development of construction capacities and the meeting of needs for construction work in terms of geographic distribution is one of the most complex and demanding tasks of the construction industry, because their fulfillment entails transfers of workers, which are and will be an increasingly demanding problem because of the high standard of living and the strong demand for manpower. The construction industry has been generally successful in mastering these difficult tasks, and during the Fifth and Sixth Five-Year Plan the following concentration of construction capacities has been achieved in relation to requirements of capital construction:/

Location of construction work	Indices 1980/1979	Indices 1980/1975	Indices 1975/1970	Percentage of total amount of work 1980	1975	1970
CSR	103.6	121.2	150.0	100.0	100.0	100.0
in Prague	102.6	125.8	200.8	18.8	18.1	13.5
in North Bohemian KNV	103.1	124.3	173.1	15.7	15.3	13.2
SSR	104.2	130.7	154.6	100.0	100.0	100.0
in Bratislava	107.5	129.4	212.2	15.1	15.3	11.1

The table indicates the high degree of geographical concentration of construction capacity; a third of all construction work in the Czech Republic is done in Prague and the North Bohemian KNV.

The overall figures do not adequately express the demands of the task. For example, the Ministry of Construction carries out almost 40 percent of its building work in these areas.

Concentration of construction capacities and their transfer from kraj to kraj were particularly intensive during the Fifth Five-Year Plan; overall,

production increased by Kcs 9.5 billion in this period and by an additional Kcs 4.7 billion over this high level in the Sixth Five-Year Plan. During the Fifth Five-Year Plan, in order to assure increased output in these areas, an increase of about 40,000 workers was required, which made possible a broadly-conceived social program and particularly the construction of residences comparable to hotels. A material and production base was built at the same time, although it must be stated that this was not done intensively enough and for the most part fell behind construction requirements, and that the production bases still do not fully utilize the benefits of sectoral integration.

The construction industry is handling the planned quantity of construction work for the Sixth Five-Year Plan in areas of concentrated capital construction, although substantive plan fulfillment lags behind the capital construction program and is affecting the smoothness with which both public utilities and facilities and projects on which development of the fuel and energy base depends are made available. The carrying out of this year's plan and the preparation for 1981 require creation of the conditions for smooth construction and for the corresponding smooth utilization of workers and machinery. In these areas in particular, the Soviet construction industry sets an example in the mastery of demanding tasks with a high level of geographical concentration, whether it be residential construction in Moscow and other cities, or industrial construction in areas with reserves of raw materials, and it does so under incomparably more difficult natural conditions and with longer transport distances.

The connection and coordination of the capital construction plan with the construction work plan make the tasks in comprehensive residential construction (KBV), apartment construction and construction of the public utilities and facilities of residential towns more specific. The state plan explicitly sets the assignments for comprehensive residential construction and specifies the number of apartments required to be completed in order to accomplish the social program of building a developed socialist society. In the Fifth and Sixth Five-Year Plans, construction work on comprehensive residential construction developed as follows:

	Indices			Percentage of total work on capital construction		
	1980/1979	1980/1975	1975/1970	1980	1975	1970
CSSR overall	110.5	129.3	127.7	30.9	30.4	34.2
By CSR and SSR ministries of construction	109.9	127.9	130.3	91.4	92.4	90.6

In the breakdown of work by contractor organizations, about 30 percent of the total was on comprehensive residential construction, which is 90 percent carried out by construction organizations belonging to the Czech and Slovak ministries of construction. Comprehensive residential construction accounts for almost 40 percent of these organizations' total capital construction work and is a key factor in their fulfillment of both the production plan and the economic indicators.

There is a systematic failure to accomplish the planned amount of comprehensive residential construction, particularly public utilities and facilities of residential towns. For Czechsolovakia as a whole, the plan for 1979 was about 93 percent fulfilled. Thus Kcs 1.4 billion worth of work was not done. For the Sixth Five-Year Plan, nonfulfillment amounting to about Kcs 3.8 billion is expected. The planned pace for 1980, with a growth rate exceeding 10 percent, is a highly demanding task compared with the approximately 3 percent growth rate achieved in 1979 and requires, in relation to the tasks of the Seventh Five-Year Plan, the creation of the technical and economic conditions for continuing mastery of capital construction.

The causes of the current state of affairs are well known, and all participants in capital construction have a share in them, starting with territorial and planning unpreparedness and lagging development of the production base for new standardized systems, and extending to nonfulfillment of their duty by subsuppliers of construction work and suppliers of materials and products. These shortcomings are centered particularly in the regions of concentrated capital construction and represent the main problem in assuring plan fulfillment for 1980.

The construction tasks which are part of comprehensive residential construction are being fulfilled. The 1980 plan requires the contractors to complete 92,415 apartments, about 10,000 more than were made available in 1979; the 1979 increase over 1978 was not quite 2,000. This comparison indicates the demanding nature of this year's plan, whose fulfillment is essential for achieving the planned number of apartments for the Sixth Five-Year Plan.

The apartment construction assignment itself is being fulfilled, although with major hitches during the year in making them available. But this was preceded by the construction of a modern production base in the first half of the 1960's, when 18 panel plants with a capacity of about 20,000 apartments were put into operation. In addition we should note that the basic precondition for fulfilling the planned tasks regarding the economic parameters of the industrialized building industry is the development of a modern production base, and accordingly this is also a primary task in connection with the Seventh Five-Year Plan assignments for fulfillment of its own capital construction plan by the building industry's production base.

Apartment construction is being carried out by the contracting and cooperative construction organizations and by public self-help. During the Fifth Five-Year Plan, about 615,000 apartments were made available; 394,000 by the contractor organizations, 167,000 in single-family houses, and 54,000 by cooperative self-help. During the Sixth Five-Year Plan it is expected that the planned assignment will be exceeded and about 650,000 apartments will be made available; the increase will be primarily from the contractor organizations.

Apartment construction has developed into a highly industrialize branch of construction in which currently an average on-site labor consumption of about 520 hours per apartment has been attained, with conditions favorable for a further decrease. However, it is necessary to concentrate on decreasing overall labor intensiveness (including nonconstruction-site labor intensiveness), particularly in the prefabricated product plants and auxiliary operations, by minimizing investment intensiveness when economizing on labor.

However, the construction industry is faced with entirely new tasks resulting from the requirement of reconstructing existing apartments. In the next five-year plan we must expect that 40,000-50,000 apartments will be involved. Even though this year the problem does not directly affect production, it is nonetheless necessary to solve it, particularly in relation to the production base, for the Czechoslovak construction industry does not have very extensive practical experience in this type of construction.

/During the Sixth Five-Year Plan the construction industry began to assert itself more on foreign markets, primarily in the socialist countries in the construction of oil and gas pipelines, the electrification of railroad lines and even in industrial and residential construction. The mastery of these tasks was on a high level, and in national economic terms contributed to providing raw materials and especially natural gas for the Czechoslovak economy. At the same time, it was confirmed that construction capacities are an export commodity which is in demand and that a slowing of the pace of investment creates some leeway for using capacities on external markets./

The technical and economic level of the Czechoslovak construction industry is competitive in world markets, and in carrying out this year's plan and preparing for 1981 the possibility of export to both socialist and nonsocialist countries, as well as the resultant economic advantages for our national economy, must be examined. The state plan creates possibilities for expansion of export activity, primarily for the Ministry of Construction and specialized capacities of the federal ministry of fuels and energy.

Even given the rapid pace of the export assignments, their share in the Fifth Five-Year Plan did not achieve even 1 percent of the total capacity

of the contractor organizations in capital construction. During the Sixth Five-Year Plan it is expected that this value will be exceeded, and the possibilities for the Seventh Five-Year Plan period are as high as approximately 4 to 5 percent.

Performance of export tasks has its own unique characteristics and differences from export of industrial products, particularly in the fact that it requires transfer of workers. In addition the forms for carrying out production projects in the nonsocialist countries, where it is possible to hire manpower, differ from those in export to socialist countries, where it is necessary to use one's own resources.

Effective export of construction work requires mastery of both the technical and organizational aspects. This entails creating the preconditions in prospective population centers by building a social and production base and concentrating the export tasks in the construction organizations which have the technical and manpower capabilies needed. Thus this involves the area of utilization of construction capacities, which previously lagged behind the tasks of domestic capital construction. Past experience indicates that the need to develop, within comprehensive socialist economic integration, not only scientific and technical cooperation, but also specialization and cooperation in supporting the investment programs of the CEMA countries with construction capacities, has become pressing.

The system of balanced utilization of construction capacities for the needs of capital construction in the national economy together, as well as for export, has been described in some detail as regards state plan indicators, which are broken down and made specific by supplier-purchaser relations in the construction enterprises' production programs. However, in addition to the contractor construction organizations, organizations engaged in construction work which are not included in the plans for contractor construction organizations, i.e. nonconstruction organizations, also take part in capital construction.

Their share in meeting capital construction requirements is as follows:

Location	Indices		Percentage of total amount of work		
	1980/1975	1975/1970	1980	1975	1970
CSSR					
construction organizations	127.1	143.8	77.4	73.5	71.2
nonconstruction organizations	103.6	117.9	22.6	26.5	28.8
CSR					
construction organizations	124.8	141.6	75.9	70.9	68.2
nonconstruction organizations	95.0	115.3	24.1	28.1	31.8
SSR					
construction organizations	131.3	148.0	80.2	78.6	77.6
nonconstruction organizations	122.1	125.4	19.1	21.4	22.4

The development of contractor construction organizations creates preconditions for gradually increasing their share of the total quantity of capital construction, even though it must be taken into consideration that there is a rational limit to the division of labor between these two areas of its performance. The utilization and distribution of the capacities of nonconstruction organizations is specified in the construction work balance for each central investor, so that it is reduced to financial support of capital construction by the direct investors. Both contractor construction organizations and nonconstruction organizations, which are an inseparable part of the sources of construction work in the national economy at the level subject to balancing, must be included in the monitoring of plan fulfillment.

/Satisfaction of the requirements of capital construction by construction capacities with the required breakdown also involves cooperative relations between construction and nonconstruction organizations, particularly involving subcontracted supply of the special construction work on which depend smooth construction progress and on-schedule completion of projects (high-voltage and low-voltage wiring, ventilation and air conditioning). In its decree on the plan for 1980, the CSSR Government imposed the task of meeting the needs of the construction industry, particularly for projects approaching completion or priority projects, so that it would be informed regarding performance of this task./

The balance system for construction work fully covers expanded reproduction of capital assets. As regards repairs of long-term assets, buildings and structures, these needs are covered by both contractor construction organizations and nonconstruction organizations. The state plan assigns the contractor construction organizations a quantity of repair work; the breakdown of this work during the Fifth and Sixth Five-Year plans developed as follows:

	Index 1980/1979	Average annual pace, Sixth Five-Year Plan	Share of total amount of work, %		
			1980	1975	1970
Total construction work on repair projects	104.0	2.8	100.0	100.0	100.0
Done by organizations managed by:					
federal bodies	104.6	0.0	3.8	4.3	4.4
CSR and SSR ministries of construction	99.9	2.8	23.7	23.7	17.0
CSR and SSR national committees	105.3	2.8	71.6	71.3	77.6

As indicated by the percentages, division of labor at the sector level is stable, as is the breakdown of the repairs conducted. The pace of development in the Fifth Five-Year Plan surpassed the planned levels, particularly in work on capital construction. One of the main causes was the carrying out of so-called major repairs on the power grid, the quantity of which was limited in the Sixth Five-Year Plan. We may expect that overall, construction work on repair projects will surpass the planned quantity in the Sixth Five-Year Plan.

The basic approach to the plan for 1980 is rational utilization of these capacities in the context of planned reserves. Meanwhile, an outflow of capacities to the areas which weaken capital construction is undesirable, particularly in organizations belonging to the construction ministries. The current situation requires maximum concentration of capacities on priority investment programs and on completion of projects. To adjust supply and demand in repair work, the capacities of the nonconstruction organizations, which have a slower pace in capital construction, may be used.

Construction work on repair projects is a serious national economic problem. The need for it stems from the development and the structure of capital assets, buildings and structures in the national economy. Performance of repair work, however, entails raising the technical-economic level of its performance, which requires that a technical policy also be worked out for this field, which is making increasing manpower demands. The low technical level of this work is affecting the meeting of current needs.

The participation of construction organizations in both repair work and private capital construction is consistently low in terms of deliveries to the public. With demand exceeding their capacity, the construction organizations are not adequately meeting the needs of the public. Accordingly, in addition to reproduction of capital assets and export, the construction industry is also faced with the task of meeting the public's needs for construction work.

Meeting the needs of capital construction on time, i.e. completion of projects, is emerging as a problem of the structural development of construction capacities. The 15th KSC Congress assigned the task of decreasing the level of uncompleted construction and shortening the average duration of projects by 15-18 percent by the end of the Sixth Five-Year Plan, and the Sixth session of the KSC Central Committee mapped out the task of resolving the inconsistency between the relatively rapid progress of construction in gross terms and the long periods required for completion of projects. This is a task which is not successfully being mastered and whose accomplishment will stretch over into the next five-year plan.

/To carry out the 1980 plan as regards completion of construction projects and concentration of capacities on priority projects, it is also

necessary to proceed in terms of the starting base for the Seventh Five-Year Plan, particularly in connection with the structural development of construction capacities and completion of the construction cycle. The preconditions for decreasing the amount of uncompleted construction are provided by the state plan, by limiting the number of construction starts. The construction industry has the task of adapting itself to these structural changes by reorganizing enterprise capacities./

To decrease the amount of uncompleted work and to complete projects, the state plan assigns the contractor construction organizations specific quanitities of construction work on projects to be completed in the planning year and issues directives regarding concentration of capacities. These are interconnected instruments; the directives on concentration limit construction starts, and specification of amounts of work on projects slated for completion creates an economic pressure to get the projects into operation.

The plan specifies, for the Czech and Slovak ministries of construction, volumes of construction work on projects which are to be completed in the year covered by the plan. The long-term development of the share of this figure in the total amount of work on capital construction is as follows:

	Indices		Billions of korunas		
	1975/1971	1980/1975	1971	1975	1980
CSR Ministry of Construction					
on capital construction	133.7	130.4	17.2	23.0	30.0
on projects to be completed within the year	230.0	113.0	2.0	4.6	5.2
SSR Ministry of Construction					
on capital construction	137.4	136.1	10.7	14.7	20.0
on projects to be completed within the year	188.2	106.3	1.7	3.2	3.4

In the Fifth Five-Year Plan, both ministries had a considerable increase in work on projects to be completed within the year of the plan, while in the Sixth Five-Year Plan this increase has been slowing and is characterized by a decreasing share of this work in the total quantity of capital construction. Analysis reveals a number of causes, involving both the contractors and the investors, but the common denominator is a falling behind in construction completions, with which is associated a falling behind in the development of capacities for completion of work, and their nonuniform use during the course of the year.

Although guidance of the development of capacities toward the completion cycle is stimulated by enterprise and personal incentives, nonetheless the results achieved are not satisfactory. It appears imperative to test and develop new approaches in connection with the evaluation of enterprises, not in terms of fulfillment of volume indicators, but in terms of completion of projects and handing over of completed work for use. The designation of a quantity of work for completion in the annual plan, possibly with an annual increase included in the directives, is too short-term a measure to orient capacity and cannot do much to work out the needed structural development. In essence, it can only seek ways to step up completions within the context of existing uncompleted projects. This is relatively little leeway, as is also shown by the results achieved. For the state plan, in which the basic economic dependencies are to be expressed, the inclusion of an annual quantity of work on projects designated for completion is more rational than norms on uncompleted construction, since it would set an assignment for completions on a long-term basis in relation to the pace of development of construction capacities and the decrease in the number of uncompleted projects.

In addition to the assignment for completions, which is set in absolute value terms, the organizational support of the plan provides directives on concentration of construction capacities on a smaller number of projects currently under way, and the average number of workers per project, which is the decisive factor for concentration of construction machinery and equipment as well, is chosen as a measure of this. In order to increase the concentration of construction capacities on a smaller number of projects currently under way and gradually to decrease construction times, the contractors' central offices are ordered to have their subordinate organizations set maximum limits on the number of construction starts, which they will determine in such a way as to effect an increase in the concentration of workers on projects of 8-12 percent over the 1979 plan (in the 1979 plan the assignment for concentrating workers on projects was set at 8-12 percent), also specifying the number of projects to be completed and budget expenditures on them.*

In carrying out the plan, this directive must be fully adhered to, and in addition it must be stressed that it applies to all construction enterprises in the sector and may not be narrowed to enterprises manged by the construction ministries. Another of the current shortcomings of sectoral management is the fact that approaches and solutions are not always implemented throughout the sector, which increases the differences in technical and economic levels between individual enterprises and departments within the sector.

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*An analysis of this problem and a calculation method were given in the article "Concentration of Construction Capacities to Deal with Uncompleted Construction," PLANOVANE HOSPODARSTVI Nos 3 and 4, 1979.

/The construction industry's main tasks in the 1980 plan have now been summarized. Their accomplishment must be approached as representing the creation of the starting basis for the next five-year plan, and monthly and quarterly plan fulfillment at all economic management levels must be analyzed from this angle. The main criterion is substantive fulfillment of the planned tasks, and the plan may no longer be considered as fulfilled when only the total quantity of work conducted with one's own workers, i.e. ZSV value, is achieved./

The state plan charges the construction industry with accomplishing the substantive tasks, and it uses its system of priorities to orient the development of construction capacities in accordance with the requirements of the capital construction plan, and does not place achievement of gross or overall or aggregate value indicators in the forefront. On the basis of the organizational support of the 1980 plan, each construction enterprise is assigned a range of indicators in the areas of breakdown of sales, proportion of expenditures on adjusted output and technical development, whose fulfillment is a basis for evaluation of plan fulfillment and which cannot be narrowed to aggregate indicators.

[No 6, 1980, pp 43-57]

[Text] At the conclusion of the Sixth Five-Year Plan and before the entry into the Seventh, the construction industry has received new economic conditions which require that in many areas it change traditional views of its development, not only in the stage of carrying out capital construction, but especially in the stage of planning preparation. The fulfillment of the 1980 plan must also be judged from this angle, for it creates the base for smooth mastery of improved utilization of inputs both in the production process and in the phase of design and manufacture of intermediate products, in which there is critical potential for new technical and process solutions.

/Rationalizing the conduct of work on construction projects can lead to only part of the needed savings on metal, fuels and energy. The critical effect must be sought in design decisions, which will respect hard-to-obtain materials and products and try to replace them with materials and products from the domestic raw materials base. In securing approval of design documentation, the supplier and designer must base themselves on the real production base. Design preparation this year will determine consumption in the second half of the Seventh Five-Year Plan, from which it follows that approaches oriented toward adherence to the above-mentioned national economic limitations for development of the construction industry, and thus for performance of capital construction, may not be narrowed, even in the stage of performance of the construction project. Only mastery of the entire investment cycle from preparation of the investment project to handing over the facility for permanent use can bring about a turnaround in previous, frequently burdensome, design demands for hard-to-obtain materials and products./

For example, the national economy, and accordingly the construction industry, has sufficient large-diameter pipeline material and extensive possibilities for substitution of alternative materials (steel, cast iron, plastic, reinforced concrete, prestressed concrete), but nonetheless for a number of years the use of steel pipes from Podbrezov has become more intensive, although it has long been known that the output of these will not increase. The systematic failure to balance demand against real supply is leading to hitches in capital construction, conversion of design documentation to other materials, and as a result prolongation of construction time. The use of pipe from Podbrezov unquestionably has technical and economic advantages, and under some technological conditions it has irreplaceable characteristics, but given the situation with regard to supplies of piping materials, a realistic technical solution based on the capabilities of the national economy must be agreed upon between supplier and esigner in the design preparation stage. This will not excuse inadequate adaptability (structural changes) of the material producers to the characteristics required for construction effectiveness.

It would be possible to cite further examples, but the purpose is only illustration and correct understanding of the idea of relations between the investor, designer and contractor, faced with limited material inputs to the construction industry. It thus proves essential to connect them rather consistently and to reconsider the current division of labor in planning preparation of construction projects so that the working plans will be developed by the construction contractor. This involves extremely complex system relationships, whose efficiency has already been investigated many times; and it is useful to turn to them again in regard to connecting the processes for performance of construction projects with the real material-technical base of the construction industry. Obviously, other factors too are operative here, which we need not further enumerate in connection with the problems of the 1980 plan.

In keeping with the balanced supplies of construction work in the national economy, the development of the capacities of construction organization has been specified in terms of the value of work conducted by an organization's own workers (ZSV):

	Indices of ZSV development			Meeting the increase in ZSV with increased labor productivity		
	1975/1970	1980/1975	1980/1979	5th FYP*	6th FYP	1980
CSSR as a whole	150.1	128.8	103.8	71.5	82.6	94.7
federal organizations	151.0	115.7	99.8	66.3	62.4	99.5
CSR and SSR ministries of construction	150.7	134.1	104.4	70.0	81.5	93.2
organizations managed by national committees	149.2	121.1	103.9	78.8	91.9	100.0

*five-year plan

The degree to which labor productivity provides for increases in production will gradually increase in the next decade; the level established in the 1980 plan assumes an increase of 1,800 workers in the sector. The exhaustion of manpower reserves in the national economy and the expected pace of investment in the next five-year plan present the construction industry with the task of providing the full increase in output through an increase in labor productivity. With its relatively small increase in comparison with previous years, the 1980 plan is the beginning of a new stage in the development of the construction industry, lacking an increase in manpower; this is not a reflection of current interest in employment in the construction industry, as frequently appears in discussions of the increase in the number of workers in relation to planned tasks.

During the last 10 years, employment in the construction industry has been characterized by a drop in absolute growth. In the Fifth Five-Year Plan, an increase of 51,225 workers was achieved, exceeding the planned value of 17,290 by a total of 33,935 workers. The turning point came during the Sixth Five-Year Plan. The planned increase in the number of workers was fulfilled as follows (in thousands of workers) during the gradual decline:

	1976	1977	1978	1979	1980
Sixth Five-Year Plan	545	553	555	561	565
Annual increase	8	8	2	6	4
Actual	542	551	554	557	559*
Annual increase	5	9	3	3	2*

In spite of difficulties in finding workers for the construction industry it is expected that fulfillment of the Sixth Five-Year Plan will amount to 22,000 of the planned figure of 28,000 workers, which is reflected in the last year in an average worker complement which is 6,000 workers low.

/The growth of construction capacities in the Seventh Five-Year Plan is based on the planned complement of workers in 1980, with the increase in output being met by an increase in labor productivity. This requires that this year, in addition to more efficient utilization of available workers, the distribution of workers in the various activities of construction enterprises be reevaluated; what is especially involved is a relocation of workers into production processes in the construction projects and into secondary activities. The essence of this situation is that even with an increase in manpower the plans for workers in the trades, particularly in certain specialties at the construction sites, were not fulfilled, and it was necessary to fulfill them by means of imports./

*annual plan

The structural transformation of capacities during the Seventh Five-Year Plan is associated in particular with a strengthening of the enterprises engaged in industrial and engineering construction, and requires solution of the problem of placement of workers, and of the associated problem of division of labor within the construction sector and between the construction industry and the other sectors of the national economy. The demanding nature of the task lies in the fact that the structural conversion must be carried out during a stagnation in the number of workers throughout the five-year plan, essentially at the 1980 level. Accordingly this problem must be analyzed profoundly and a solution sought within the designated manpower limitations.

The increase in the number of workers in the construction industry and in its basic activities has been as follows (in thousands):

	Total workers	Workers engaged in construction	Manual	Operations and service	Other	Workers in auxiliary operations
Initial breakdown of workers in 1950	325.4	276.1	226.7	12.0	37.4	49.3
Increase in:						
First Five-Year Plan	46.7	31.5	15.5	2.7	13.3	15.2
Second Five-Year Plan	71.1	49.7	37.0	1.4	11.3	21.4
Third Five-Year Plan	0.3	-3.2	-8.6	0.5	4.9	3.5
Fourth Five-Year Plan	42.0	30.3	15.2	1.4	13.7	11.7
Fifth Five-Year Plan	53.0	32.9	19.0	3.0	10.9	20.1
Annual increase:						
1976	5.9	1.7	-1.2	0.6	2.3	4.2
1977	7.3	3.5	1.8	0.3	1.4	3.8
1978	3.3	0.6	-0.3	0.3	0.6	2.7
1979	3.4	-0.1	-0.6	0.4	0.1	3.6

Hitherto the growth of construction capacities depended on a rather rapid increase in the number of workers, which made it possible to handle structural changes within its scope with virtually no interference with enterprise breakdowns.

In the Third Five-Year Plan there was a drop in the number of workers in construction, which began in 1961 and continued through 1962 and 1963. The turnabout came in 1964, and the 1962 number of workers was first exceeded again in 1966. The movement of workers out of the construction industry, which resulted from a loss of preference accorded to this sector, had to be dealt with by extraordinary measures in wages and

social policy. Instructive in this connection is the fact that renewing interest in work in the construction industry is a long-term process. Similar symptoms have been observable in the current five-year plan as well, and their result is a shortage of workers with certain skills in the construction projects.

/Leeway for structural transformation of construction capacities in keeping with the requirements of capital construction must also be sought in more efficient allocation of workers between primary construction work and the secondary operations, and within the latter. Accordingly, it is advantageous to characterize past development in more detail. Over the long term, the structure has developed in the direction of an increase in the percentage of workers in secondary operations from 15.2 percent in 1950 to 22.5 percent at the end of the Fifth Five-Year Plan, with a trend to faster and faster growth. In 1979 the figure was already 24.5 percent./

Within the primary activity, the percentage of operations and service workers is gradually increasing, and the percentage of technical operations workers is growing, while the percentage of manual trades workers at the projects decreases.

Year	Workers engaged in construction work	Trades	Operations and service workers	Other workers
1950	100.0	82.1	4.3	13.6
1955	100.0	78.7	4.8	16.5
1960	100.0	78.2	9.5	17.3
1965	100.0	76.4	4.7	18.9
1970	100.0	74.3	4.7	21.0
1975	100.0	73.0	5.0	22.0
1977	100.0	72.3	5.2	22.5
1978	100.0	72.1	5.3	22.6
1979	100.0	72.0	5.4	22.6

The changes in the breakdown of workers in construction work reflect the industrialization of the construction industry, particularly the introduction of the prefabricated and fully assembled construction technologies and the increased share of mechanization and comprehensive mechanization of construction work, as well as the associated demands on management and organization. It is necessary to determine the degree of this effect and the corresponding required number and breakdown of workers in construction work.

A criterion of an effectively structured increase in the number of workers in construction is substantive fulfillment of the state plan tasks. Among the primary causes for nonfulfillment we may cite shortages in certain construction trades, and enterprise plans too are not being fulfilled in terms of structural indicators. Thus the breakdown of workers is not

in agreement with the needs of structural development of construction capacities. The pressure to end this disproportion is increasing, because it involves the activity which consumes the greatest amount of labor value added. When the planned development of capacities is based only on increased labor productivity, the problem becomes even more acute. It cannot be put off to the Seventh Five-Year Plan: it requires consistent solution even during performance of the 1980 plan, which must prevent further divergence between demand and the supply of construction trades.

In the Fifth and Sixth Five-Year Plans, the structural disproportion between construction capacities and trade breakdown of the workers was made up by import, in the form of:

/-importing turnkey projects;
-subsupply for general contractors of projects;
-import of building trades./

In connection with the development in the Fifth Five-Year Plan, a gradual elimination of both direct import and import of trades has already been achieved in the sixth.

The belated reaction to the unfavorable structural development of the building trades, together with inadequate regulation of the increase in number of workers on projects, showed themselves systematically in a pressure to import trades, which further increased the need to concentrate some trades (carpenters, masons, scaffolders, plasterers) on selected projects, particularly the nuclear program, hydraulic and thermal power stations, metallurgical facilities in the North Bohemian Kraj, projects in the "third area" and comprehensive housing construction in Prague.

The share of imported construction work in the total quantity of capital construction in the national economy is relatively small (for the Sixth Five-Year Plan), amounting to about 2 percent of the work done by contracting organizations in capital construction, and is continuously decreasing. Imported building trades averaged about 1,000 workers a year with a falling trend. The demand for these imports stemmed from the long-term unfavorable development of the worker breakdown, which was not consistently regulated in keeping with national economic goals. As the imports are eliminated, the Czechoslovak construction industry has considerable leeway for matching supply to demand through domestic resources, by the first year of the Seventh Five-Year Plan at the latest.

The approaches to evaluating the previous unfavorable development of the worker breakdown in the construction industry may not be simplified, because they are also associated with the nature of employment in this sector (separation from family, transfers to key projects and to areas of concentrated capital construction, work under difficult weather

conditions), and this during full employment and a high standard of living for all workers in the national economy. Bringing workers into the construction industry, keeping them and training them in the required range of trades is and will be one of the most demanding tasks of organization and management work in the construction industry.

/Concentrated attention must be devoted to this problem in the 1980 plan in terms of both skill structure and comprehensive creation of the conditions for keeping the workers. Hitherto a high level of worker turnover amounting to roughly a third of the total labor force and systematic overflow between enterprises and departments has decreased the efficiency of manpower utilization and failed to provide a firm foundation for an increased level of organizational work. This problem must be dealt with in the context of the planned reserves, and import of building trades can no longer be planned in order to make up for fluctuations./

At the 14th plenum of the KSC Central Committee, an unequivocal directive was issued to the construction industry that its development of the trades structure should make it possible with the utmost speed to provide the imported building trades and construction capacities from our own resources. The import of construction work ended, other than agreements already concluded, and the import of building trades will continue only within strict limits. The CSSR Government has discussed the elimination of import of building trades and has ordered the construction ministries to develop a comprehensive program to supply the needed range of trades.

In the 1980 plan the increase in the number of workers must already be so regulated that the trades in particular are strengthened, both by recruitment of manpower and by its redistribution among the internal resources and construction enterprises. This will create the basis for retraining and further training of workers in the required trades.

On the basis of previous development and experience which confirms that training and instruction of workers is a long-term process, the CSSR Government has directed that a trades management system be developed at the enterprise, VHJ and department level; this must be in keeping with current capabilities and manpower resources. At the same time, the conditions are being created for utilizing the trades which are in shortest supply by concentrating them on key projects, by developing specialized teams led by experienced technicians and by bringing these to bear smoothly and using them on the basis of time schedules. This thus involves an approach which increases organization and management of workers above the level of a single project, and possibly above the level of enterprise and VHJ. Making these organizational measures effective requires a greater availability to the workers of construction machinery and equipment; this will by no means be based solely on demands for new machinery, but will come primarily by improved utilization, with a decrease in the amount of uncompleted construction.

In order to speed up the matching of the supply of trades in short supply to the demand, measures have been adopted whose fulfillment is among the basic tasks for 1980, particularly as regards creating the conditions for elimination of these disproportions in the very first years of the Seventh Five-Year Plan.

Specific tasks in the training of unskilled workers as assistants in carpentry and tiling work have been assigned. In addition, wage bonuses have been established for bringing workers into training and retraining as carpenters and tile-layers, and the limits for personal evaluation and the length-of-service bonus after at least 5 years have been increased.

Management of the development of the trades structure in accordance with the capital construction program requires development of a system for monitoring of long-term regulation of trades development in connection with the structural changes in the production program and trends in production technology and the total number of workers.

In connection with achieving an increase in construction output by increasing labor productivity, stress is laid on the need to reevaluate the existing distribution of workers in the construction industry. We refer in particular to workers engaged in construction and workers in secondary operations, whose share amounts to about 25 percent.

The secondary operations of construction enterprises have developed under conditions of the industrialization of the construction industry and development of social division of labor, not always effectively utilized, and with an inadequate utilization of the economic advantages of concentration and specialization of production within departments and sectors. The level which has been achieved also requires that all capabilities be used in this area to increase construction efficiency in relation to the 1980 plan and the preparation of the Seventh Five-Year Plan.

The varied nature of the activities of secondary operations requires a differentiated approach, both as regards effective meeting of the requirements of construction and in relation to the economic environment, particularly the provision of deliveries and services by the other sectors of the national economy. The current status and developmental trend of secondary operations of the construction enterprises in the Czechoslovak construction industry can be expressed in terms of the following breakdown of workers (in thousands):

	1975	1976	1977	1978	Increase in number of workers by year 1976	1977	1978
Secondary operations as a whole	120.0	124.6	129.3	132.3	4.6	4.7	3.0
Industry	44.6	46.3	48.0	49.5	1.7	1.7	1.5
Transport	46.5	48.4	49.6	50.3	1.9	1.2	0.7
Planning	7.2	7.5	8.2	8.3	0.3	0.7	0.1
Material and technical supply	1.2	1.0	1.0	1.0	-0.2	--	--
Plant dining rooms	1.7	1.8	2.0	1.9	0.1	0.2	-0.1
Other production activities	1.4	1.5	1.4	1.4	0.1	-0.1	--
Research and development	1.9	2.0	2.0	2.1	0.1	--	0.1
Housing and domestic	5.6	5.5	6.1	6.2	-0.1	--	0.1
Personnel training	5.9	5.9	6.0	6.0	--	0.1	--
Machine computation stations	1.2	1.4	1.6	1.7	0.2	0.2	0.1
Enterprise health services	0.1	0.1	0.1	0.1	--	--	--
Other departmental activities	2.7	3.2	3.3	3.8	0.5	0.1	0.5

Industry and transport have the greatest weight, with shares of 37.4 and 38 percent respectively. Far behind are planning (6.3 percent), the housing services and residential operations (4.7 percent), and manpower training organizations (4.5 percent) while the remaining activities account for less than 10 percent.

The increase in the number of workers during 1975-1978 was basically directed to the production, transport and project planning areas: 4,900 for the building materials industry, 3,800 for transport, 1,100 for planning and 700 for housing and personnel training services.

The structure of secondary operations in the construction sector differs considerably in individual enterprises of the relevant central organs according to the nature of their work, the degree of development of cooperation and additional factors which affect the need for particular activities. Accordingly we cannot introduce specific conclusions for the enterprise level on the basis of a sectorwide viewpoint without specific balancing of demand and supply of products and services for smooth construction progress, as well as the meeting of the construction industry's needs by the other sectors of the national economy.

/From partial findings, however, we may conclude that the material production base and services within the secondary operations of construction

enterprises have dispersed capacities with low work efficiency, result- from the relatively small-series nature and variability of a production program which is specified on an as-needed basis to assure smoothness of construction work. The basic route to making these activities more efficient is their sectoral integration in connection with intersectoral division of labor, particularly in relation to the machine-building industry. The construction of these comprehensive production and service bases has already been begun in areas of concentrated capital construction, particularly in Prague and the North Bohemian Kraj. During the Fifth and Sixth Five-Year Plans a substantial part of the required social and production base was implemented./

The development of construction enterprises' secondary operations has a consistently rising trend, and their direct relationship to primary construction activity and to the overall efficiency of construction requires planned management not only at the department and operating organizational level, but in the sectoral structure as well. Accordingly, the relevant indicators were included in the Unified Procedural Directives for Developing Five-Year and Annual Plans; these make it possible to proceed to a central solution of the problem of efficient development of these activities. The decisive role among these activities goes to the building materials industry, which breaks down as follows according to number of workers:

	1976	1977	1978	Indices 1977/1976	Indices 1978/1977
Total industrial production and production-support construction	100.0	100.0	100.0	100.1	101.5
Production-support construction work	17.7	15.4	15.1	87.4	99.6
Production construction components	28.5	29.4	29.1	103.0	100.4
Rock quarrying and processing and preparation of light fillers for concrete	1.8	1.7	1.6	93.4	95.5
Production of metal structural members and fittings	14.5	14.0	13.9	96.8	100.5
Repair of construction machinery	30.3	31.9	32.9	105.4	104.5
Production of carpentry and woodworking products	2.3	2.3	2.3	101.2	102.4
Other industrial production	4.9	5.3	5.1	108.1	99.0

Each of the above types of production has its own specific characteristics, requiring its own approach to increased efficiency, both at the enterprise level and in the context of specialization and cooperation. On the

basis of an independent analysis of the efficiency of development of prefabrication, measures have been adopted in the 1980 plan to increase the efficiency of production of structural components. The construction organizations have proved to be using these production bases inefficiently, and accordingly labor productivity has been stagnating even as equipment has increased. The significance of these measures lies in the fact that a significant proportion of the production of construction components is concentrated in the construction enterprises. Of the total capacity under the ministries of construction, about 35 percent is incorporated organizationally into the construction enterprises, while the remaining 65 percent is in the Prefabrikace VHJ, i.e. in the building materials industry.

In order to increase the level of planned management of this important supporting area, as part of the organizational support for the 1980 plan the Czech and Slovak construction ministries are ordered to establish assignments for developing the production of silicate prefabricates, organized at the construction organization level with the following indicators:

/--output in physical units;
--adjusted output;
--labor productivity;
--number of workers;
--ratio of material expenditures to adjusted output./

Also required is documentation and monitoring of the fulfillment of the tasks assigned.

The production of silicate components is specified in some detail because it is a named assignment in the plan for 1980 to whose fulfillment concentrated attention must be given, and the findings from which will be used as the basis for improving planned management of construction enterprises' secondary operations.

In carrying out this year's plan and preparing the 1981 plan and the Seventh Five-Year Plan, the secondary activities of the construction enterprises must be expanded only on a scale which will assure smoothness in the construction process. The development of the individual activities in subsequent years will achieve varying economic results. Construction work in support of production processes will develop the most rapidly as regards total output (and also in labor productivity in reaction to a drop in the number of workers), in accordance with the implementation of technical progress and will achieve the required relative savings of workers (production in central concrete, mortar, steel reinforcing rod and crushed-stone plants, and the like).

The shortage of repair capacities in specialized organizations requires that in addition to technical and preventive maintenance, building

industry production also carry out medium repair and general overhaul of machinery and transport facilities. According to estimates, the repair shops of construction organizations will carry out about 50 percent of the repair work. With dispersed capacities and a shortage of spare parts, their efficiency is low, as indicated by their increasing number of workers.

The construction enterprises are carrying out the production of about half of the fastenings and fittings used, while the rest is produced on site or delivered from production facilities outside the construction enterprises. Increased efficiency must be combined with concentration of production. Similarly, analyses must be made of secondary activities, and not only in the building materials industry. When seeking ways of increasing construction efficiency, the focus of attention should be secondary activities which have fallen below the technical, organizational and management level of primary construction work, which will make it possible to increase output with lower investment expenditures than in primary construction work.

Plant transport has a special position in construction enterprises' auxiliary operations; its large increases in number of workers must be evaluated in connection with transport output. The nonproduction activities also meet the need for workers for the housing services, training work and plant dining rooms, as specified by the relevant regulations, even though there are ways of economizing in this area.

The development of construction enterprises' secondary operations has reached a level requiring comprehensive sectoral analysis in terms of the possibility of increasing the effectiveness of manpower utilization in the construction industry, which in many cases is limited only in construction work itself, i.e. in decreased labor intensiveness at the construction sites. This narrow conception of rationalization, directed only toward work on the construction site, does not embrace all possible ways of improving the efficiency of secondary activities, which must be discovered in concentration and specialization of production, supra-enterprise service activities and rationalization of intersectoral division of labor. Here it must be stressed again that the development of the construction industry in the Seventh Five-Year Plan is based on increased labor productivity with essentially no increase in the number of workers over the level achieved in 1980. This requires that a structural transformation of construction capacities be carried out throughout the production and nonproduction activities of construction enterprises.

Creation of conditions for a smooth transition from the Sixth to the Seventh Five-Year Plan is essential in 1980, and this cannot be separated from fulfillment of planned tasks and preparation of the plan for 1981. This entails not only a problem of the construction industry itself, but also a problem of the national economy, for it is growing into a

question of working out intersectoral division of labor, particularly between the construction industry, the machine-building industry and other sectors of the national economy. Assuring deliveries of materials and products from these sectors is a precondition for limiting less efficient production activities in the construction enterprises.

/The 14th plenum of the KSC Central Committee assigned first place among the principal tasks to consistently assuring the planned increase in production with limited inputs and ordered that the maximum attention be devoted to conservation in the consumption of petroleum products./

/The construction industry is one of the sectors of the national economy which has a high consumption of fuel and energy, both in its own production process and in the range of building materials, other materials and parts which it consumes. The quality and the thermal engineering parameters of exterior facings determine fuel and energy consumption when buildings are in use. Thus we should briefly identify the areas in which is is necessary to work out programs of measures to reduce fuel and energy consumption in carrying out capital construction, in all phases from manufacture of semifinished products to the handing over of high-quality construction work./

In view of the limited sources of motor fuel, currently top priority belongs to provision for deliveries in the construction industry, particularly given the increasing technological complexity of the projects (construction of nuclear power plants, hydraulic engineering products on the Danube, mains, transport projects and the like). The construction process is highly transport-intensive; the breakdown of transport for construction work and the building materials industry is developing as follows:

	1970	1975	1980	Indices 1975/1970	Indices 1979/1970
Total transport	100.0	100.0	100.0	138.4	163.8
Plant motor transport	59.7	61.2	66.4	143.1	182.1
CSAD motor transport	27.1	27.0	24.0	137.8	144.9
Railroad transport	8.8	7.3	6.2	115.7	116.8
Water transport and other	4.4	4.0	3.4	123.2	124.4

The critical element is motor transport, whose share increased from 86.8 to 90.4 percent during the last decade; as transport by CSAD [Czechoslovak Motor Transport] has dropped, the share of plant motor transport has increased greatly. Under current conditions, we must justify the level of motor transport in terms of maximum conservation of motor fuel. Accomplishing the planned tasks under the specified limitations on motor fuels requires a decrease in consumption when operating transport

facilities; another route is an absolute decrease in transport tonnage and transport output in connection with the real possibilities for meeting the requirements with other means of transport.

At present there are no technical indicators which provide sufficient information in justifying the amount of transport tonnage and transport output in the construction industry. On the basis of partial findings from construction projects, we may conclude that there is excessive use of transport, particularly construction-related transport of soil. The fuel limitations will help curb this increase, which manifests itself among the construction contractors with all its economic and technical consequences as regards carrying out projects, but has no direct effect on investment and planning preparation.

Motor transport provides a critical amount of work for construction enterprises; the relationship between plant and public transport is organized by plan in such a way that together they meet the overall needs. In the Sixth Five-Year Plan, the motor transport requirements of enterprises in the construction industry (in tons per million korunas of construction work) showed the following development and structure:

	1975	1976	1977	1978	1979	Index 1979/1975
Total						
millions of tons	492	530	546	568	806	123.2
tons/million Kcs ZSV	11,765	11,643	11,307	11,071	11,371	96.7
Earth						
millions of tons	213	230	264	275	296	139.0
tons/million Kcs ZSV	5,095	5,052	5,467	5,360	5,554	109.0
Building materials						
millions of tons	211	233	282	292	310	146.9
tons/million Kcs ZSV	5,047	5,052	5,840	5,711	5,817	115.3

With the total tonnage of all transport up 18 percent between 1959 and 1979, and with the indicator of tons per million korunas of construction work down by 1.1 points, motor transport is expanding.

In the breakdown of materials carried, the share of earth and construction materials is increasing, and transport of other materials is decreasing. The amounts of earth and construction materials carried at the beginning of the five-year plan were roughly the same, i.e. earth-moving work requires just as much transport as construction itself, or in other words the tonnage of earth carried is essentially equal to that of construction materials carried, both per million korunas of construction work and in absolute terms. The weight of construction materials

carried is gradually increasing, but these are only rough calculations, for they take in only motor transport by the plants and by Czechoslovak State Truck and Bus Transport.

According to the tonnages indicated, each million korunas of constructionn work accounts for about 5,800 tons of building materials. The material-intensive nature of construction is determined by construction technology, and in this context a long-term task is to decrease it, particularly in the stage of planning preparation. Another way of decreasing the transport requirements lies in construction organization and management. This involves particularly a decrease in the number of intermediate depots and in excessive transfers and haulage, rationalization of on-site transport and the like. For a rough estimate we can use the example of the material-intensiveness of residential construction, which from this viewpoint is a demanding type. With an average material consumption of 95 tons per housing unit, each million korunas of construction work in this area of capital construction calls for 760 tons of building materials. Comparison of this number with the average amount of transport per million korunas of construction work allows us to judge the extent of necessary and realistically possible savings from the current level. At the same time, it must be taken into account that the amount of building materials transport mentioned includes the building materials industry.

Another important consideration for conservation of fuels is the number of ton-kilometers of haulage by plant motor transport, where conservation and the meeting of transport requirements within the supply limitations are critical for assurance of a smooth construction process.

Plant motor transport can be characterized by the following basic indicators of transport tonnage and transport output in relation to the quantity of work carried out by internal resources (ZSV):

	1970	1975	1976	1977	1978	1979	Indices 1975/1970	Indices 1979/1975
Total								
tons/million Kcs ZSV	8,618	8,189	8,113	7,987	7,966	8,337	95.0	191.8
Earth								
tons/million Kcs ZSV	3,506	3,715	3,741	3,688	3,869	4,090	106.0	110.1
tkm*/million Kcs ZSV	9,209	10,677	11,437	12,394	13,152	15,082	115.9	141.3
average transport distance, km	2.6	2.9	3.1	3.4	3.4	3.7	111.5	127.6
Building materials								
tons/million Kcs ZSV	3,232	3,200	3,089	3,156	2,988	3,070	99.0	95.0
tkm/million Kcs ZSV	36,064	34,976	34,326	35,396	35,633	36,693	97.0	104.9
average transport distance, km	11.2	10.9	11.1	11.2	11.9	12.0	97.3	110.1

It is typical of plant transport within this department (for construction and building materials industry enterprises) that more than half of transport tonnage is accounted for by moving of earth.

The average transport distance for building materials decreased during the Fifth Five-Year Plan. Currently, however, it is moving up, having increased by about 10 percent; thus we have a decrease in both transport tonnage and transport output in ton-kilometers. In this connection it is necessary to increase also the use of trailers and semitrailers. Adherence to specified limitations on fuels and the meeting of transport requirements this year require a comprehensive approach. The construction industry will achieve the planned increase in construction capacities during the Seventh Five-Year Plan with the current level of fuels, and accordingly even this year it is necessary to create the technical and economic conditions for this accomplishment.

Transport tonnage and transport output in ton-kilometers for earth are increasing more rapidly than the amount of construction work. During the Fifth Five-Year Plan, tonnage of earth transported increased by 159 percent, while the number of ton-kilometers increased by 174.6 percent, compared with an increase of 150.4 percent in the amount of construction work; during the Sixth Five-Year Plan tonnage increased by 162.9 percent, and the number of ton-kilometers by 180 percent, compared with an

*tkm = ton-kilometers

increase of 127.4 percent in construction work. During the last 10 years, the indicator of tonnage per million korunas of construction work has increased by about 17 percent, and transport output in ton-kilometers has increased by about 64 percent in the same period; transport distance has increased from 2.6 kilometers in 1970 to 3.7 kilometers in 1979 and is still on the way up.

/The intensity of demand for earth transport is reaching a level which exceeds the real capabilities of not only plant but also public motor transport, and is becoming the limiting factor for smooth progress in construction. Under current conditions, the demand must be met within the specified limitations on fuels. Accordingly it will be necessary to employ nontraditional solutions. Limited tests on construction projects indicate that the planned amounts of earth-moving work are frequently excessive and should be limited; otherwise there will be a decrease in the utility value of construction work. In addition, the dumps of humus and earth that have been set up are far too distant and do not make use of possibilities near the construction sites./

In its decree on the 1980 plan, the CSSR Government ordered the central organs managing investor and contractor organizations to minimize, even in preproduction investment preparation, the amount of excavation and filling, to decrease earth haulage distances and to limit secondary working and hauling.

On the basis of this decree, a statewide test and review of the scale and advantageousness of excavation, filling and haulage of earth is being carried out in order to limit them substantially and decrease haulage distances; this applies to:

/--all projects worth more than Kcs 2 million FN either uncompleted or planned for commencement this year;

--line projects with earth-moving work amounting to more than 10,000 cubic meters;

--other projects with earth-moving work amounting to more than 5,000 cubic meters./

This by no means implies that other projects should remain outside the sphere of interest of either contractors or investors.

The special-purpose inspection commission, consisting of representatives of the general designer, the investor and the construction contractor, will check the following in accordance with the nature of the project:

/--selection of a construction site in terms of the use of local filling materials;

--line projects and fill-type dams in terms of minimizing haulage distances, haulage of earth, use of the nearest supplies of filling materials, and possible new solutions;

--landscape improvements in terms of not entailing the hauling of soil further than 5 km from the edge of the work area and in terms of the benefits to accrue from the proposed improvements and of the amount specified;

--foundation construction in terms of use of progressive methods with limited earth work;

--trenches and pits in terms of the benefits of the earth-moving work and minimization of the quantity, while adhering to the regulations of state standards./

The inspection commissions have a financial interest in achieving savings, and the construction organizations will have their planned output decreased in accordance with their success in limiting earth work, even with lower budget expenditures on the projects.

By its scope and its approach, this inspection lays the groundwork for new methods of working out the relationship between demand and supply. The experience obtained will be used fully in the draft plan for 1981 and the Seventh Five-Year Plan. This one-time project will handle the conflict between transport supply and demand in a nontraditional way, and within the plan for 1980 it will test the starting basis for the Seventh Five-Year Plan. It must be approached from this viewpoint and must be given the requisite support at all levels.

Essentially there are two ways of accomplishing the material tasks of the construction industry designated by the state plan in the context of the limitation on motor fuel, namely thrift in consumption and a decrease in the amount of transport and in haulage distances. An analysis of the connection between the construction industry and transport has indicated new potential for solving the problem.

Another area in which it is necessary to look for ways of decreasing the energy intensiveness of the construction industry is a decrease in the consumption of energy-intensive materials and products based on petroleum products. In the forefront is the consumption of cement, even though currently supply and demand are in balance and cement output fully covers production requirements and market supplies.

/Cement consumption, should, however, be approached in terms of its demands on the fuel and power reserves of the national economy. This justifies the requirements for conservation of cement and for examining the current level of consumption both in carrying out construction projects and in preproduction investment preparation, where the question

is in particular the thriftiness of the construction work and of the proposed design itself./

The problems of decreasing cement consumption cannot be put off until after 1980, because the intensity of cement demand in construction during the Seventh Five-Year Plan will be determined by design planning done this year. From this viewpoint, the task is a pressing one, and extensive initiatives should be developed in this direction. Programmatic approaches must be embodied in a unified technical policy of the construction industry. Its basic criterion must be efficiency and decreased energy intensity of construction projects.

The absolute level of cement consumption in the national economy is increasing, while the ratio of consumption to quantity of construction work by contractor organizations is decreasing, as shown by the table:

	1970	1975	1980	Indices $\frac{1975}{1970}$	Indices $\frac{1980}{1975}$
Total cement consumption in the national economy, million tons	7.6	9.8	10.9	128.9	111.2
Use in production	6.5	8.3	9.4	127.7	113.3
Market supplies	1.1	1.5	1.5	136.4	100.0
Production use (tons) per million korunas of construction work by construction organizations	147.5	125.4	110.3	85.0	87.9

Even though cement consumption is gradually decreasing, the Czechoslovak construction industry is one of the most cement-intensive in the world in terms of consumption per inhabitant. The planned consumption for 1980 is the upper limit, and further consumption must contribute to an improvement of the national economy's fuel and energy balance. A decrease of about 1 percent in cement consumption represents a saving of about 12 million kilowatt-hours of electrical energy and about 15,000 tons of fuel oils.

The construction industry is faced with an especially demanding task as regards increasing the insulating quality of external facing wall components in accordance with CSN [state standard] 73 0540. This involves especially facing panels for building, which as a result of building design, have a substantial effect on insulating quality. Current design of reinforced concrete facing panels is oriented toward heat insulation with polystyrene and to the production of so-called "light prefabrication" components.

In connection with the guidance of technical solutions for projects in the Seventh Five-Year Plan toward decreased consumption of metals,

particularly aluminum, and products and components which are highly demanding as regards consumption of petroleum products and other energy and investment-intensive materials, primarily metal-plastic components, the primary method of increasing the insulating quality of facing panels is the use of the domestic raw and other materials base, particularly silicates. The preconditions for this must be created by further utilization of foamed concrete, whose production has been introduced in the republic, and the conditions for whose expansion are in existence. This is a technically demanding task requiring elimination of previous shortcomings and in particular a transition to large-dimension components which will decrease labor consumption in on-site installation.

Even though the new norm will go into force in 1983, even in 1980 it will be necessary to fulfill consistently the tasks associated with changes in facing panels and to find ways to shorten the established time schedules.

Performance of the planned tasks in 1980 and overall effectiveness of construction depend on, in addition to the areas already mentioned, the utilization of machine capital assets, and the performance of their own capital construction by construction enterprises in accordance with the tasks of structural development in the Seventh Five-Year Plan.

The planned increase in capital assets will make possible the development of construction capacities provided that the tasks regarding their time and output utilization are fulfilled and the dispersion of equipment on projects is decreased by concentrating it on the decisive investment programs.

From the national economic level it is possible to characterize the increase of machine capital assets in relation to these tasks by their effectiveness and the ratio of labor productivity to worker availability, which is developing as follows:

				Indices		
	1970	1975	1980	1975/1970	1980/1975	1980/1979
Labor productivity, thousand Kcs	96.2	130.4	166.6	135.6	127.8	104.8
Effectiveness of machinery capital assets	3.58	3.38	2.79	94.4	82.5	95.5
Worker availability (SZP)	26,885	38,596	59,694	143.6	154.7	109.8

/The increase in worker availability is surpassing the rate of growth of labor productivity, which manifests itself on the other hand in a decreasing effectiveness of machine capital assets. In connection with the preparation of the Seventh Five-Year Plan and with limited investment resources, it will be necessary to slow this decrease even this year.

An increase in the effectiveness of machine capital assets is one of the main tasks of the construction industry, which in addition to increasing their utilization is related to the concentration of construction capacities in order to decrease the amount of uncompleted construction, and is affected by the efficiency of development of by-products by construction enterprises. The low level of elimination of obsolete equipment included in capital assets ties the workers to outmoded equipment with a high consumption of fuel./

A decrease in the amount of uncompleted construction would make it possible for the construction industry to eliminate more obsolete and unsatisfactory machinery. While a low level of elimination expands the machinery inventory and increases the level of capital assets in terms of purchase prices, still it decreases efficiency and to some degree covers up shortcomings in organizational and management work. The current approach makes it necessary for the plan to specify priority tasks regarding equipment elimination, and when these are not adhered to, investment resources are decreased to this extent.

With regard to the plan and this breakdown of construction machinery, there is a specific way of increasing their effectiveness in improving time and output utilization, which are increasing continuously. The trend in time utilization of the main construction machines is given in the table (in terms of number of hours worked per machine):

	1970	1975	1976	1977	1978	Indices $\frac{1975}{1970}$	Indices $\frac{1978}{1975}$
Power shovels	1,715	1,714	1,771	1,796	1,879	99.9	109.6
Scrapers	-	1,257	1,347	1,505	1,435	-	114.2
Bulldozers	1,768	1,809	1,808	1,819	1,869	102.3	103.3
Graders	-	1,040	1,073	1,123	1,113	-	107.0
Cranes	1,986	1,883	1,913	1,980	1,967	94.8	104.5

Overall, time utilization of machinery during the Sixth Five-Year Plan is going up; between 1975 and 1976 it increased by 2.7 percent, between 1976 and 1977 by 3.9 percent, and between 1977 and 1978 by 4.9 percent.

Although this indicator comprises the time during which the machine is engaged in productive work (excluding losses or the time required for preparing the machine or maintaining it after work), this represents use of about 75 percent of the annual number of hours in single-shift operation. Thus the task becomes that of increasing machine utilization in multishift operation, which is also one of the ways of decreasing the demand for construction machinery and equipment.

/The production utilization of machinery is constantly at a low level, and while it it increasing, there is still great untapped potential.

Accordingly the measures adopted by the management organs which create the conditions for higher utilization of construction machinery must be consistently observed. Better utilization of construction machinery is not only a task of the construction industry itself, but must also be assisted by machine producers and suppliers. This involves particularly completing sets of machinery and adding to the machine inventory an assortment which is necessary for structural development of construction capacities./

In this connection, the state plan assigns the machine-building departments overall limits on deliveries, which are made specific in discussions of supplier-purchaser relations. Long-term conflicts between construction industry needs and deliveries have made it necessary to balance key construction machinery at the state plan level and also at the department level. This will improve the specificity of material support of the construction industry.

The plan for 1980 assigns the construction industry demanding tasks whose fulfillment is essential to the fulfillment of the economic and social plan in the Sixth Five-Year Plan and is the initial base for the Seventh Five-Year Plan. In addition to carrying out the plan for 1980, an inseparable part of work on the draft plan and the Seventh Five-Year Plan is the development of the "Set of Measures for Improving Planned Management of the National Economy after 1980."

8480
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ASSIGNMENTS, TRANSFERS, BIOGRAPHICAL DATA ON FOREIGN CORRESPONDENTS PUBLISHED

Budapest MAGYARORSZAG in Hungarian 27 Jul 80 p 2

[Text] At the right of the page MAGYARORSZAG's readers can find a list of the names of MTI correspondents who regularly contribute information and articles to this paper from their places of assignment. From time to time this list changes. Some return home at the end of their assignments, there are young newcomers whose names must also be presented, and others are merely being transformed to new assignments. It also happens fairly often that a name will be found that had figured there previously, but had disappeared for a while, because after a number of years here in Hungary the person has once again taken up in some foreign capital.

Dr Miklos Pek, the new MTI correspondent in Sofia, is 29 eyars old. He completed his education at the ELTE [Lorand Eotvos University of Arts and Sciences] in the State and Jurisprudence Department, and after obtaining his diploma immediately went to work in MTI's Foreign Affairs Section. In 1976 he received a certificate from the MUOSZ [National Federation of Hungarian Journalists] School of Journalism. In early 1977 he received a long-term assignment to Moscow, which he covered for the news service for two and a half years. During the time he was in the Soviet Union he had the opportunity to visit more than half a dozen of the republics in the continent-scale country. He told readers about his trips in his stories. He has been back in Hungary since fall of last year, working as column editor of the MTI Foreign Affairs Section. He is not unfamiliar with his new assignment, having substituted for the regular Sofia correspondent in the summer of 1976. In addition to Russian and Bulgarian he works in German and English.

Istvan Kelemen, MTI's new Warsaw correspondent, is 33 years old. He was educated at the ELTE Liberal Arts Department, majoring in Russian and English. After receiving his diploma he began work for Hungarian Radio. From 1971 to 1973 he attended the MUOSZ School of Journalism. Working for the radio was good training for him. Among other things it accustomed him to the deluge of information that floods us these days, to evaluating it and preparing it for dissemination. He was already working as a leading member of the editorial staff for the radio when he transferred for 4 years to another area of press work: The Nation--The World.

There he learned another form of journalism, a freer, more colorful way of presenting information. In February 1979 he began working at the largest institution for foreign affairs journalism in the country, MTI, where he was in the foreign affairs section until his assignment as a correspondent. The Warsaw assignment is familiar to him: during the past 10 years he has frequently been to Poland as a member of delegations of newspaper writers. Most regularly he was there this February when he covered the PZPR congress together with the permanent MTI correspondent there at the time. He knows Russian, English, Polish and German.

There is also to be a change of correspondents in Washington: Andras Heltai is returning to Hungary, being replaced by Pal Bokor. There is no need to introduce Moker since in the past we have frequently been able to publish interesting, analytical writings by this former Moscow correspondent.

To each new correspondent we wish good work and much success!

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ENTERPRISES MEETING CHALLENGE OF NEW DEMANDS, REGULATIONS

Success Formula at BRG

Budapest NEPSZABADSAG in Hungarian 23 Aug 80 p 3

[Interview with Sandor Stenczinger, director general of BRG (Budapest Radio Technology Factory), Dezso Karacsony, director of operations and Bela Bodry, party secretary of the factory, by Istvan Oroszi]

[Text] "Navigation is a necessity," said the ancient Romans and they took to the sea to conquer new lands and new markets. This saying is quoted today at enterprises where, in spite of more difficult and complex conditions, there are purposeful initiatives aimed at the discovery and utilization of new opportunities for progress.

One of these enterprises is the Budapest Radio Technology Factory which produces mobile radio telephones, tape recorders and computer devices. How did this medium-size enterprise of our telecommunications industry, with 3,800 employees, succeed in transforming its product structure? What new methods are they using to improve their competitiveness and market position? These are the questions we asked of Sandor Stenczinger, director general of BRG, director of operations Dezso Karacsony and party secretary Bela Bodry.

Our paper was represented by Istvan Oroszi.

[Question] The experience of the first half of 1980 shows that not all enterprises were able to adapt, in a flexible manner, to the new conditions and requirements represented by the new regulators. In fact, some of them are struggling with serious financial difficulties. What is the situation at BRG?

[Stenczinger] We have no reason to complain. This situation has certain historical roots. Near the end of the 1960's we came to the conclusion that BRG was producing too many types of products and spreading its resources too thinly. We found it highly unlikely that we could make sufficient progress over the long haul on such a basis. Thus, if the enterprise wanted to do well, it was necessary to concentrate our forces, reduce our product scale, and accelerate the production of goods that are in line with the conditions

at BRG, can be manufactured economically and can be sold in all markets. We needed also to cut down on the manufacturing of products that cannot be made economically feasible. This strategy proved correct and, to a large extent, it has been implemented. Briefly, this is the reason why the changes in the regulatory system did not find BRG unprepared. The requirement of using competitive world market prices is not as new or unusual for us as it is for others.

[Karacsony] In the past we always sold our products at world market prices and bought the import materials we need at world market prices. We have not received state support; we have not asked for it and do not need it. Therefore, reduction or elimination of support cannot cause us the kind of financial hardship that some other enterprises are experiencing. Concerning the BRG prospects for 1980, let me mention some illustrative statistics: last year the capitalist exports of the enterprise grew by 33 percent. We planned for a further 20 percent growth this year. Our socialist exports, representing more than half of all sales receipts for BRG, will grow at the same dynamic rate as before. Domestic sales of our products will decline, but the total sales receipts of the enterprise will be somewhat greater than last year.

[Question] How much profit do you expect?

[Stenczinger] As a result of regulatory changes, profits will be reduced by half. This decline has a substantial impact on BRG but will not present us with unsolvable problems. The financial position of the enterprise is stable. The BRG's debts are in line with its resources. It can use its own resources to create the funds necessary to repay earlier investment bank loans and to finance ongoing development projects, planned economic growth and a somewhat slower rise in personal incomes.

[Question] I believe there are not too many enterprises that are facing the future with so much self-assurance. In the trade there are those who say that the BRG is a lucky enterprise with a good profile.

[Karacsony] When people talk to me about our lucky profile I always say, pardon the expression, that we did not win our profile at the lottery. BRG has shaped it the way it is today. We mentioned this before. A lot of other enterprises did or could have done the same by making long-range decisions on what to make and what not to make. But I will go further: I do not believe anyone seriously thinks that the progress and profitability of an enterprise is determined by its product profile alone. A profile is "lucky" only if there is purposeful management making steady efforts toward the implementation of an economic product structure, modernizations of products and manufacturing techniques, organization of marketing and many other factors. If these are lacking then an enterprise will fail even with the best profile. The BRG tried once to make a product within our profit and we almost went bankrupt. I am talking about the "super tape deck" as it is still called. The BRG spent millions to develop this entertainment tape deck with the ability to play backwards and forwards. The technical conditions of up-to-date manufacturing were lacking; in addition, the price of the device would have been prohibitive.

[Stenczinger] We were forced to conclude, on the basis of this ill-fated enterprise, that we will never make it or even earn an honest living by making tape recorders, even if we provide a more solid development base. The capacity of the domestic market is too low (80,000 to 100,000 tape recorders annually) to provide a basis for economic production runs while assuring sufficient selection. Considering that, as a result of domestic supply difficulties, the electronic components necessary for manufacturing the device (e.g., transistors) must, in most cases, be procured from capitalist markets, it is clear that under such conditions the BRG could not become competitive in international markets.

This is what caused us to look around in the world and try to see where and how we can aim for competitiveness. We learned that, although there are many manufacturers of complete tape recorders abroad, some subassemblies are produced by a few companies, while others are made by an even smaller circle of manufacturers, in spite of the great demand for them. By proposing to satisfy this demand, the BRG could begin to make new products in great quantities and sell them in both socialist and capitalist markets. After we found international cooperative partners, we decided to make and develop so-called mechanical subassemblies instead of complete tape recorders (e.g., recording heads and motors). This will eliminate the need for imports of mechanical subassemblies. Economical capitalist exports of the same products will provide the funds needed to cover the currency expenses associated with the imports of electronic components that the BRG will continue to require, although our requirements will grow at a slower pace than our production will.

[Question] What is the present status of this large scale product shift?

[Karacsony] Production of tape recorder subassemblies represented a mere 10 percent of the value of the production of our enterprise 5 years ago. It represented 30 percent in 1979, and this year its share will be about 40 percent. We stopped making the old, obsolete reel-to-reel tape machines and replaced them with new, modern cassette units. The enterprise has already earned some profits with these. The production of complete entertainment tape recorders declined from the earlier 60 percent of total BRG production to 10 percent. Had we not developed the production of tape recorder subassemblies, we would have had to spend $3 million on purchasing them just this year. These imports were reduced to $200,000 as a result of the product shift.

[Bodry] Seventy percent of our production of recording heads goes for export. We have cooperation agreements with a number of firms abroad, including one of the big tape recorder manufacturing companies in Western Europe, valid for several years. Our Soviet partner enterprise is shipping color television subassemblies to Hungary in exchange for our tape recorder subassemblies. Assembly line production of tape recorder motors started 1 year ago. The quantity of production this year will approach 500,000 units.

[Question] Where does the BRG find the labor force and production capacity to account for such a dynamic rate of development?

[Stenczinger] As the saying goes, "if your arm is too short, step closer." This led us to an idea to try to offset the shortage of money and labor in a way that is unusual in domestic practice. At home we were also looking for partners able and willing to cooperate with us on an economic basis. This led to agreements, lasting 5 and 10 years respectively, between the BRG and two cooperatives in the provinces to jointly manufacture components and assemblies. The cooperative contributes buildings and labor to the association. We provide machinery, materials and technology. The association with the agricultural cooperative is 2 years old. The one with the artisan cooperative has been in existence for 1 year. Expanding production will not require new construction investment. In fact, the cooperative venture enables the two cooperatives to utilize their existing plants and unused capacities. They are providing full-time employment for hundreds of workers and producing more valuable products than in the past.

[Question] This is indeed a new initiative and the BRG has done it ahead of a lot of other enterprises. Surely another advantage comes from the independent export rights enjoyed by the BRG and the existence of a well-organized in-house research and development department.

[Karacsony] We have enjoyed independent export rights for the past 10 years jointly with other telecommunications industry enterprises within the framework of the Videoton Corporation and the Budavox Corporation Foreign Trade Enterprise. The director general of the BRG is on the boards of both associations. Thus, production and foreign trade are, in practice, concentrated in one hand. This indeed makes it easier to coordinate engineering development and marketing operations. There are, however, occasional debates and conflicts.

[Bodry] People in development often think that sales are none of their business and should be left to the foreign trade specialists. The latter, on the other hand, often expect the people in development to solve marketing problems. Therefore, in agreement with the economic leadership of the BRG, we say that the designer or development specialists should not only design, but also take part in, the initial businesss negotiations. He should be out there in the marketplace to see if the new product is needed and whether it can be sold at a good price.

[Question] In-house research and development is considered a high-risk, but necessary and useful investment, even by the largest capitalist enterprises.

[Stenczinger] We are just a small firm but this also applies to us. Whether a product is up-to-date and economical is decided largely at the development stage. Money must not be withheld from development. More than 50 important, internationally noted inventions have been accepted for use in new, modern products made by BRG. But we pay invention bonuses only to the extent the BRG can recover them in economic terms. Thus, researchers have an incentive to invent things that can be made at BRG and can be sold at a good price.

[Bodry] High risk means, in our case as in others, that in research and development time is money, in a double sense. We found this was so most recently in the development of the BRG tape recorder motors where, in certain

critical periods, almost the entire public opinion of the enterprise had to be mobilized in order to solve complex engineering problems and start assembly line production on schedule. Further success of the product shift was largely dependent on this, as was our accelerated development. Therefore, it was not at all the same for us whether the development of the new product took 3 years or 5 years.

[Karacsony] I would emphasize another important factor in market competitiveness and risk: pricing. Until now, enterprises had a capitalist export plan. As long as they fulfilled it, everything was all right. Today's system of regulators forces us to make sure that the world market competitiveness of a product is recognized in capitalist market prices to a larger extent than before. I will give you an example.

Recently our foreign trade specialists returned from abroad saying that in such and such a place they could sell BRG products much easier if only we would lower the price. In reply we asked to find out what is it that the customer would be willing to pay extra. This is because if we can make the design changes he needs at a cost that is less than the price differential we could get, then this is a good deal for us. Otherwise, we do not need the business. Our foreign trade specialists were taken aback. But then they collected themselves and came to an agreement with the customer, just as we thought. In the end, the deal ended up being three times as big as the one discussed originally. In exchange for the higher price, the BRG undertook to make the modifications requested by the customer; the capitalist firm that competed with us was unwilling to do this.

[Bodry] Of course, the heat begins later, as interests within the factory collide. The changes interfere with the regular work of the factory. The new product requires more attention and is harder to make than the old one. But this is what life is all about. We must get accustomed to the difficulties.

[Question] Some people say the CEMA market does not require such hard work and that it is possible to get by without all this.

[Stenczinger] In CEMA markets we are also meeting the customer halfway. For example, we hold conferences and trade shows in the USSR every year. There, we regularly obtain detailed information from our customers regarding the modifications they would like to see in the BRG products we are shipping to them. Next time, we present our products tailored to their wishes. This is why they recognize us. This is why they are pleased to buy from us and arrive at mutually advantageous, correct business deals.

In any case, the two markets cannot be rigidly contrasted or separated. If BRG products did not have a substantial CEMA market then we would have been unable to use high quality mass production methods. We cannot sell sufficient quantities just to our capitalist partners to make it pay for itself. Economic production and exports can only be based on the combined capacity of the two markets.

[Karacsony] There is competition also in the CEMA market. For example, in the past 7 years two CEMA countries besides ourselves were making so-called report storage tape recorders used in industry and transportation. Since engineering quality rose faster at our factory and economic parameters improved significantly, production stopped everywhere else almost automatically. As a result, today we are the only ones within CEMA who are still making and exporting these special tape recorders, usually produced for individual orders. We might say that CEMA specialization happened in this case without special recommendations, by economic means.

[Question] What has been said thus far provides very interesting and convincing proof that the accomplishments of the BRG are indeed due not to luck, but to local flexibility, effort and adaptability. Therefore, I would like to ask your opinion concerning the outlook and risks for the future.

[Stenczinger] We are continuing the transformation of our product structure in the other major product group of our enterprise: radio telephones. These also contain mechanical components and subassemblies that can be mass-produced at the BRG, provided that, as in the past, marketing can be assured by long-term international agreement.

We have also begun the development of an up-to-date FM radio telephone system, primarily to satisfy increasing demand in developing countries. At customers request we are willing to provide this or similar systems on a principal contractor basis.

[Bodry] The BRG had to pay a substantial entry price to get into the capitalist market. This kind of risk and others similar to it must be reduced by improving operations within the enterprise. For example, just by improving material supplies we could achieve a 10 percent improvement in efficiency. Another great reserve of risk is represented by improved reliability of our products, reducing the number of customer complaints regarding quality. This requires more responsible work and, among other things, good customer service. The latter will be organized first of all in the largest market for BRG products, the USSR.

[Karacsony] Today we are more sensitive to risk than in the past. Therefore, we would like to obtain independent import rights to complement our independent export rights. In the new situation, the BRG may gain or lose millions on the timing and price of the components needed for production, almost one half of which are imported from capitalist countries. This is why we would like to have full autonomy and responsibility also in this area.

Over the Hump at DIGEP

Budapest NEPSZABADGAG in Hungarian 23 Aug 80 p 3

[Interview with Sandor Enekes, director general of DIGEP [Diosgyor Machine Factory], by Attila Gyorgy Kovacs]

[Text] The low point in the history of the Diosgyor Machine Factory, an enterprise with 10,000 employees and a great past, occurred in 1978, the year when the enterprise was reorganized. It is now clear that this event

marked the beginning of progress in the right direction. The revamped leadership mobilized thousands of workers who hoped for renewal but still had their doubts. The results of the first half of this year show a declining workforce producing 19 percent more value than last year; sales receipts increased by 14 percent.

The road is both steep and difficult. In the middle of the long climb one feels how long there is still left to go. Where is the enterprise coming from and where is it going? This was the subject of our conversation with director general Sandor Enekes.

Below the Mark

[Enekes] During the critical year, the financial stability of our enterprise was threatened; we were losing money on production and had underfulfilled our plan. The inquiry at the time of the reorganization showed that our low performance was due to weakenesses in leadership, problems of organization and internal cooperation, and the backwardness of management and technological development. During the Fourth Five-Year Plan the DIGEP was operating on a day-to-day basis, without providing foundations for the future.

Investment and enterprising spirit were in decline; machinery was obsolescent. We were ill prepared for the modernization of our product structure. Enormous inventories indicated that part of our product range is unsaleable. Some unsuccessful efforts were made to fulfill certain international obligations, while the production of goods in high demand declined. This led to a catastrophic 75 percent decline in productivity and the disappearance of development resources.

[Question] How did you find your way out of this difficult situation?

[Answer] In part with the help of our superior organizations, but mainly as a result of our own consistent, unsparing efforts. Briefly: we accelerated the pace of our investment projects; reduced our product scale on the basis of ranking according to profitability; we improved in-house cooperation and regularity of production by introducing a bonus system with more incentives; we replaced one half of our totally depreciated high performance machines (there were 90 of them); through organization, we created the basic conditions necessary for more efficient and disciplined work.

[Question] At what point is the DIGEP today?

[Answer] I have to give you an answer based on three criteria. This shows that we have merely made the first few steps. By improved management and political work we achieved results that are in line with, and in some cases better than, the plan. Nevertheless, our productivity is only 75 percent of the best plants of the Hungarian machine industry and only one-third of the international standard.

[Question] What is the key issue?

[Answer] Per capita production value last year was 320,000 forints. In the first half of 1980 it increased by a quarter. Our goal is to raise this figure above 500,000 in 5 years. The ratio of workers to white collar employees is 100:42. Thus, the key issue is improved efficiency and, in particular, a decisive improvement of productivity.

Discipline and Responsibility

[Question] One hears complaints about an excessively tight rein. A lot of people are questioning, either explicitly or implicitly, how long can you continue the management practices you introduced 2 years ago as "emergency measures?"

[Answer] True, after 2 years I am still directly in charge of the production plants. This is not the task of the director general, some say in reproach. But I repeat: even though production has been consolidated, we have still taken only the very first steps. Day-to-day reporting on each task is burdensome. I think all managers feel ill at ease in the role of a despatcher. There was more than personal whim on my part behind the elimination of our production directorate. It was unable to cooperate normally with other organizations. The fact is that cooperation among the various production units was unbelievably bad; management organization was confusing and plagued with parallel authorities and bureacracy. Responsibility and initiative were lost among the gears of the machinery.

To build a house on solid foundations, we first need to prepare the building site. Along with the day-to-day work of building the foundations we must also carry out the tasks aimed at alleviating our problems over the long haul and serving our future.

[Question] This is true; but you are doing the work of others. When a worker in one of the workshops asks his foreman for extra time above the production norm it is necessary to obtain approval from the director general. Is this not overdoing it a little?

[Answer] For the time being, there is no other way to shed light on problems. I check on the daily plan fulfillment of factory units. If some units are lagging behind, I ask the person responsible the reason. The purpose of the morning conferences in not to get explanations, but to find out what they are doing to eliminate the reasons for the lag. I check on this every day. I do not interfere with the means of execution, but I want to make sure it is clear who has the responsibility. This directly forces each manager to bring himself to a point where he can direct his area in a responsible, well-informed manner.

Let me mention the matter of extra time beyond the production norm. Let us start by assuming that the worker wants to work for 480 minutes every working day. In fact, the amount of time he can work is determined by management, i.e.,

the availability of tools, materials and drawings. Suppose the production norm for a certain item is 2 hours. Material is not always available, so the worker is unable to fulfill his monthly norm. His wages will decline; thus, he has a right to complain to his foreman. They have been working together for a long time, so the foreman will ask for extra time from the norms analyst. Of course, a different reason is given (e.g., wrong size material), even though the real reason was deficient work organization and management. The worker gets his wages; productivity declines; there is no performance behind the money. The point is that there are 20 valid reasons to ask for extra time beyond the norm, and they are all uncontrollable. What are we doing to avoid this kind of collusion? We ask the technologist to record, in a numbered journal, all the data on requests for supplementary norms: who is asking for time and why? They must also name the person responsible. Extra time can only be given in case of a mistake. The person making the request is the one who must know best where the fault lies. The journal comes to me. On a statistical basis, it becomes clear who the managers are in the areas where such manipulations are most frequent. This is taken into consideration at evaluation time and when bonuses are awarded. After a while, those who are involved will pay attention to more regular supplies and workers are not adversely affected.

[Question] Let us change the subject. Many consider the new system of bonuses unjust. Were there occasions where factory units who fulfilled their plan did not receive any bonuses?

[Answer] That is true. I would merely like to add that the new system of incentives was introduced in agreement with the trade union and the party committee. We specified not only the timely and good quality fulfillment of the plan, but also that these prerequisites must be present in the operations of the enterprise as a whole. We are all in the same boat. There is no such thing as a good production unit within an unsuccessful enterprise. In the beginning there were some conflicts. Today, every production unit is interested in the problems of other plants and will not sit idly by while their neighbors are struggling with problems.

In Many Keys

[Question] People are talking about large scale employee transfers in the interests of improving productivity. What is the truth?

[Answer] We formulated a program in this area stretching over several years. The question is how can we increase per capita production, whether we intend to increase the value of production with the same work force, or whether we want to preserve the existing value with a declining work force. Employee transfers are merely one of the methods available. With the help of the workers we made a survey of thousands of jobs to see if there are any duplications and what could or should be done differently. Every year, we transfer 2 to 3 percent of the work force from office jobs to production. The people involved are given three choices, depending on their age, abilities and problems. If none of these is acceptable, they are transferred to discretionary status. This means there are no wage increases or promotions. It is in their interest to get out of this category or to look for a job elsewhere.

This is only one of the sources for the planned 47 percent improvement in productivity. Others are the purchase of high performance machinery and its utilization for at least 2.5 shifts per day. There are great reserves in the area of better utilization of working hours. This year we will be freeing 640,000 norm hours by means of better organization, improved material supplies and norm maintenance. This represents 10 percent of our capacity. The electricity consumption curve of our factory gives a good indication of the presence of such reserves: around 6:30 am the curve rises; around 12:30 pm it starts to decline. If we want to reduce our annual losses, now approximately 45 million forints, we must know that they are due 50 percent to faulty materials, and 50 percent to rejects. On the one hand, we will institute stricter incoming inspection and utilize the abilities of our lawyers; on the other hand, in the area of work quality we can rely on our 800 socialist brigades, the achievements of the DH [Worker Without Mistakes] work system, and the large numbers of innovators we have.

The requirements are changing rapidly and we must adapt to them. It took us 4 years to turn a development result into pilot production. We reduced the number of research projects and called in outside professionals so as to substantially reduce the time needed. We intend to introduce a number of product lines that can last for a long time, by means of license purchases and cooperative projects. Most of our products require constant development and design changes. In cooperation with foreign trade specialists we are developing market operations and we are trying to formulate a suitable system of incentives that encourages profitability. We have already signed a contract with Technoimpex that provides incentives for expanding our market and strengthening our positions.

Our principle is to take market demands into consideration, but to supply only those demands that promise healthy profits, assured sales, efficient work and, in the final analysis, enable us to earn a secure living.

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CONTENTS

INTERNATIONAL AFFAIRS

Thirty-Two Years of Bulgarian-Soviet Trade Reviewed
(Valentin Aleksandrovich Dyakov; OTECHESTVEN FRONT, 18 Mar 80) 1

BULGARIA

Developments in Sugar Beet Technology Promise Good Crop
(Nikola Kutrev; KOOPERATIVNO SELO, 23 Aug 80) 5

CZECHOSLOVAKIA

CSSR Trade Cooperation With West Viewed
(HANDELSBLATT, 8/9 Aug 80) 8

Capital Asset Depreciation Schedules Announced
(SBIRKA ZAKONU CSSR, 8 Aug 80) 11

Deadlines Said Closing In on 'Konzorcium' Gas Pipeline
(Jan Dulin; PRAVDA, 6 Aug 80) 25

GERMAN DEMOCRATIC REPUBLIC

Energy Minister Outlines Future Energy Problems
(Wolfgang Mitzinger; ENERGIETECHNIK, Jul 80) 28

HUNGARY

Statistics on 1979 Labor Turnover Published
(MUNKAUGYI SZEMLE, Jun 80) 39

[III - EE - 64]

Manpower Regrouping, Retraining Measures Discussed
(Iren Szabo; FIGYELO, 13 Aug 80) 54

YUGOSLAVIA

Personal Incomes in First Quarter of 1980
(M. Urosevic; PRIVREDNI PREGLED, 15 Aug 80) 58

Foreign Trade in Agroindustrial Sector, First Half of 1980
(Milorad Urosevic; PRIVREDNI PREGLED, 15 Aug 80) 60

Official Discusses Economic Status of Croatia
(Ivan Mecanovic Interview; KOMUNIST, 5 Sep 80) 63

THIRTY-TWO YEARS OF BULGARIAN-SOVIET TRADE REVIEWED

Sofia OTECHESTVEN FRONT in Bulgarian 18 Mar 80 pp 1,3

[Conversation with Valentin Aleksandrovich Dyakov, trade representative of the Soviet Union in Bulgaria: "Our Country Has Never Had a More Loyal Ally"]

[Text] "This treaty fully meets the vital interests of our people, reflecting its most profound aspirations. The implementation of this treaty will give our people even greater confidence in the justice of their cause and will double their creative efforts in the building of the Bulgarian People's Republic."

This historic statement was made by Georgi Dimitrov, 32 years ago, on 18 March 1948, at the Big Kremlin Palace, at the signing of the Friendship, Cooperation and Mutual Aid Treaty between the Bulgarian People's Republic and the Union of Soviet Socialist Republics.

The conclusion of this treaty was a historical event not only in relations between our two countries. It marked the beginning of a new stage in the development of Bulgaria and in the strengthening of its national independence and sovereignty. The treaty is the first equitable political document concluded by our country. It laid solid foundations for its development along the path of socialism and helped to establish Bulgaria in the international arena.

The 32 years which have passed since convincingly confirm the strength and vitality of the treaty. It became the starting point for the strengthening and intensification of Bulgarian-Soviet friendship and the development of Bulgarian-Soviet relations in all fields of life.

On this occasion, we chose the USSR Trade Mission as the spot for our article. Inside its new beautiful building we were hospitably welcomed by Valentin Aleksandrovich Dyakov, trade representative of the Soviet Union, who shared with us a few thoughts on the headlong development of economic relations between the two fraternal countries.

The chronicles of Bulgarian-Soviet economic and trade relations began precisely three years before the Friendship, Cooperation and Mutual Aid Treaty was concluded. On 14 March 1945, while World War II was still raging and the Soviet people were fighting for the liberation of the European nations from Hitlerite fascist oppression, the first trade agreement was concluded between the USSR and the Bulgarian People's Republic. This was the first postwar treaty concluded with a country belonging to the just-created comity.

In order to be more convincing, allow me to mention merely a few figures which clearly depict the development of our cooperation. Whereas in 1945 the USSR exported to Bulgaria 73,000 tons of petroleum and petroleum products, in 1980 such exports will total 13 million tons of petroleum and two million tons of petroleum products. In 1945 Bulgaria imported 16,000 tons of ferrous and nonferrous metals. This year such imports will exceed three million tons. At that time Bulgaria received from our country 2,000 tons of cotton. Current cotton imports total 40,000 tons.

Here is another interesting and significant fact: in 1945 Bulgaria received from the Soviet Union agricultural equipment totaling 10 combines and several dozen tractors. Today, on the basis of the cooperated deliveries system, we purchase from Bulgaria agricultural equipment worth 140 million rubles.

Whereas in 1945 trade between the two countries totaled 120.6 million rubles, today it has increased by a factor of 55. In other words, in one week we are trading the same amount of goods we traded in the entire year of 1946.

Mikhail Mikhaylovich Korolev, head of the economic department of the trade mission, joined in the conversation:

"Compared with 1948, our trade has increased by a factor of nearly 50. At that time it totaled 150 million rubles. This year it will reach 6.6 billion rubles."

The figures mentioned by Comrades Dyakov and Korolev are eloquent. They are a factual expression of the parameters of our friendship. Only a few days ago Petur Mladenov, member of the BCP Central Committee Politburo and Minister of Foreign Affairs of the Bulgarian People's Republic stated in an article in IZVESTIYA that, "cooperation with the Soviet Union became the main foreign political factor which enabled the Bulgarian state to assume leading positions in the building of mature socialism and in strengthening its international prestige."

I asked Comrade Dyakov to describe the way the structure of trade between our countries had changed over the years.

"Until 1960 Bulgaria was virtually not exporting machines and equipment. It was exporting agricultural raw materials and products only. Subsequently, particularly over the past 15 years, with the help of the Soviet Union a developed industry was created, to the point that Bulgaria is exporting to our country equipment worth one billion 560 million rubles and the USSR imports complete machines and equipment worth 800 million rubles. What better description could be given of the increased possibilities of the Bulgarian economy?"

"Allow me also to emphasize," Comrade Korolev added, "that all agricultural commodities exported by Bulgaria to the Soviet Union are processed, since this is a more effective method. The same applies to consumer goods such as clothing, knitwear, shoes, cosmetics, and pharmaceuticals.

"The USSR is a stable market for Bulgarian commodities, insuring employment and economic stability," Valentin Aleksandrovich went on to say. "Over 55 percent of Bulgaria's trade is with the Soviet Union. In 1979 it equaled the sum total of trade between 1956 and 1960 and 1961-1965 together. In the Seventh Five-Year Plan the level reached over the three preceding years will be outstripped and trade will total 28 billion rubles.

"Our trade and economic relations reciprocally supplement the national economies of the two countries. As trade develops the share of reciprocal deliveries of machines and equipment rises considerably; 38 percent of them are based on specialization and cooperation. A number of examples may be cited in this respect. Let me merely mention the fact that in the city of Toliatti, one out of two Zhiguli or Lada cars is equipped with parts produced in Bulgaria."

Gradually, our conversation turned to the present, which marks the implementation of the plans considered in the first treaty. In order to illustrate his thoughts, Comrade Dyakov used an interesting example which shows the scale of the changes in the trade between the two countries.

"If we consider the sum total of USSR supplies to Bulgaria as equaling 100, 70 percent of that would be raw materials and only 30 percent would be finished goods. Thus, for example, your country received 6.3 million tons of power industry and coking coal, 4.3 billion cubic meters of natural gas, fertilizers, cotton, cellulose, and paper.

"The principle of the process of further intensification of the development of economic relations, and the rapprochement between the economies of the two countries and the development and intensification of integration processes and cooperated deliveries has been included in the general plan for specialization and cooperation in the field of material production adopted by Bulgaria and the Soviet Union, which will run until 1990. This plan

was formulated with the participation and direct guidance of our party and state leaders, Comrades Leonid Brezhnev and Todor Zhivkov."

Economic cooperation and integration between Bulgaria and the Soviet Union, this powerful booster in the development of our country as a modern industrial-agrarian state, has faced the development of Bulgarian-Soviet relations with new strict requirements.

In this connection, and with a view to the further all-round rapprochement between our two countries, on 12 May 1967 a new Friendship, Cooperation, and Mutual Aid Treaty was signed by Comrades Todor Zhivkov and Leonid Brezhnev.

This treaty became the logical extension of the 1948 treaty and of the further blossoming and enrichment of its ideals and principles.

In conclusion, my collocutors cited yet another example which, in my view, eloquently shows the growth and development of our relations. Whereas in 1945 freight hauled from the Soviet Union to Bulgaria totaled 210,000 tons, while freight in the opposite direction totaled 15,000 tons, today it has reached 35 million tons. In terms of freight cars, the length of such a train would be 32 kilometers.

Thirty-two years are a sufficient period of time to be used as a convincing proof of the lasting ties and feelings which link our two fraternal peoples led by consistent communist parties marching shoulder to shoulder under the pure victorious Marxist-Leninist banner to the bright horizons of socialism and communism.

Leaving Moscow after the signing of the Friendship, Cooperation and Mutual Aid Treaty, 32 years ago, Georgi Dimitrov, our immortal leader and teacher, said the following in his speech at the airport:

"I know the Bulgarian people well and I can assure the Soviet brothers that they will remain their friend loyal to the end, whatever may happen in the future. The Bulgarian people will never betray their elder brother-liberator."

Thirty-two years later, expressing the thoughts and feelings stemming deep from the hearts of all Bulgarian citizens, in his speech at the National Conference of the Fatherland Front, Comrade Todor Zhivkov said:

"Our country has never had a more loyal, more selfless, more sincere and more staunch ally than the Soviet Union; it has never been so free, so independent, and so confident of its present and future...."

5003
CSO: 2200

DEVELOPMENTS IN SUGAR BEET TECHNOLOGY PROMISE GOOD CROP

Sofia KOOPERATIVNO SELO in Bulgarian 23 Aug 80 p 1

[Article by Nikola Kutrev, director of Sugar Beet Production of the Bulgarian Sugar PAO [Industrial-Agrarian Trust]: "Using Our Experience"]

[Text] We are on the eve of one of the most difficult agricultural campaigns--the sugar beet harvest. This year the APK [Agroindustrial Complexes] and the PAK [Industrial-Agrarian Complexes] devoted a great deal of effort to prepare the soil and plant and raise the crop. A major step forward was taken in the application of the scientific technology developed by the Sugar Beet National Industrial Complex near Shumen, expanded with the positive practical experience of the producers.

For the first time there was a mass conversion to sowing using a reduced number of seeds. This made it possible to thin the crop more easily and qualitatively. Consequently, today we have the best organized crops in the last five to eight years. Particularly good results were achieved by beet growers in Veliko Turnovo, Ruse, Pleven, Burgas, Stara Zagora and Sliven okrugs. Compared with its previous results, however, Vratsa Okrug achieved its biggest progress! Herbicides were used in a greater quantity and more efficiently. The struggle against main diseases and pests was waged with great precision and promptness. The July and August droughts hindered the development of the plants, particularly in nonirrigated areas. Their condition improved rapidly after the rains. Favorable conditions were created for the intensive growth of root crops and the accumulation of saccharose.

Some ten days are left before the most important and responsible measure within the technological cycle must be undertaken: the harvesting of the sugar beets. A great deal of work must be done under varying and difficult weather conditions. Success in this area depends, above all, on good organization and advance preparations. What has been accomplished so far by the farmers in the APK and PAK, and the collectives of automotive transport enterprises and sugar refineries?

Machine repairs in the plants have been completed. Currently a commission of specialists is conducting a final investigation of all assemblies and

parts with the help of operational and mechanical tests under conditions similar to those in which they will be operating.

The results of the investigations indicate that the plants are ready for the campaign. The capacity of reception facilities has been expanded almost everywhere. The new plant in Kameno, Burgas Okrug, will begin operations at triple its original capacity.

Several days ago the managements of the Bulgarian Sugar PAO, Automotive Transportation DSO [State Economic Trust] and Bulgarian State Railroads DSO reviewed all programs related to the loading and hauling of sugar beets. The number of needed trucks was determined. It was decided that each automotive transportation enterprise and sugar refinery will conclude a socialist competition contract. Such a contract was signed between the Bulgarian Sugar PAO and Automotive Transportation DSO.

The APK and PAK farmers are also intensively preparing themselves for the rhythmical extraction of the beets without losses. All enterprises have adequate KS-6 and Erio model combines. The most important thing is for this highly productive equipment to be used to its full capacity. In order for this to be achieved, the machines must be looked over in the next few days. Only thus will it be possible to avoid unnecessary tension, work rhythmically, and fulfill daily schedules. Spare parts are available at the central warehouse in Gorna Oryakhovitsa. However, the Agromashinaimpeks VTO [Foreign Trade Trust] should supply all the necessary spare parts for the Erio combines. The second major problem which must be resolved as soon as possible is to determine the composition of the mechanized detachments. The APK and PAK have mechanizers with great practical experience. Unfortunately, frequently the machines are assigned to people lacking the necessary training. Also, a number of mechanizers claim that the quality of the equipment is poor. In reality, such people are simply unable to tune properly the operational parts. Beets are wasted and the farms and the state suffer losses. Currently, experienced Soviet specialists are teaching refresher courses in the okrugs, very useful to all.

The APK and PAK have adequate practical experience in the use of material incentives. An example in this respect is the approach of the complexes in Dolna Mitropoliya, Ruse and Kameno. This year again the mechanized detachment will be the basic organizational form. Its advantages are numerous: easier maintenance of the equipment and better facilities for the men, and an easier way for managers to supervise the work process. Naturally, this is only one side of the problem. In order for the work to be fast and of good quality, the automotive combines and sugar refineries must develop a good organization, for everyone knows that by remaining in the field a single additional day, the root crops lose 0.15 percent of their weight and their quality is worsened.

Despite the adverse weather, the crop appears to be good. However, we must not forget that the vegetation period is not over yet. The threat presented

by the noctuid moths and the leaf spot disease is not over. Observations must be continued and, wherever necessary, the crops must be sprayed. Along with the harvesting, we must prepare for the next sowing: the areas to be planted in beets must be indexed. Soil samples must be taken and the soils must be fertilized and prepared. The good farmer thinks of everything in advance!

5003
CSO: 2200

CSSR TRADE COOPERATION WITH WEST VIEWED

Duesseldorf HANDELSBLATT in German 8/9 Aug 80 p 9

[Article by cmk: "New Search for Western Cooperation"]

> [Text] Prague-Berlin--Even though 30 percent of Czechoslovak machinery exports are still going to Western countries, the export structure must be changed. The reason: In fields where the CSSR used to be the world leader, such as with certain textile machines, it now faces oversupplied markets in the Western industrial states. This is the word from Prague's Ministry for General Engineering.

The FRG is still considered the classical trade partner for CSSR machine manufacture, accepting primarily machine tools and dies, textile machines, passenger cars and tractors. This listing alone indicates that the sphere of interest of the General Engineering Ministry is awesome; according to its own words it stretches from thumbtacks to shipbuilding.

The ministry is responsible for a total of 70 percent of the production of consumer goods for the domestic market. Since both the demand and the purchasing power of the Czechoslovak population are great--the ever-expanding "dacha-movement" has reached a point where 50 percent of the families own two households--the new five-year-plan (1981-1985) is to concentrate on the improved supply of the domestic market, especially with household appliances, bicycles and baby carriages.

The ministry repeatedly emphasizes that in the next 5 years, only certain sectors are to be favored. Of primary importance--especially with an eye to the export capability--are to be the development of energy- and material-conservation technologies in machine tool construction. A higher degree of automation as well as an increased use of electronic control mechanisms are to be of primary interest.

A further favorite topic will be production cooperation, especially since the CSSR has been very modest in this field over the years. According to the Ministry for General Engineering, there are currently only 15 cooperation agreements in force with the FRG, although these agreements are extensive in terms of economic volume. Some 30 cooperation agreements, primarily in the field of machine-tool construction, are said to be in the negotiating stage.

The Czechoslovak planners see the agreements as concentrating on the licensing of production, exchanges of components and joint action on third markets. Prague complains that Western firms often talk cooperation, but actually think only about increasing their own exports.

A great interest exists in the field of automobile construction for cooperation with Western countries. However, there is no wish to follow the Romanian, Polish, or even the Soviet example of constructing an entire production line with Western know-how; rather, the aim is limited to the acquisition of partial licenses (see HANDELSBLATT, 7 August 1980).

The Prague ministry argues that the Czechoslovak automobile industry has a grand tradition and has possessed since 1964 technologies on a European level which are valid even today. All further efforts are to concentrate merely on energy savings.

Licensing negotiations are currently under way with several major Western automobile concerns, including the Volkswagon Works in Wolfsburg, stated the ministry. The conversations are to clarify the possibilities for cooperation in the manufacture of passenger cars. However, the Wolfsburg offers are said to have been not as favorable as those of other West European automakers, and Prague had gained the impression that VW did not have a real interest in passenger car cooperation. According to reports, the discussions centered on a possible collaboration in engine construction.

The General Engineering Ministry commented guardedly on cooperation with the GDR in automobile manufacturing. It could only be learned that the long-term investment contracts are to be restructured and that the number of reciprocal component delieveries has been reduced. Designs for the 1981-1985 Five-year Plan indicate that the CSSR is also thinking about closer cooperation with Western countries in truck manufacturing; negotiations are said to be under way not only with the FRG but also other states. However, the time is not yet ripe to talk about the extent of the consultations, stresses Prague. A hint at the direction of these talks are taking was merely provided by the remark that the Tatra chassis is eminently suited to carry construction machinery.

The basic concept of the CSSR Ministry for General Engineering seems to be that the question of the components of both passenger-car as well as truck manufacture is so extensive that the problem of international cooperation has to be taken very seriously, considering especially that the Czechoslovak automobile Industry has always bought licenses and wishes to do so in the future as well.

9240
CSO: 3103

CAPITAL ASSET DEPRECIATION SCHEDULES ANNOUNCED

Prague SBIRKA ZAKONU CSSR in Czech No 94, 8 Aug 80 pp 419-426

[Text] Decree of the Federal Finance Ministry, dated 17 June 1980, concerning the depreciation of capital assets.

The Federal Finance Ministry, in agreement with the finance ministries of the Czech Socialist Republic and the Slovak Socialist Republic, in accordance with section 391, paragraph 1 of the commercial code number 109/1964 of the Laws of the Czechoslovak Socialist Republic, and in the sense decreed in number 37/1971 of the Laws of the Czechoslovak Socialist Republic, establishes:

Section 1: The Object and Extent of Modification

This decree modifies the depreciation of capital assets, and establishes the depreciation schedules included in the supplement to this decree.

Section2: Responsibility for Depreciation

1. These organizations depreciate capital assets:[1]

a. State economic organizations; within concerns, concern enterprises and specialized concern organizations depreciate in the same fashion,

b. cultural and educational support organizations,

c. united agricultural cooperatives, communal agricultural enterprises, and improvement cooperatives,

d. foreign trade organizations, with the exception of cooperative foreign trade enterprises,

e. enterprises and the operating equipment of social organizations, as well as the organizational elements of social organizations designated by their central agency, as long as these elements continually perform economic activity, and register separately the capital assets for this activity,

f. other socialist organizations, insofar as decreed by the relevant finance ministry.

2. The depreciation of capital assets of cooperative organizations not included in paragraph 1, letter c, are governed by this decree if established by their central agency; the relevant central agency of cooperative organizations, in agreement with the relevant finance ministry, will decide on case by case deviations in the depreciation of capital assets by these organizations.

3. Capital assets are depreciated by the organization which administers or owns them, or by the concern enterprise (or specialized concern organization) which carries out their administration. Capital assets which have been committed to permanent utilization,[2] or to long term utilization[3] are depreciated, however, by the permanent or long-term user.

Section 3: Method of Depreciation

1. Capital assets are depreciated from the purchase cost[4] according to binding depreciation schedules established in the supplement to this decree, without suspension and up to the amount of the purchase cost.

2. Should an obligation arise to depreciate capital assets which had previously not been tied to such an obligation, then the capital assets are depreciated from the purchase cost, but only to the amount of the current value.

3. In the event of a change in the purchase price, capital assets are depreciated from the changed purchase price, but from the beginning of the month immediately following the beginning of the validity of the purchase price change.

4. Capital assets are depreciated according to their placement in the fields of the individual classification of capital assets established by special regulation,[5] in the case when capital assets are placed in the fields of classes 3 to 7 and the relevant fields are not included in the supplement to this decree, they are depreciated according to a binding yearly depreciation schedule of 12 percent.

5. The current value of a capital asset is understood to be the difference between its purchase cost and adjustments[4] as of the end of the month for which the current value is determined.

Section 4: The Beginning and End of Depreciation

1. Captial assets are depreciated from the beginning of the month which directly follows their entry into the capital asset account,[6] to the end of the month in which their purchase price is completely written off, until further notice; when the onset of utilization of capital assets is earlier, they are depreciated from the beginning o the month which immediately follows their introduction into utilization.

2. Capital assets which are not fully depreciated are no longer depreciated by an organization at the end of a month in which

a. they are placed in mothballs[1] or stockpiled,

b. they are transferred to the control or ownership of another organization,

c. they are assumed for sale by an organization which takes care of performing brokerage services,

d. they are committed to permanent or long-term utilization,

e. the right to their permanent or long-term utilization expires,

f. their physical liquidation commences,

g. they are taken out of service due to damage or defects.[7]

3. In cases where state organizations are obliged to decide concerning the surplus character or uselessness of national property,[8] capital assets which are not fully depeciated may cease being depreciated only on the basis of this decision.

Section 5: Disposition of Current Values of Capital Assets

1. In a case in which capital assets are not fully depreciated and are eliminated as a result of physical liquidation, damages, or defects, an organization accumulates their current values in its costs.

2. In a valid transfer of control or ownership of capital assets, the transferring organization modifies its costs by the difference between their sales price and current value.

3. An organization is required to express completely, and in a timely manner in its financial plan the total of the current value of capital assets planned for physical liquidation into costs.

Section 6: Capital Assets Not Covered by Depreciation

The requirement to depreciate does not extend to:

a. mothballed capital assets,[1]

b. capital assets exclusively designated for civil defense purposes and for special tasks, as long as they are handled as independent inventory objects,

c. real estate,

d. stands of timber,

e. growths of hops and grapes, as well as fruit trees and bushes which have not reached bearing age, or the numbers of which have not exceeded the established boundary of a husbandry unit,[9]

f. facilities for flood control and forestry-technical improvement,

g. other improvement projects up to 2 years following their completion,

h. recreational facilities of organizations stationed abroad.[10]

Section 7: Exceptions

The Federal Finance Ministry may, at the request of a federal agency, grant a waiver from the provisions of paragraphs 2,3,5, and 6 for organizations which it manages, or modify the binding yearly depreciation schedule (hereafter simply "waiver from depreciation"), especially in cases where the capital assets are:

a. constantly, for the whole period of utilization, exposed to extraordinary environmental influences or operational conditions,

b. used in a targeted manner, for the completion of a single delivery, operation, or task, and which become upon this completion superfluous or useless.

2. A waiver from depreciation may be permitted particularly under the conditions that:

a. it is not a matter of constructional, design, technological, functional, and other shortcomings and defects in the capital assets,

b. the capital assets are used, maintained, repaired, and protected from environmental influences in accordance with legal regulations, technical norms, and the instructions of the producer or importer.

3. A waiver from depreciation may only be permitted with a validity beginning on 1 January of the following year when the application for waiver from depreciation was submitted to the Federal Finance Ministry by 1 July of the current year at the latest. An application for waiver must be properly justified and documented in accordance with paragraphs 1 and 2, and must also express the results of the applied for measures according to special regulations.[11]

4. The finance ministries of the republics may, analagously, permit a waiver from depreciation according to paragraphs 1,2, and 3 for organizations managed by agencies of the republics, national committees, and agricultural administrations; as long as it is not a matter of an organization managed by national committees, the finance ministries of the republics may proceed in these matters in agreement with the Federal Finance Ministry.

Section 8: Annulling and Transitional Regulations

1. Decree number 76/1966 of the Laws of Czechoslovak Socialist Republic concerning the depreciation of capital assets is revoked, in the sense of decrees number 103/1970 and 97/1976 of the Laws of the CSSR.

2. Insofar as waivers have been permitted under the revoked decrees, they retain their validity until 1 January 1982; high-level central agencies may, however, after verification of the justification for the existing waivers under Section 7 of this decree, request the relevant finance ministry to arrange for their renewed negotiation and authorization.

Section 9

This decree becomes effective as of 1 January 1981.

Minister: Engr Ler, Candidate for Doctor of Science (signature)

Depreciation Schedules

Field Code[5]	Short Field Name	Binding Yearly Depreciation Schedule (percent)	Orientation Period for Depreciation (years)
	Class 1. Buildings (including accessories)		
801	Buildings of Public Investment	1.3	77
802	Halls of Public Investment	1.3	77
803	Buildings for Habitation	1.3	77
811	Halls for Production and Services	2.0	50
812	Buildings for Production and Services	2.0	50
	In field 812, buildings for		
	--fuel and ore extraction	2.5	40
	--energy generation	4.0	25
	--water management	1.5	67
	--transport and communication	1.3	77
	--warehousing	1.5	67
	In class 1, buildings which are		
	--of wood and like materials	4.0	25
	--temporary[12]	10.0	10

Code[5]	Name	Depreciation Schedule (percent)	Orientation Period (years)
	Class 2. Structures (including Distribution Structures)		
813	Towers, Poles, Chimneys	3.3	30
814	Surface tanks, cisterns, containers, pits	1.5	67
	In field 814, cleaners for waste industrial water	4.0	25
815	Special surface facilities	2.0	50
821	Bridges	1.3	77
822	Surface communication and airports	1.3	77
823	Tracks and area upkeep	1.3	77
824	Track beds	1.0	100
	In field 824, rail superstructure	3.3	30
825	Underground facilities (except mines)	1.3	77
	In field 825, tunnels	1.0	100
826	Underground mining facilities	2.5	40
	In field 826, temporary shafts	20.0	5
827	Long distance and connecting pipelines	1.3	77
	In field 827		
	--water mains	1.5	67
	--cement pipe sewers	5.0	20
	--steam, heat, oil, gas and air pipelines	3.3	30
	--communications cable lines	5.0	20
	--other cable lines	3.3	30
828	Electric and overhead wires	3.3	30
831	Water treatment	2.5	40
832	Dams and waterway facilities	1.0	100
833	Waterway reservoirs, waterway and canal improvements	2.0	50
	Temporary class 2 structures[12]	10.0	10

Code[5]	Name	Depreciation Schedule (percent)	Orientation Period (years)
	Class 3. Energy-related and Driving Machinery and Apparatus		
346	Sources of Electrochemical current	20.0	5
354	Power condensers, parts of assembly distributors and lightening rods	5.0	20
356	Converters (rectifiers) with over 0.1 kilowatt capacity	5.0	20
357	Control panels	5.0	20
359	Electric motors	8.0	12
361	Rotating current sources	4.0	25
362	Transformers and high capacity choke coils	5.0	20
364	Converter station units	5.0	20
365	Building and tower transformer stations and building switching stations	5.0	20
366	Source generating sets and electrical driving systems	5.0	20
426	Pumps	8.0	12
427	Compressors and volume air pumps	6.0	17
428	Turbine compressors	5.0	20
429	Air technology apparatus	7.0	14
432	Cooling and freezing equipment	7.0	14
436	Water treatment equipment	7.0	14
482	Piston motors	6.0	17
483	Industrial and shipboard boilers	5.0	20
484	Central heating equipment	3.3	30
485	Steam turbines	4.0	25
486	Gas turbines and turbine sets	5.0	20
487	Water turbines	4.0	25
488	Atomic reactors and equipment for atomic power plants	5.0	20
	Portable and mobile class 3 machines and equipment	10.0	10

Code [5]	Name	Depreciation Schedule (percent)	Orientation Period (years)
	Class 4. Working machines and equipment		
363	Industrial electrical heating equipment	7.0	14
414	Power hand tools	25.0	4
431	Driers	7.0	14
433	Filling and packaging machines and machines for adjusting packaging	8.0	12
434	Fired industrial ovens (exclusive of those for ceramics)	5.0	20
435	Equipment for pumping and measuring liquid fuels	7.0	14
463	Domestic ships and floating equipment	8.0	12
492	Machinery and equipment for underground mining	17.0	6
	Infield 492, conveyor belts	25.0	4
493	Extraction equipment for underground mines	4.0	25
494	Machinery and equipment for coal and ore treatment	7.0	14
495	Digging wheel excavators and overburden dumping machines	5.0	20
496	Machinery and equipment for geological exploration	12.0	8
497	Equipment for extraction and treatment of peat	6.0	17
498	Machinery and equipment for preparation of blast furnace charges and production of raw iron	5.0	20
499	Coking plant machinery and equipment	5.0	20
501	Steel factory machinery and equipment	5.0	20
502	Rolling equipment	5.0	20
503	Foundry machinery and equipment	6.0	17

Code[5]	Name	Depreciation Schedule (percent)	Orientation Period (years)
506	Social equipment mainly for chemical and food industry	6.0	17
	In field 506, gasometers	3.3	30
507	Machinery and equipment for chemical industry	7.0	14
	In field 507, gas plants	5.0	20
508	Machinery and equipment for production and processing of cellulose, paper, and glues	6.0	17
509	Machinery and equipment for processing rubbers and plastic materials	7.0	14
512	Machine tools (exclusive of machine tools for wood)	7.0	14
513	Forming machines for metals and plastics	7.0	14
	In fields 512 and 513, numerically controlled machines	10.0	10
514	Machines and equipment for welding, soldering and cutting metals	8.0	12
515	Surface finishing equipment	8.0	12
516	Machinery and equipment especially for machinery production and metallurgical accessories	10.0	10
519	Machinery and equipment for the woodworking industry	10.0	10
521	Machinery and equipment for the glass industry	7.0	10
522	Machinery and equipment for textile and clothing industry	6.0	17
	In field 522, industrial sewing machines	14.0	7
524	Machinery and equipment for leather goods industry	6.0	17
525	Machinery and equipment for printing and book industry	7.0	14

Code[5]	Name	Depreciation Schedule (percent)	Orientation Period (years)
526	Machinery and equipment for sugar factories, breweries, malt plants, distilleries, brandy plants, liqueur works, wine processing, yeast, mold, vinegar, acids, enzymes, and fat production, starch factories and potato drying facilities	7.0	14
527	Machinery for processing of milk, eggs, grain and fodder, flour, meat, fish, tobacco, for production of chocolate, candies, and canned foods	6.0	17
533	Machinery and equipment for earth moving, construction, and road work	14.0	7
534	Power shovels and bucket ladder excavators	10.0	10
535	Machinery and equipment for processing nonvegetable materials	7.0	14
536	Agricultural machinery and equipment	10.0	10
	In field 536, machinery and equipment for fertilization and plant protection	20.0	5
538	Machinery and equipment for public eating and sales	7.0	14
539	Equipment and implements for dry cleaning, washing, ironing, cleaning, barbering, and hair dressing	10.0	10
541	Heating and boiling equipment	10.0	10
544	Household sewing and weaving machines	7.0	14
	Class 5. Instruments and Specialized Technical Equipment		
348	Lighting equipment	20.0	5
382	Equipment for cable telecommunication	5.0	20

Code[5]	Name	Depreciation Schedule (percent)	Orientation Period (years)
383	Equipment for radio and television communications	12.0	8
388	Mechanical measuring instruments (excluding weights and timers)	7.0	14
389	Electrical measuring instruments (excluding timers)	8.0	12
391	Electronic and electron microscopic measuring instruments	17.0	6
392	Optical-mechanical instruments (including equipment for the processing of film and photographic materials)	10.0	10
393	Scales (excluding laboratory and home scales)	7.0	14
394	Timing instruments	7.0	14
395	Machines and instruments for determining properties and defects of materials	7.0	14
396	Scientific and laboratory instruments and vacuum equipment	10.0	10
397	Health technology including instrumentation	8.0	12
401	Duplication equipment	20.0	5
402	Office machinery, instruments and equipment	10.0	10
403	Data processing equipment	12.0	8
404	Signalling and security equipment	5.0	20
405	Instrumentation for automatic regulation and control	8.0	12
409	Gauges and equipment for measuring geometric sizes	8.0	12
425	Industrial lubricating equipment	12.0	8
	Class 6. Transportation Assets		
429	Air-technical equipment	7.0	14
444	Delivery trucks and personal cars	12.0	8
445	Trucks and their specific modifications	12.0	8

Code[5]	Name	Depreciation Schedule (percent)	Orientation Period (years)
446	Trailers and semi-trailers	12.0	8
447	Buses	17.0	6
448	Trolleybuses and electric buses	9.0	11
449	Fire trucks and fire apparatus (fire prevention assets)	6.0	17
451	Single track motor vehicles and their specific modifications and trailers	17.0	6
454	Equipment for technical service for transportation assets	7.0	14
456	Electric locomotives	4.0	25
457	Motorized and steam locomotives (excluding steam)	4.0	25
	In fields 456 and 457, mine locomotives	10.0	10
458	Rail cars for passenger transportation	5.0	20
459	Rail cars for freight transportation	3.0	35
	In field 459		
	--mining carts	17.0	6
	--large capacity mining carts	5.0	20
463	Domestic ships and floating equipment	3.3	30
464	Sea-going ships and ships for mixed service	5.0	20
465	Airplanes	14.0	7
	In field 465, aircraft propulsion units	25.0	4
468	Cranes	6.0	17
469	Hoisting mechanisms	6.0	17
471	Elevators	6.0	17
472	Transportation equipment for movement of loose materials	6.0	17
473	Equipment for transportation by cable	6.0	17

Code[5]	Name	Depreciation Schedule (percent)	Orientation Period (years)
474	Equipment for loading operations	6.0	17
	In fields 468 to 474, equipment for construction assembly work	14.0	7
475	Carts	17.0	6
476	Transport equipment for piece materials	7.0	14
477	Metal transport assets for palletization and containerization	17.0	6
531	Wheeled and caterpiller tractors	8.0	12
	In field 531, special forest tractors	17.0	6
	Class 7. Inventory		
384	Radio and television receivers and reproductive apparatus	12.0	8
478	Equipment for the storage of piece merchandise	6.0	17
537	Technical assets for mass entertainment	12.0	8
542	Electrical appliances and household refrigerators (excluding heating equipment, light sources and lighting elements)	10.0	10
557	Metal furniture	4.0	25
615	Furniture of wood and other materials (excluding metal)	6.0	17
739	Stage equipment and theatrical needs	6.0	17
742	Musical instruments	10.0	10
744	Sporting goods	10.0	10
	Class 9. Land and Permanent Growths		
094	Permanent stands (excluding forest)	7.0	14

FOOTNOTES

1. Decree number 152/1975 of Laws of the CSSR, concerning the financing of the replacement of capital assets.

2. Section 70 of the commercial code.

3. Section 350 of the commercial code.

4. Section 34 of CSSR government ordinance number 153/1971, Laws of the CSSR, regarding the information system of organizations.

5. Decree number 95/1976 of the Laws of the CSSR concerning the individual classification of capital assets, as stated in the latest regulations.

6. Directive of the Federal Finance Ministry on the billing basis.

7. Decree number 155/1971 of the Laws of the CSSR concerning the inventorying of economic assets.

8. Decree number 156/1971 of the Laws fo the CSSR, concerning the disposition of national property.

9. Decree 23/1964 of the Laws of the CSSR, which accompanies law number 22/1964 concerning the documentation of real property, as stated in decree number 133/1965 of the Laws of the CSSR.

10. Decree number 90/1972 of the Laws of the CSSR concerning the financing of certain apparatus for the social needs of enterprises, and for certain activities of state economic organizations and foreign trade organizations.

11. Section 18 of law number 134/1970 of the Laws of the CSSR concerning the rules of the federal budget of the Czechoslovak federation and the principles of frugality with the budgeted assets of the budget of the federation and the republics (budget regulations).

12. Decree number 85/1976 of the Laws of the CSSR concerning a more detailed modification of territorial administration and construction practice.

9276
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DEADLINES SAID CLOSING IN ON 'KONZORCIUM' GAS PIPELINE

Bratislava PRAVDA in Slovak 6 Aug 80 p 2

[Article by Jan Dulin, editor of PRAVDA: "Time Is Running Out and Deadlines Call for Action--The Construction of the Konzorcium Gas Pipeline Demands Stepped-Up Activity"]

[Text] Kosice (By our editor, Jan Dulin)--Although the history of the transit gas pipeline system in our country began less than 10 years ago, last year we noted that 100 billion cubic meters of gas had already been transported. The capacity of the system continues to grow and will be considerably expanded by a third line--the Konzorcium gas pipeline now under construction.

Last year a 336-km section of the total length of 909 km had been completed and put into operation, and additional sections now being prepared for operation include new turbosets in compressor plants. At present, however, it is evident that the unfavorable weather conditions particularly in East Slovakia, has retarded the pace of the construction work so much that the October deadline for the completion of the entire construction project is in jeopardy.

Challenge of the Assembly Workers from the Ceskomoravsja-Kolben-Danek

Comrade Vojtech Littera, the chief of No 1 construction area in the Transit Gas Pipeline syndicate in Prague, says: "The task of delivering the line sector of the gas pipeline in October of this year is based on concluded agreements concerning Soviet gas deliveries. For that reason we are striving to meet it. The hub of operations in East Slovakia is the compressor plant in Jablonov, where we are scheduled to deliver four turbosets. We have organized a special administrative staff which is in charge of the schedule of operations and deals with urgent problems."

The work of the managing staff led by Comrade Littera has been successful. Turbosets Nos 11 and 12 were delivered by the CKD [Ceskomoravska-Kolben-Danek] in Prague--the general supplier of technology--in July, ahead of schedule. The recent aktiv called by the construction-wide committee of the Communist Party of Slovakia with the deputy director of the Transit

Gas Pipeline communal enterprise, Engineer Tibor Kubini, participating, also expressed appreciation for their innovative approach to all suppliers and workers in the group of investors, but the expression of gratitude was not all. The assembly workers again demonstrated their determination to deliver two additional turbosets ahead of schedule, as soon as October.

Their initiative is of particular importance because it guarantees the transport of the required amount of gas even before the delivery of the entire line is completed.

Construction work on the fourth building of the compressor plant in Velke Kapusany is proceeding concurrently with this task. There the Chemkostav of Humenne must definitely speed up the fulfillment of its objective tasks. Furthermore, it must improve its performance in the construction of the third building in Jablonov; it does not have to go far to look for an example to emulate, because the Hydrostav of Kosice has done excellent work on the same construction project.

Water and Rock

While work on the projects to construct compressor plants has been progressing on the whole successfully, a rather serious situation has developed on the tract of the gas pipeline. Last year's success and this year's fulfillment of the resolutions made by the welders of the Engineering Construction Works in Kosice in general gave rise to optimism; after all, the successive deadlines for the projects from the eastern border up to Jablonov had been met ahead of schedule, and all that was left for completion was a 16-km section. The plans and socialist pledges made by construction workers, however, were jeopardized by the rains. The soggy ground in the East Slovakia lowlands and high water conditions hampered operations connected with the spanning of rivers because the gas pipeline will cross the Ondava and Laborec rivers with an inverted siphon in their riverbeds. Thus far, the delay in the stipulated schedule of construction may not seem excessive. Nevertheless, the completion of the work in this part of the construction project has been postponed until the end of this year.

The most alarming situation, however, has developed in construction project 303, whose 27-km-long second section will cross the Silica Plateau. The Metallurgical Works in Kosice, as a subcontractor of Sigma in Prague, still has more than 10 km of trenches to dig. Drilling and blasting operations are proceeding very slowly, the applied capacities are insufficient, and the deadline set for pumping the gas into the pipeline is now no longer realistic. It appears that this very section will be crucial for the completion of the entire construction project because tasks are being successfully fulfilled in the okreses of Rimavska Sobota and Lucenec with regard to concrete results, the timetable and the stipulated volume. It is therefore quite correct to demand that the Metallurgical Works Corporation reinforce the capacities of its drilling technology and accelerate its operations. It makes no difference that the construction workers were late starting the work there. The complexity and difficulty of the

construction work on the highland plateau had become fully evident even during the construction of the first two lines of the gas pipeline, and thus they could not come as a surprise. The workers of the general supplier, Sigma of Prague, must consider the consequences of their failure to meet partial deadlines. Under the current unfavorable conditions it is of no avail to search for apologies; it is necessary to find a common language and an expedient solution. Every delay in the construction in one section negatively affects the completion of the work in other parts of the gas pipeline, and influences the subsequent technical and biological reclamation of the land as well.

9004
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ENERGY MINISTER OUTLINES FUTURE ENERGY PROBLEMS

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[Edited version of plenary presentation by Wolfgang Mitzinger, GDR minister for coal and energy, at Fifth Scientific Conference for Energy Management, Zittau Engineering College, 14-16 November 1979 in Zittau: "The Importance of the Planned Development of Coal and Energy Management Capacities and the Efficient Use of Energy Sources in All Social Areas To Meet the Growing Energy Requirement of the Socialist Society in the GDR"]

[Text] In the 30 years of the existence of the first worker and peasant state on German soil, as well as with the successful development of our country as a stable factor for peace in the heart of Europe, as the home of the revolutionary traditions of the German working class and as one of the 10 developed industrial nations of the world, demands on energy management have grown constantly.

The problems of providing a stable supply of fuels, electrical energy, gas and thermal energy to the inhabitants and the economy, however, have at no prior time been so much the focal point of social interest as is the case today. More than ever before, the effective production and use of energy--and thus the responsible activity of miners and workers in the energy field, of scientists, engineers and economists in the coal and energy sectors, as well as of all workers in the GDR who in one way or another determine the degree of efficiency of energy conversion and use as a result of their work--has obtained a high degree of political priority. It is of decisive economic relevance for the successful realization of our goals of full employment, public welfare, growth and stability.

As was established scientifically at the Ninth SED Party Congress, assuring the raw-materials and energy base for our country is of fundamental importance for the development of productive forces and for construction of the material and technical base of socialism and communism.

Primary tasks are to increase labor productivity and effectiveness of work in our society, to develop the economy proportionally and to strengthen the material and technical base of the economy of our country. Resulting from this are the constantly growing requirements placed on managing coal and energy in the GDR.

Today, the requirements for meeting energy demand have taken on completely new dimensions. They are the result of current conditions on the international market which are characterized by enduring and continuing processes of price increases for raw materials and energy sources. But they are also the consequence of the problems and rising costs for exploring, mining, converting and transporting domestic energy sources.

Our consistent course of fulfilling the main task, namely the unity of economic and social policy, directly includes the daily, interference-free supply of fuel and energy. Because the material and cultural needs of the citizens can only be satisfied with the aid of certain energy sources, thepeople evaluate the successful implementation of the energy policy of our party and of our socialist state--a policy developed by the Eighth Party Congress and reaffirmed by the Ninth Party Congress--primarily by how the growing needs in fuel and energy are net on a secure and stable basis at all times and under all conditions.

Fuel and energy supply has a high political priority because energy management problems go well beyond the national framework and today already play a decisive role in determining the foreign policy of states. In no region on earth can the problems of raw materials, fuels and energy be solved by one country alone. The capitalist world has been shaken by a profound energy crisis as part of the general crisis of capitalism.

Up to now only the socialist nations, unified in the Council for Economic Mutual Assistance, have been capable of solving their energy problems without the turmoil of such crises. This does not mean that our development is proceeding without problems. But all socialist countries are making great efforts to expand their own raw-materials, fuels and energy base and have experienced the realization of important joint projects in this area. In recent times alone, proof of these efforts can be found in such important projects as the completion of the 750-kV [kilovolt] line between the Soviet Union and the Hungarian People's Republic or the "Soyuz" natural gas pipeline, for which our contribution was the "Druzhba" line. Since 1979, electricity and Soviet natural gas have flowed into our republic through both lines.

The Agreement on Specialization and Cooperation Between the GDR and the USSR until 1990, which was signed on the occasion of the state visit of the general secretary of the CPSU Central Committee, Comrade L. I. Brezhnev, honoring the 30th anniversary of the founding of the GDR, establishes that we will continue on this path in the future and will continue to expand it.

More clearly today than at any time previously do we realize the great economic importance of the fact that our party and state leaders have constantly devoted a great deal of attention in their economic policies to the development and expansion of the domestic energy and raw-materials base as well as to the assurance of a stable supply of energy in the 30 years of development within the GDR.

After 1945, over 30 surface-mining sites as well as 6 new briquette factories, with an annual capacity of around 15 million tons of brown coal briquettes, were established in our socialist worker and peasant state. Today we are producing around 2.4 million tons of coke annually from our domestic brown coal in two brown coal high-temperature coking facilities which are the result of the creative work of scientists, technologists and engineers as well as of our state's construction and assembly workers. Today, for example, it takes us barely 6 months to mine the same quantity of crude brown coal as it did in the founding year of our republic.

In the 30 years of the GDR's existence, production of electricity has been increased to over 500 percent. The largest turbine in 1949 had a standard capacity of 35 MW [megawatts], whereas today we are producing electricity with power plant blocks having a capacity of 525 MW as the result of creative performances by our and Soviet scientists, engineers and machine builders.

Today we are producing in 3 months' time the same amount of city gas as we did in the entire year of the founding of our republic. This results primarily from the development of highly productive procedures for gasification and degasification of domestic crude brown coal as well as the use of our own and imported natural gas for city gas production.

Together with our Soviet friends and comrades, we established a completely new industrial branch, namely the natural gas industry of the GDR, with a current production level of around 9 billion m^3 per year.

In the 30 years of the power of the workers and peasants, a high-performance electricity network has been created for our republic with transmission voltages of up to 380 kV and, as part of the "Frieden" Unified Energy System, up to 750 kV with transmission capacities of over 2,000 MW. Our energy system is thus solidly integrated with those of CEMA member states by means of numerous intermediate system linkages.

The energy policy of the GDR is clearly determined by the resolutions of the Ninth SED Party Congress for the coming years and rests on three important pillars.

First, the needs of the people are to be met by maximum use of our own raw-material and fuel resources in line with the growing of fuels and energy, and planned growth as well as intensification in all branches of the economy of the GDR are to be assured.

Second, specific fuel and energy consumption is to be reduced even further by the continued rationalization of the processes of energy conversion, transmission and use.

Third, on the basis of a consistent realization of the comprehensive program of socialist economic integration, we shall continue to deepen the interrelationships between our economy and the economies of the USSR and the other CEMA member nations.

The implementation of these three premises of our energy policy has also affected the continuous expansion of the fuel and energy base of the German Democratic Republic in the past few years.

The brown coal industry occupies the key position in our country for meeting the growing energy needs of our society.

For meeting the growing energy requirements in the period 1976 to 1980 alone, 13.6 million tons of crude brown coal, 2.8 million tons of brown coal briquettes, 350 kilotons of brown coal high-temperature coke as well as over 1 billion m^3 of city gas were made available for the people and the economy. These amounts exceeded the targets of the 1976 - 1980 Five-Year Plan. Playing a major role here were applied scientific techniques in surface mining, such as capacity-increasing remodeling of overfurden removal bridges and excavators, the development and application of highly productive maintenance procedures, the improvement of drainage technologies or the continued mechanization of auxilliary and secondary processes, with a simultaneous reduction in heavy physical labor.

In the briquette factories as well, the conversion of research findings into practice contributed to a continued increase in the capacities of drying facilities by using an optimum methodology, to the complex mechanization and partial automation of production processes or to the increase in the life spans of high-wear parts for the purpose of rationalizing the production process.

It led to an increase in labor productivity in briquette production by about 9 percent in the last 3 years in comparison with 1975.

Our socialist society made large amounts of funds available in the past few years for the increased use of domestic crude brown coal, including follow-up investments in the territory in connection with the development of surface mining. In the last 3 years alone, more than M 5.8 billion marks were made available for the establishment of new surface mining capacities, in part as a substitute for exhausted coal deposits, for the reconstruction of refinement facilities as well as for the expansion of workshop capacities. It was and is a main objective of scientific-technical work, in the project-planning process as well as in the realization of investments, to use these funds as effectively as possible.

The experiences of the winter of 1978 and 1979 show that massive scientific-technical as well as organizational tasks still have to be solved in order to assure a high degree of stability and efficiency in all surface mining operations at all times and under all weather conditions. The flow of coal to the power plants, briquette factories and gas production plants, especially under severe weather conditions, may not be interrupted at any time.

Therefore, our work in the recent past has been directed toward the improvement of surface mining technologies and the operating regimen in the in the surface mines, especially with respect to the following conditions:

Implementation of scientifically based technologies between increasing the pace of overburden removal and increasing raw coal mining;

Adaptation of management and equipment technology in the surface mines to possible extreme weather conditions;

Development of scientific-technical technologies for assuring a hort-term, priority mining of coal under adverse weather conditions.

Other tasks for increasing the certainty of raw coal supply for large power plants have been accomplished--for example, expansion of coal storage areas in a few power plants, the additional use of railcar discharge equipment, the construction of extraction platforms of the establishment of defrosting walls and halls.

In this connection we believe that research and theories in the management of power plants will have to concern themselves much more in the future with the optimal mastery of large mass flows and with the requirements placed on the organization of work, even under extreme weather conditions. We need more scientific-technical solutions for assuring a high degree of stability for power plants at all times and solidly trained cadres that are capable of managing the power plants safely and stably, even under extraordinary conditions, with as great a degree of availability as possible.

About 50 percent of the still available coal deposits that can be mined in the GDR are in the surface mines that are already in operation or are to be opened by 1990. Of the remaining deposits, which either have not yet been opened up or included in the mining plans up to 1990, about 10 percent are salt coal deposits, any processing of which causes considerable technological difficulties because of the relatively high alkali content. We are also expecting an important contribution by scientists and engineers for solving this problem.

The further development of our brown coal mining efforts in the period around 1990 and thereafter will be determined not only by the useable duration of the deposits and the necessity for ensuring an adequate life span of the large consumers that have been created, such as power plants

and refinement facilities. It will also be determined by the then available approaches and the prerequisites created by deposits for establishing mining capacities. Therefore, our long-term concepts assume that up to 1980, raw coal mining will continue to increase. The period from 1980 to 1985 has a special strategic importance for the furhter impact of the energy management structure in our republic, aimed at the following considerations:

achievement of a considerable reduction in the use of heating oil through the increased use of domestic raw brown coal; and

Assurance of the prerequisites for an increase in the mining of brown coal in the next decade to 300 million tons per annum.

The great importance of the rapid development of brown coal mining for effectively meeting the growing energy needs of our socialist society can also be seen in the fact that in comparison with 1971, the prices on the capitalist world market for crude oil increased to 1,029 percent and to 179 percent for hard coal in 1979. For example, if one calculates the prices for these energy sources in terms of calories, then crude oil costs 4.5 times more than raw brown coal and 2.7 times more than brown coal briquettes. In the case of hard coal the price is more than double that of briquettes. It can clearly be seen from this comparison that it is very important for our republic to increase our own uields of energy sources on the basis of our domestic raw brown coal and to conserve all energy sources as much as possible.

The importance of brown coal for the production of electricity is illustrated by the power plant structure. Despite the growing proportion of nuclear energy in total electricity production figures, present calculations show that in 1990 over 70 percent of the total production of electricity will have to be supplied by brown coal-fired power plants.

The use of raw brown coal for producing heat is occurring to an increasing extent through the expansion of the district heating supply system.

In concurrence with the housing construction program, a series of new heat facilities, thermal power plants and industrial power plants using brown coal will appear in the coming years.

This fact emphasizes the special importance of raw brown coal for meeting energy needs, for the stable availability of electrical energy helps determine to a decisive degree the dynamic development of the economy as well as the rise in the people's standard of living.

In the past few years we have also ambitiously expanded the power plant base in our country, and alone in the period from 1976 to 1978, capacities were increased by 11.5 percent.

In close socialist cooperation with machine builders, workers in the electrical engineering field as well as construction workers, and as part of the socialist economic intergration with the Soviet Union and the other socialist countries, we were able to assure the scheduled start-up of new capacities with a high degree of supply efficiency. Some of these new capacities are the power plants at Hagenwerder III and Boxberg as well as the "Bruno Leuschner" nuclear power plant.

But also decisive for meeting the electricity needs of the GDR was the fact that the average availability of power plant capacities was increased by 2.4 percent in the past 3 years. In this effort it was primarily the scientific work and the worker initiatives that contributed decisively to peak load methodologies, to the application of productive maintenance technologies and to extension of the life spans of the plants.

On the basis of the resolutions on the "Theories Related to Overcoming the Consequences of Extreme Weather Conditions in the Winter of 1978/1979," our work in the past few months has been directed toward creating greater assurances for supplying electricity to the people and to the economy.

The solution of two decisive tasks was emphasized in our work:

First, there were efforts to create the necessary prerequisites so that the availability of power plant capacities, which are the basis of supply balances and plans, is achieved at all times and under all conditions.

Second, we concentrated on achieving a higher degree of supply assurance by projecting demanding objectives for the most economical use of electricity in industry as well as in all other areas of our life. These objectives assume the reduction of the previously planned consumption of electricity by an average of 5 percent by means of conservation without having any effect on production and the standard of living.

To assure a high degree of stability of capacities in power plants, the work has to emphasize the following conditions:

Precise adherence to the operational regimen, especially the operating and control regulations;

Consistent implementation of the repair and remodeling programs for power plant outfittings.

What we need is a greater contribution by science and technology for a high level of management in the power plants to preclude disruptions and accidents.

For example, this involves the development and use of safety equipment which precludes improper procedure and incorrect actions right from the beginning.

But in the determination of necessary maintenance schedules and applications in energy installations as well, there presently are still too few scientifically based and tested instruments and methods which can be used to determine reliably the state of wear and the life span reserve of power plant facilities and electricity transmission systems. For this reason, the methods and procedures of technical diagnostics are to be advanced at a considerably faster pace and applied practically in larger areas of application in order to preclude discontinuities in the electricity supply process as much as possible.

But we also need scientific-technical solutions for a higher level of productivity and effectiveness of the maintenance processes in power plants which will lead to a further reduction in repair times, with a simultaneous reduction in the amount of work necessary and the maintenance of high quality standards.

The main way to achieve the objectives we have posed for securely meeting the growing demand for electricity in our socialist society is and remains the continued expansion of socialist intensification, with a simultaneous acceleration of scientific-technical progress as well as the systematic construction of new capacities.

Continuing to design the developed socialist society in the GDR simultaneously includes new and greater tasks for science and technology. We especially need results in research and development from our institutes and universities, results which set world standards and which can be transferred into practice within the shortest possible period of time.

Science and technology are integrated components of management and planning in the development of the fuel and energy base. We derive our development objectives from the information gained thereby for the planned design of the energy base of our socialist society.

But simultaneously we also determine the requirements to be placed on science and technology for assuring the growth of performance, productivity and effectiveness from the requirements resulting from the continued designing of the developed socialist society in the GDR.

With respect to the continued expansion of the power plant base in our republic, access to capacity will be determined primarily by the new brown coal power plants with 500-megawatt block units and by nuclear power plants with large block units. The close cooperation with the USSR in constructing these power plants assures the comprehensive realization of scientific-technical progress as well as the smooth adoption of the most advanced experiences in power plant construction in the USSR, a country which occupies a leading position in the world.

The output structure is being improved gradually with the continued expansion of our power plant base. Completion of the pump storage plant in Markersbach, with 1,060 MW in 1981, will be a decisive component. Together with the existing pump storage plants and gas turbine plants, the percentage of pure peak power in total power will increase from 6.1 percent in 1975 to about 10 percent in 1985. With the construction of industrial and thermal power plants, we will be making even greater use of the energetically and economically advantageous heat-to-power coupling method using the building-block solution for thermal power plants and industrial power plants, now being developed and constructed, with 320-tons per hour steam generators using raw brown coal and 60-MW bleeder back-pressure turbines. This type of thermal power plant will determine the profile of heat supply in the coming decades. This is of decisive importance for the ambitious realization of the housing construction program as the core of the SED's social policy program.

Alone in the period from 1976 through 1980, over 93 percent of all newly constructed housing is being outfitted with modern heating systems; of these, around 78 percent use district heating.

The continued development of the electricity system, however, also requires the continued systematic expansion of the main transmission lines with 220/380 kV in connection with the power feed from the new power plant locations. The 380-kV system will be designed as a beam network until about 1980 and then be increasingly interlaced with cyclical circuits. The 380-kV system is related to the gradual construction of a 750-kV system-forming network of the Unified Energy System of the CEMA member states. The first step in this direction was the establishment of the 750-kV intermediate system connections between Vinnitsa (USSR) and Albertirsa (Hungarian PR).

We have achieved a marked scientific level in calculating and optimizing the expansion plans of electrical mains. This level must also be achieved in the management of electrical transmission systems.

Microelectronics and computer technologies are providing us with important assistance on this point, as has been confirmed by the first cases of application.

But in this area as well, the pace has to be accelerated and a closed concept for automating the associated electricity system has to be developed.

Along with the increase in the performance of coal and energy management by intensifying existing facilities and building new capacities, growing importance is being accorded to the rational and economical use of energy as a fixed component of our socialist energy policy.

The rational use of energy and the consistent reduction in avoidable energy-conversion, transmission and application losses are increasing the leeway in economic growth considerably and are thus having a direct affect on the successful continuation of our economic and social policies which are directed toward fulfilling the main task.

The consistent adaptation of energy needs for production to technically and economically based consumption values that are oriented toward the peak scientific-technical level, and assurance of the economical and rational consumption of energy in all other areas of social life, especially for room heating, lighting and transportation, are the tasks which will continue to require intensive penetration by science and technology. Initial results have already been achieved.

The growth rate in the national income of more than 5 percent per annum was achieved in the past few years with a utility energy growth rate averaging only 2.0 percent. The specific expenditure of primary energy per mark of gross production was reduced by aroudn 25 percent. By means of economic rationalization in energy and an improved energy sources structure, from 1971 to 1978 energy conservation was achieved which corresponds to about 58 million tons of raw brown coal.

The high degree of effectiveness of economic rationalization measures for energy is expressed in the return flow time span for investments averaging 1.5 years.

These few figures do show clearly that the rational use of energy is not a matter that was born out of necessity but rather is a rule of socialist management derived from the law of the economy of time.

It is objectively necessary here to place the question about reduction of energy losses in the management of coal and energy at the top of the list of all considerations.

Up to now, the specific index figures for energy consumption have been undercut for a whole series of energy-intensive processes, including gas and coke production as well as the production of briquettes. The core problem, however, consists in achieving a considerably faster pace for reducing the specific fuel-to-heat consumption for electrical energy production, especially in our large power plants.

Along with conserving fuels and increasing degrees of energy conversion efficiency, the use of incidental and environmental energy also plays an important role.

Undoubtedly, in the GDR good results have already been achieved in the use of secondary energy sources. Waste xylite-bearing wet ash, coal-mix products and sump products as well as brown coal briquette dust have been used almost completely. This also applies to liquid and gaseous waste fuels. The waste energy sources used at present are equivalent to about 20 million tons of raw brown coal. If we consider that almost half of the waste energy sources are being used, then the comparison of both values indicates the importance of the greater use of waste energy sources for our republic's primary energy balance.

The higher requirements placed on a rational and economical use of energy, as was dictated to us with the resolution of the GDR Council of Ministers, dated 13 September 1979, are the bases for the 1980 plan and for conducting the socialist competition. This can be perceived mainly by using the following comparison of figures: the annual growth rate in primary energy source supply from 1971 to 1976 was 2.0 percent and from 1976 to 1979 an average of 2.7 percent per year, but the 1980 plan estimate projects economic growth with a growth rate for primary energy of 1.7 percent.

The tasks to be solved in the coming period are clearly defined in the resolutions of the party and government for the continued development of the fuels and energy base in our republic.

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STATISTICS ON 1979 LABOR TURNOVER PUBLISHED

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[Compilation of Statistics: "1979 Labor Turnover"]

[Text]

1 Fizikai foglalkozásúak létszámváltozása az iparban 1979. évben

	3 Megnevezés	4 Átlagos statisztikai állományi létszáma (fő)	5 Munkába lépők		6 Munkából kilépők	
			7 száma (fő)	8 százaléka	7 száma (fő)	8 százaléka
9	Bányászat	94 062	12 616	13,4	14 240	15,1
10	Villamosenergia-ipar	25 643	5 076	19,8	5 426	21,2
11	Kohászat	76 576	13 969	18,2	14 531	19,0
12	Gépipar	382 437	87 937	23,0	99 380	26,0
13	Építőanyag-ipar	63 452	16 346	25,8	16 759	26,4
14	Vegyipar	82 668	17 056	20,6	18 253	22,1
15	Nehézipar	724 838	153 000	21,1	168 589	23,3
16	Könnyűipar	344 308	87 958	25,5	99 924	29,0
17	Egyéb ipar	48 994	15 286	31,2	15 392	31,4
18	Élelmiszeripar	149 203	54 737	36,7	54 715	36,7
19	Ipar összesen	1 267 343	310 981	24,5	338 620	26,7
20	Ebből:					
21	Állami	1 080 423	258 765	24,0	283 443	26,2
22	Szövetkezeti	186 920	52 216	27,9	55 177	29,5

[Table continued on following page]

[Table continued]

2 Fizikai és nem fizikai foglalkozásúak létszámváltozása az iparban 1979. évben

1 3 Megnevezés	4 Átlagos statisztikai állományi létszáma (fő)	5 Munkába lépők 7 száma (fő)	8 százaléka	6 Munkából kilépők 7 száma (fő)	8 százaléka
9 Bányászat	113 365	14 147	12,5	15 819	14,0
10 Villamosenergia-ipar	35 346	6 526	18,5	6 805	19,3
11 Kohászat	95 882	16 022	16,7	16 849	17,6
12 Gépipar	514 538	107 688	20,9	122 325	23,8
13 Építőanyag-ipar	77 068	18 260	23,7	18 720	24,3
14 Vegyipar	109 613	20 491	18,7	21 994	20,1
15 Nehézipar	945 812	183 134	19,4	202 512	21,4
16 Könnyűipar	401 719	96 441	24,0	109 587	27,3
17 Egyéb ipar	58 422	16 893	28,9	17 089	29,3
18 Élelmiszeripar	189 339	61 172	32,3	61 455	32,5
19 Ipar összesen	1 595 292	357 640	22,4	390 643	24,5
20 Ebből:					
21. Állami	1 376 795	299 400	21,7	329 440	23,9
22 Szövetkezeti	218 497	58 240	26,7	61 203	28,0

Key:

1. Changes in the number of manual workers employed in industry in 1979
2. Changes in the number of manual and non-manual workers employed in industry in 1979
3. Designation
4. Average statistical labor force (person)
5. Starting work
6. Leaving work
7. Number (person)
8. Percent
9. Mining
10. Electric power industry
11. Metallurgy
12. Machine industry
13. Building material industry
14. Chemical industry
15. Heavy industry
16. Light industry
17. Other industry
18. Food industry
19. Industry, total
20. Of which:
21. State
22. Cooperative

1 **Nem fizikai foglalkozásúak létszámváltozása az iparban 1979. évben**

	2 Megnevezés	3 Átlagos statisztikai állományi létszám (fő)	4 Munkába lépők		5 Munkából kilépők	
			6 száma (fő)	7 százaléka	6 száma (fő)	7 százaléka
8	Bányászat	19 303	1 531	7,9	1 579	8,2
9	Villamosenergia-ipar	9 703	1 450	14,9	1 379	14,2
10	Kohászat	19 306	2 053	10,6	2 318	12,0
11	Gépipar	132 101	19 751	15,0	22 945	17,4
12	Építőanyagipar	13 616	1 914	14,1	1 961	14,4
13	Vegyipar	26 945	3 435	12,7	3 741	13,9
14	Nehézipar	220 974	30 134	13,6	33 923	15,4
15	Könnyűipar	57 411	8 483	14,8	9 663	16,8
16	Egyéb ipar	9 428	1 607	17,0	1 697	18,0
17	Élelmiszeripar	40 136	6 435	16,0	6 740	16,8
18	Ipar összesen	327 949	46 659	14,2	52 023	15,9
19	Ebből:					
20	Állami	296 372	40 635	13,7	45 997	15,5
21	Szövetkezeti	31 577	6 024	19,1	6 026	19,1

22 **Fizikai és nem fizikai foglalkozásúak létszámváltozása az építőiparban 1979. évben**

	2 Megnevezés	3 Átlagos statisztikai állományi létszáma (fő)	4 Munkába lépők		5 Munkából kilépők	
			6 száma (fő)	7 százaléka	6 száma (fő)	7 százaléka
23	Magasépítőipar	233 466	64 938	27,8	71 506	30,6
24	Mélyépítőipar	63 004	16 068	25,5	19 175	30,4
25	Építési szak- és szerelőipar	20 467	5 269	25,7	5 900	28,8
26	Építőipari kivitelezés	316 937	86 275	27,2	96 581	30,5
27	Építőipari tervezés	35 716	6 208	17,4	6 873	19,2
28	Építőipar összesen	352 653	92 483	26,2	103 454	29,3
29	Ebből:					
30	Állami	282 561	68 413	24,2	79 041	28,0
31	Szövetkezeti	70 092	24 070	34,3	24 413	34,8

[Table continued on following page]

[Table continued]

	32 Fizikai					
23	Magasépítőipar	189 460	58 079	30,7	64 066	33,8
24	Mélyépítőipar	50 424	14 365	28,5	17 054	33,8
25	Építési szak- és szerelőipar	16 181	4 665	28,8	5 170	32,0
26	Építőipari kivitelezés	256 065	77 109	30,1	86 290	33,7
27	Építőipari tervezés	4 432	1 377	31,1	1 628	36,7
28	Építőipar összesen	260 497	78 486	30,1	87 918	33,8
29	E b b ő l :					
30	Állami	203 682	56 890	27,9	65 900	32,4
31	Szövetkezeti	56 815	21 596	38,0	22 018	38,8
	33 Nem fizikai					
23	Magasépítőipar	44 006	6 859	15,6	7 440	16,9
24	Mélyépítőipar	12 580	1 703	13,5	2 121	16,9
25	Építési szak- és szerelőipar	4 286	604	14,1	730	17,0
26	Építőipari kivitelezés	60 872	9 166	15,1	10 291	16,9
27	Építőipari tervezés	31 284	4 831	15,4	5 245	16,8
28	Építőipar összesen	92 156	13 997	15,2	15 536	16,9
29	E b b ő l :					
30	Állami	78 879	11 523	14,6	13 141	16,7
31	Szövetkezeti	13 277	2 474	18,6	2 395	18,0

Key:

1. Changes in the number of non-manual workers employed in industry in 1979
2. Designation
3. Average statistical labor force (person)
4. Starting work
5. Leaving work
6. Number (person)
7. Percent
8. Mining
9. Electric power industry
10. Metallurgy
11. Machine industry
12. Building material industry
13. Chemical industry
14. Heavy industry
15. Light industry
16. Other industry
17. Food industry
18. Industry, total
19. Of which:
20. State
21. Cooperative
22. Changes in the number of manual and non-manual workers employed in the construction industry in 1979
23. Surface construction industry
24. Civil engineering building industry
25. Construction technical and fitting industry
26. Construction industry finishing
27. Construction industry planning
28. Construction industry, total
29. Of which:
30. State
31. Cooperative
32. Manual
33. Non-manual

1 **Fizikai és nem fizikai foglalkozásúak létszámváltozása a mezőgazdaságban 1979. évben**

	2 Megnevezés	3 Átlagos statisztikai állományi létszám (fő)	4 Munkába lépők		5 Munkából kilépők	
			6 száma (fő)	7 százaléka	6 száma (fő)	7 százaléka
8	Mezőgazdaság	705 623	154 237	21,9	151 925	21,5
9	Ebből:					
10	Állami gazdaság	127 894	27 838	21,8	30 794	24,1
11	Erdőgazdálkodás	45 639	10 513	23,0	40 253	22,5
12	Mezőgazdaság és erdőgazdálkodás	751 262	164 750	21,9	162 178	21,6
13	Ebből:					
14	Állami	179 099	40 149	22,4	42 662	23,3
15	Szövetkezeti *	572 163	124 601	21,8	119 516	20,9
	16 Fizikai					
8	Mezőgazdaság	601 980	138 929	23,1	139 181	23,1
9	Ebből:					
10	Állami gazdaság	107 583	25 048	23,3	27 696	25,7
11	Erdőgazdálkodás	37 982	9 786	25,8	9 538	25,1
12	Mezőgazdaság és erdőgazdálkodás	639 962	148 715	23,2	148 719	23,2
13	Ebből:					
14	Állami	149 379	36 237	24,3	38 522	25,8
15	Szövetkezeti *	490 583	112 478	22,9	110 197	22,5
	17 Nem fizikai					
8	Mezőgazdaság	103 643	15 308	14,8	12 744	12,3
9	Ebből:					
10	Állami gazdaság	20 311	2 790	13,7	3 098	15,3
11	Erdőgazdálkodás	7 657	727	9,5	715	9,3
12	Mezőgazdaság és erdőgazdálkodás	111 300	16 035	14,4	13 459	12,1
13	Ebből:					
14	Állami	29 720	3 912	13,2	4 140	13,9
15	Szövetkezeti *	81 580	12 123	14,9	9 319	11,4

18 * Szakszövetkezetek nélkül

[Table continued on following page]

[Table continued]

19 **Fizikai foglalkozásúak létszámváltozása a szállítás és hírközlésben 1978. évben**

	2 Megnevezés	3 Átlagos statisztikai állományi létszáma (fő)	4 Munkába lépők		5 Munkából kilépők	
			6 száma (fő)	7 százaléka	6 száma (fő)	7 százaléka
20	Vasúti közlekedés	104 349	40 796	39,1	15 545	14,9
21	Közúti közlekedés	108 292	25 382	23,4	26 423	24,4
22	Városi közlekedés	26 959	6 525	24,2	5 961	22,1
23	Vízi közlekedés	4 076	1 012	24,8	898	22,0
24	Légi közlekedés	2 104	418	19,9	274	13,0
25	Csővezetékes száll.	1 638	178	10,9	259	15,8
26	Közlekedésjellegű szolgáltatás	198	78	39,4	63	31,8
28	Szállítás	247 616	74 389	30,0	49 423	20,0
29	Hírközlés	34 712	20 132	58,0	19 118	55,1
30	Szállítás és hírközlés	282 328	94 521	33,5	68 541	24,3
31	Ebből:					
32	Állami	280 627	94 103	33,5	68 160	24,3
33	Szövetkezeti	1 701	418	24,6	381	22,4
	34 Nem fizikai					
20	Vasúti közlekedés	33 639	6 628	19,7	2 749	8,2
21	Közúti közlekedés	24 475	3 684	15,1	3 704	15,1
22	Városi közlekedés	6 991	845	12,1	1 132	16,2
23	Vízi közlekedés	2 382	244	10,2	319	13,4
24	Légi közlekedés	2 291	499	21,8	300	13,1
25	Csővezetékes szállítás	572	78	13,6	101	17,7
26	Közlekedésjellegű szolgáltatás	30	8	26,7	7	23,3
28	Szállítás	70 380	11 996	17,0	8 312	11,8
29	Hírközlés	27 837	7 577	27,2	6 606	23,7
30	Szállítás és hírközlés	98 217	19 563	19,9	14 918	15,2
31	Ebből:					
32	Állami	97 903	19 485	19,9	14 853	15,2
33	Szövetkezeti	314	78	24,8	65	20,7

[Key on following page]

Key:

1. Changes in the number of manual and non-manual workers employed in agriculture in 1979
2. Designation
3. Average statistical labor force (person)
4. Starting work
5. Leaving work
6. Number (person)
7. Percent
8. Agriculture
9. Of which:
10. State farm
11. Forestry
12. Agriculture and forestry
13. Of which:
14. State
15. Cooperative
16. Manual
17. Non-manual
18. * Without special cooperatives
19. Changes in the number of manual workers employed in transportation and communication in 1979
20. Rail transport
21. Road transport
22. City transport
23. Water transport
24. Air transport
25. Pipeline transport
26. Transport-like services
28. Shipping
29. Communication
30. Transportation and communication
31. Of which:
32. State
33. Cooperative
34. Non-manual

1 **Fizikai és nem fizikai foglalkozásúak létszámváltozása a szállítás és hírközlésben 1979. évben**

2 Megnevezés	3 Átlagos statisztikai állományi létszáma, (fő)	4 Munkába lépők		5 Munkából kilépők	
		6 száma (fő)	7 százaléka	6 száma (fő)	7 százaléka
8 Vasúti közlekedés	137 988	47 424	34,4	18 294	13,3
9 Közúti közlekedés	132 767	29 066	21,9	30 127	22,7
10 Városi közlekedés	33 950	7 370	21,7	7 093	20,9
11 Vízi közlekedés	6 458	1 256	19,4	1 217	18,8
12 Légi közlekedés	4 395	917	20,9	574	13,1
13 Csővezetékes szállítás	2 210	256	11,6	360	16,3
14 Közlekedésjellegű szolgáltatás	228	86	37,7	70	30,7
15 Szállítás	317 996	86 375	27,2	57 735	18,2
16 Hírközlés	62 549	27 709	44,3	25 724	41,1
17 Szállítás és hírközlés összesen	380 545	114 084	30,0	83 459	21,9
18 Ebből:					
19 Állami	378 530	113 588	30,0	83 013	21,9
20 Szövetkezeti	2 015	496	24,6	446	22,1

[Table continued on following page]

[Table continued]

21 **Fizikai foglalkozásúak létszámváltozása a kereskedelemben 1979. évben**

	2 Megnevezés	3 Átlagos statisztikai állományi létszáma (fő)	4 Munkába lépők		5 Munkából kilépők	
			6 száma (fő)	7 százaléka	6 száma (fő)	7 százaléka
22	Termelőeszköz és készletező nagykereskedelem	17 754	4 149	23,4	4 394	24,7
23	Mezőgazdasági termék nagykereskedelem	19 290	8 244	42,7	8 760	45,4
24	Melléktermék és hulladékbegyűjtő nagykereskedelem	3 134	1 436	45,8	1 353	43,2
25	Fogyasztási cikk nagykereskedelem	15 126	6 585	43,5	6 388	42,2
26	Bolti kiskereskedelem	66 061	22 412	33,9	20 857	31,6
27	Gyógyszer-kereskedelem	11 947	2 957	24,8	2 304	19,3
28	Vendéglátás	64 100	28 986	45,2	27 886	43,5
29	Vegyes tevékenységű kereskedelem	89 420	35 521	39,7	32 405	36,2
30	Kereskedelmi szolgáltatások	2 864	1 784	62,3	1 073	37,5
31	Belkereskedelem	289 696	112 074	38,7	105 420	36,4
32	Külkereskedelem	4 051	1 439	35,5	1 446	35,7
33	Kereskedelem összesen	293 747	113 513	38,6	106 866	36,4
34	Ebből:					
35	Állami	182 024	67 694	37,2	64 420	35,4
36	Szövetkezeti	111 723	45 819	41,0	42 446	38,0

[Key on following page]

Key:

1. Changes in the number of manual and non-manual workers employed in transportation and communication in 1979
2. Designation
3. Average statistical labor force (person)
4. Starting work
5. Leaving
6. Number (person)
7. Percent
8. Rail transport
9. Road transport
10. City transport
11. Water transport
12. Air transport
13. Pipeline transport
14. Transport-like services
15. Shipping
16. Communication
17. Transportation and communication
18. Of which:
19. State
20. Cooperative
21. Changes in the number of manual workers employed in trade in 1979
22. Capital goods and stockpiling wholesale trade
23. Agricultural product wholesale trade
24. By-product and waste collecting wholesale trade
25. Consumer goods wholesale trade
26. Store retail trade
27. Pharmaceutical trade
28. Catering
29. Miscellaneous trade
30. Trade services
31. Domestic trade
32. Foreign trade
33. Trade, total
34. Of which:
35. State
36. Cooperative

1 **Nem fizikai foglalkozásúak létszámváltozása a kereskedelemben 1979. évben**

	3 Megnevezés	4 Átlagos statisztikai állományi létszám (fő)	5 Munkába lépők		6 Munkából kilépők	
			7	8	7	8
			száma (fő)	százaléka	száma (fő)	százaléka
9	Termelőeszköz és készletező nagykereskedelem	12 928	2 338	18,1	2 389	18,5
10	Mezőgazdasági termék nagykereskedelem	7 759	1 094	14,1	1 302	16,8
11	Melléktermék és hulladékbegyűjtő nagykereskedelem	1 389	350	25,2	370	26,6
12	Fogyasztási cikk nagykereskedelem	12 148	2 509	20,7	2 561	21,1
13	Bolti kiskereskedelem	31 468	3 427	10,9	4 333	13,8
14	Gyógyszer-kereskedelem	4 998	658	13,2	544	10,9
15	Vendéglátás	26 541	6 815	25,7	7 150	26,9
16	Vegyes tevékenységű kereskedelem	39 512	6 036	15,3	6 149	15,6
17	Kereskedelmi szolgáltatások	5 137	1 490	29,0	1 209	23,5
18	Belkereskedelem	141 880	24 717	17,4	26 007	18,3
19	Külkereskedelem	18 027	3 673	20,4	3 551	19,7
20	Kereskedelem összesen	159 907	28 390	17,8	29 558	18,5
21	Ebből:					
22	Állami	110 156	20 439	18,6	21 543	19,6
23	Szövetkezeti	49 751	7 951	16,0	8 015	16,1

[Table continued on following page]

[Table continued]

2 Fizikai és nem fizikai foglalkozásúak létszámváltozása a kereskedelemben 1979. évben

	3 Megnevezés	4 Átlagos statisztikai állományi létszáma (fő)	5 Munkába lépők		6 Munkából kilépők	
			7 száma (fő)	8 százaléka	7 száma (fő)	8 százaléka
9	Termelőeszköz és készletező nagykereskedelem	30 682	6 487	21,1	6 783	22,1
10	Mezőgazdasági termék nagykereskedelem	27 049	9 338	34,5	10 062	37,2
11	Melléktermék és hulladékbegyűjtő nagykereskedelem	4 523	1 786	39,5	1 723	38,1
12	Fogyasztási cikk nagykereskedelem	27 274	9 094	33,3	8 949	32,8
13	Bolti kiskereskedelem	97 529	25 839	26,5	25 190	25,8
14	Gyógyszer-kereskedelem	16 945	3 615	21,3	2 848	16,8
15	Vendéglátás	90 641	35 801	39,5	35 036	38,7
16	Vegyes tevékenységű kereskedelem	128 932	41 557	32,2	38 554	29,9
17	Kereskedelmi szolgáltatások	8 001	3 274	40,9	2 282	28,5
18	Belkereskedelem	431 576	136 791	31,7	131 427	30,5
19	Külkereskedelem	22 078	5 112	23,2	4 997	22,6
20	Kereskedelem összesen	453 654	141 903	31,3	136 424	30,1
21	Ebből:					
22	Állami	292 180	88 133	30,2	85 963	29,4
23	Szövetkezeti	161 474	53 770	33,3	50 461	31,3

[Key on following page]

Key:

1. Changes in the number of non-manual workers employed in trade in 1979
2. Changes in the number of manual and non-manual workers employed in trade in 1979
3. Designation
4. Average statistical labor force (person)
5. Starting work
6. Leaving work
7. Number (person)
8. Percent
9. Capital goods and stockpiling wholesale trade
10. Agricultural product wholesale trade
11. By-product and waste collecting wholesale trade
12. Consumer goods wholesale trade
13. Store retail trade
14. Pharmaceutical retail trade
15. Catering
16. Miscellaneous trade
17. Trade services
18. Domestic trade
19. Foreign trade
20. Trade, total
21. Of which:
22. State
23. Cooperative

1 **Fizikai és nem fizikai foglalkozásúak létszámváltozása a vízgazdálkodásban 1979. évben**

2 Megnevezés	3 Átlagos statisztikai állományi létszám (fő)	4 Munkába lépők		5 Munkából kilépők	
		6 száma (fő)	7 százaléka	6 száma (fő)	7 százaléka
8 Vízgazdálkodás összesen	73 070	16 572	22,7	14 982	20,5
9 Ebből:					
10 Állami	61 720	13 241	21,5	11 944	19,4
11 Szövetkezeti	11 350	3 331	29,3	3 038	26,8
12 Fizikai					
8 Vízgazdálkodás összesen	56 779	14 087	24,8	12 714	22,4
9 Ebből:					
10 Állami	48 050	11 235	23,4	10 143	21,1
11 Szövetkezeti	8 729	2 852	32,7	2 571	29,5
13 Nem fizikai					
8 Vízgazdálkodás összesen	16 291	2 485	15,3	2 268	13,9
9 Ebből:					
10 Állami	13 670	2 006	14,7	1 801	13,2
11 Szövetkezeti	2 621	479	18,3	467	17,8

[Table continued on following page]

14 Fizikai és nem fizikai foglalkozásúak létszámváltozása az anyagi ágazatokban 1979. évben

2 Megnevezés	3 Átlagos statisztikai állományi létszáma (fő)	4 Munkába lépők		5 Munkából kilépők	
		6 száma (fő)	7 százaléka	6 száma (fő)	7 százaléka
15 Anyagi ágak összesen	3 606 436	887 432	24,6	891 140	24,7
16 Ebből:					
17 Állami	2 570 885	622 924	24,2	632 063	24,6
18 Szövetkezeti	1 035 591	264 508	25,5	259 077	25,0
19 Fizikai					
15 Anyagi ágak összesen	2 800 656	760 393	27,1	763 378	27,3
16 Ebből:					
17 Állami	1 944 185	524 924	27,0	530 588	27,3
18 Szövetkezeti	856 471	235 379	27,5	232 790	27,2
20 Nem fizikai					
15 Anyagi ágak összesen	805 820	127 129	15,8	127 762	15,9
16 Ebből:					
17 Állami	626 700	98 000	15,6	101 475	16,2
18 Szövetkezeti	179 120	29 129	16,3	26 287	14,7

Key:

1. Changes in the number of manual and non-manual workers employed in water management
2. Designation
3. Average statistical labor force (person)
4. Starting work
5. Leaving work
6. Number (person)
7. Percent
8. Water management, total
9. Of which:
10. State
11. Cooperative
12. Manual
13. Non-manual
14. Changes in the number of manual and non-manual workers in the material branches in 1979
15. Material branches, total
16. Of which:
17. State
18. Cooperative
19. Manual
20. Non-manual

2153
CSO: 2500

MANPOWER REGROUPING, RETRAINING MEASURES DISCUSSED

Budapest FIGYELO in Hungarian No 33, 13 Aug 80 p 1,6

[Article by Dr Iren Szabo: "Labor Management. Regrouping, Retraining and Skills"]

[Text] Technological and economic development, combined with a changing product structure, affects workers' skills in a number of ways. On the one hand, it requires skills that are convertible (i.e., include a number of trades and job assignments) and are based on a higher educational level. On the other hand, it requires regrouping and retraining of a substantial portion of employed skilled workers.

At the present time, the skilled labor force of enterprises can be classified according to the workers' credentials as follows: the so-called "in-house skilled workers" (those who have completed 8 grades or less); those who have obtained their credentials by completing courses after work (also with a 8th grade education or less); skilled workers who have graduated from training institutes (8 grades plus 2 or 3 years of training); and, finally, skilled workers with a high school diploma.

Worker's Certificates From Many Sources

Most of the so-called "in-house skilled workers" have spent a long time in the same job at the same enterprise. They have accumulated a great deal of experience. In general, their theoretical knowledge is on a low level, their skills are narrow, but they are competent and know a great deal about local conditions. Convertibility of their skills is narrow: it is restricted to jobs not much different from the one they have learned.

Skilled workers who have completed courses along with their work differ from the preceding category in that their worker's certificates must be accepted by all enterprises. As a result, this group has more mobility. Their convertibility within the enterprise is in most cases restricted to jobs that were part of their trade at the time when they took their courses.

It must be noted that participation in vocational training by those already in the work force declined between 1960 and 1974.

Graduates of vocational training institutes are somewhat better acquainted with theory. This provided a better basis for further technical training. This is especially true for those who have received 3 years of vocational training after finishing eighth grade. The number and percentage of vocational institute students enrolled in advanced programs increased greatly between 1960 and 1974. Their percentage rose from 0.2 percent during the 1964-65 academic year to 47.2 percent in 1973-74. Expansion of this system creates better conditions for further training, raising the general and special skills of workers and converting skills.

Skilled workers who have obtained their certificates after finishing high school have received technical training over a much shorter period (the difference is 1 or 1.5 years). This is because they have learned about theory in the high school. As a rule, they are easier to "convert" than those without a high school diploma, precisely because of their theoretical knowledge.

The training of graduates of technical high schools differs from that of other high school graduates mainly in that their basic knowledge of humanities and natural sciences is on a somewhat more modest scale, while their basic knowledge of technical matters is more extensive. On the other hand, their work experience is less than that of vocational school graduates. Their absorption into the workplace involves more problems, but they are highly "convertible," especially in jobs requiring a lot of theory.

One can assume that with the increasing integration of technological processes in the future there will be an increasing need for workers who have received training in a number of interrelated skills in a technical high school where they have acquired knowledge of a large segment of the production process.

Technical development and changes in the product structure over the next 10 to 15 years will both require a great deal of realignment and regrouping. The quality, composition and adaptability of the work force will have a major effect on the rapid and smooth fulfillment of these tasks.

Without an Eighth Grade Education?

The fact is that the education and training of manual workers has undergone major changes in the last 30 years. There is an intimate relationship between age composition and educational level because young people have had much better opportunities to study and, of course, because the age groups with a lower educational level are gradually leaving the productive work force. Development of the workers has a similar effect: more and more are finishing elementary school; the number of skilled workers with high school diploma is increasing and teaching in technical high schools is increasingly being coordinated with vocational training.

Nevertheless, we must know that, alongside the laudable accomplishments, about one half of active wage-earners doing manual work have not completed elementary school. This situation, unfavorable as it is, is further complicated by the fact that about 30 percent of those who have not finished elementary school (500,000 people) belong to the 15 to 30 age group. This is especially noteworthy because these people will take part in socially organized work for up to 20 to 30 years. The situation is further exacerbated by the constant "regeneration" of the group that has not finished elementary school. Every year, about 12,000 to 15,000 young people exceed the compulsory school age limit without finishing their elementary school studies. This is one reason why, in some trades, it is not possible to insist on elementary school graduation as a prerequisite for adult training. Lack of basic elementary school subjects is a critical point of labor management, retraining and convertibility within enterprises because the theoretical basis of technical training is lacking.

One and one half million people passed the tests to become skilled workers between 1960 and 1973. This represents 80 percent of all skilled workers in 1973. This does not mean, however, that a corresponding percentage of skilled workers finished school after 1960 because some obtained certificates in two or even three trades, others got white-collar jobs after earning their certificates, while a substantial number of young skilled workers took unskilled or other jobs due to financial reasons.

Education and Technology

By analyzing the question from another viewpoint based on the age composition of skilled workers and other data, one can conclude that about one half of skilled workers in 1973 finished training after 1960. This means that about one half of today's skilled workers got their certificates in the 1950's when the number of students increased suddenly, but the financial and personnel conditions of training were, to put it mildly, deficient. (On this topic, more in FIGYELO, No 27, 1980. - Ed.)

At the same time, there were periods when novice workers entered socially organized work in such numbers that the relatively few well-trained professionals were unable to give them any competent direction. As a result, practical experience contributed to problems arising from the low quality of training, rather than remedying them.

From the standpoint of the development of our economic structure one cannot neglect the fact that about 1 million active wage-earners have entered industrial organizations straight from households or agriculture. (55 to 60 percent of today's unskilled or semi-skilled workers are still of peasant origin). In the majority, they have no skills or have only the kind of skills and experience that is largely unnecessary for today's economy. The educational level, skills, technical, organizational and work structure of workers entering industry and construction directly from agriculture and household work as a result of this large-scale realignment was much lower than the general and technical sophistication of the group

they joined. Their adaptability is still slowed by problems accompanying a shift in environment. This has a direct effect on the quality of production, the technology to be employed and the utilization of advanced technology. The technology in use puts certain limitations on the product structure and the quantity and quality of products. In some cases the level of technology in use is beyond the educational level of the work force, which leads to reduced utilization of assets.

Increasing Losses

We must acknowledge rapid development in the area of education and technical training, but we must also pay attention to the facts mentioned. Certain experiences suggest that the workers real knowledge and accumulated experience of manual workers and their resulting productive capacities are lower than one would expect on the basis of data indicating expansion of education and technical training. These experiences provide another proof that young skilled workers with a high school diploma are easily "convertible;" graduates of vocational institutes are relatively more difficult to "convert," while conversion of so-called in-house skilled workers and graduates of courses at the workplace is the hardest.

Thus, there are many who lack the fundamental prerequisites for acquiring more advanced skills. For them, technological shifts and manpower redistribution mean difficult conflicts. Our problems and losses due to structural reorganization are expected to become more acute because, on the one hand, the national economy has too many specially trained workers with a low level of general education who are hardly capable of redirection and retraining. On the other hand, unfortunately only a narrow group of skilled workers has the wherewithal to enable them to satisfy the new requirements.

These facts mean that the leadership and personnel in labor management must face up to new and unusual tasks, one that can be solved only on the basis of thorough analysis and a great deal of technical competence.

9164
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PERSONAL INCOMES IN FIRST QUARTER OF 1980

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 15 Aug 80 p 2

[Article by M. Urosevic: "Foundation for Renewed Growth of Real Personal Incomes"]

[Text] In a recent conversation with newsmen of TANJUG Veselin Djuranovic, chairman of the Federal Executive Council, issued the assessment that incomes policy is in conformity with the demands of stabilization policy, but that everything will have to be done to shorten the time of the real drop of personal incomes. This provided an occasion for us to compare figures on the trend of production, hiring, productivity and personal incomes.

In the first 4 months of this year the physical volume of industrial production rose 5.5 percent over the same months of last year, and employment rose 3.1 percent, which means that labor productivity rose 1.6 percent.

Over that same period retail prices, which are used to measure the rate of inflation, rose 26.2 percent and the cost of living 26.5 percent more than in the same months of last year. Nominal personal incomes of employed Yugoslavs increased 17 percent, and the difference between this increase and the rise of the cost of living, which amounts to 9.5 percent, signifies a real drop of personal incomes.

However, it would be wrong to conclude that the burden of the drop of real personal incomes is being equally borne by all employees in all workplaces. It is true that this year the statisticians are late with reports on personal incomes by industries according to the Uniform Classification of Activities and are publishing figures on the principal economic activities--which is considerably more restricted and one-sided--but it is still sufficient to indicate essential characteristics.

Thus, personal incomes in economic activities are lagging 3 percent behind the Yugoslav average, and those of employees in industry and mining, where more than two-fifths of the social product is created, are lagging 5.6 percent behind. The situation in economic activities would have been still less favorable on the average if 2 years ago those employed in the activity

entitled "financial and other services" had not been "shifted" from noneconomic activities to the economy. This transfer consisted of 193,000 employees with personal incomes averaging 30.6 percent above the Yugoslav average.

Employees in noneconomic activities had personal incomes in the first 4 months of this year 15.8 percent higher than the average for the entire country, and those in sociopolitical communities and organizations were 20.8 percent better off.

The level of personal incomes varies from one sociopolitical community to another. The personal incomes of employees in Slovenia were 22.1 percent better than the Yugoslav average, and those of employees in Croatia 7.5 percent higher. In Serbia proper the lag behind the Yugoslav average was 4.8 percent, but we must bear in mind that these figures also include the personal incomes of those employed in federal agencies and sociopolitical institutions and organizations at the level of Yugoslavia, which considerably boosts the average. Personal incomes in Vojvodina lagged 5.7 percent behind the Yugoslav average, those in Bosnia-Hercegovina 9.1 percent, Montenegro 10.1 percent, Macedonia 17.7 percent and Kosovo 20.4 percent.

In addition to these figures, it would be worthwhile if we also had figures on payments per worker from the social service funds of organizations of associated labor.

It is obvious, then, that in the coming period conditions need to be created by raising productivity and output for personal incomes to begin a new real growth.

[Box]

According to the final figures, the average net monthly personal income of employees in the period January-April of this year amounted to 6,636 dinars: 6,436 in economic activities and 7,682 dinars in noneconomic activities.

The ranking of principal activities is as follows:

1.	Financial and other services	8,667
2.	Sociopolitical communities and organizations	8,013
3.	Education and culture	7,798
4.	Health and social welfare	7,288
5.	Transportation and communications	7,102
6.	Crafts and trades	6,998
7.	Housing and municipal services and utilities	6,582
8.	Water management	6,581
9.	Trade	6,518
10.	Industry and mining	6,265
11.	Construction	6,221
12.	Timber and lumber	6,760
13.	Agriculture and fishing	5,760
14.	Hostelry and tourism	5,569

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CSO: 2800

FOREIGN TRADE IN AGROINDUSTRIAL SECTOR, FIRST HALF OF 1980

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 15 Aug 80 p 6

[Article by Milorad Urosevic: "Appreciably Smaller Deficit"]

[Text] The change in the dinar's rate of exchange should objectively stimulate exports and at the same time activate disincentive on imports, while at the same time fulfilling the main condition that sufficient goods be produced primarily to satisfy domestic needs and then also for export at competitive prices. At a time when food is joining petroleum as a commodity in ever greater demand in international trade, this change should also speed up exports of raw and processed foods from Yugoslavia; that is, it should make it possible to continue the favorable trends from the second quarter, when the deficit in the first 3 months was reduced. All of this provided there is enough food to meet domestic needs as well as the higher consumption at the height of the tourist season, which as matters now stand is in doubt.

Actually, imports increased even before devaluation of the dinar: thanks to the sudden jump of sugar prices on the world market, which took away the worries of domestic sugar mills and made it possible for them to sell inventories at very favorable prices, the agroindustrial complex appreciably improved its 6-month trade balance, as can be seen from the figures below.

January-June Period, in millions of dinars

Activity	Exports	Imports	Difference
		1979	
Food processing industry	3,767	3,134	+ 633
Beverages industry	541	61	+ 480
Livestock feed industry	25	83	- 58
Tobacco manufacturing	31	3	+ 28
Field cropping	1,191	5,645	-4,454
Fruitgrowing	56	4,137	-4,081

Table (continued)

Activity	Exports	Imports	Difference
Viticulture	4	14	- 10
Livestock raising	1,147	1,022	+ 125
Fishery	136	224	- 88
Total	6,898	14,323	-7,425
Coverage of imports by exports, %		48.2	
		1980	
Food processing industry	5,678	3,575	+2,103
Beverages industry	685	101	+ 584
Livestock feed industry	28	58	- 30
Tobacco manufacturing	87	2	+ 85
Field cropping	1,997	6,221	-4,224
Fruitgrowing	35	3,814	-3,779
Viticulture	12	22	- 10
Livestock raising	1,227	1,098	+ 129
Fishery	117	222	- 105
Total	9,866	15,113	-5,247
Coverage of imports by exports, %		70.7	

Results of this kind for the first 6 months are very encouraging, providing favorable opportunities are maintained for the agroindustrial complex to continue the tendency of exports to increase more rapidly than imports. We should remember that the coverage of this complex's imports by exports in the first 3 months of this year was only 51.6 percent, as against 50.6 percent in the same months of last year; and also that in the first half of this year the coverage of the entire economy's imports by exports was 55.8 percent and that of the agroindustrial complex (as is evident from the table) 70.7 percent, but it is no sure thing at all that this trend will continue.

There are several reasons for this view of the situation. It is well known, for instance, that this year's harvest of 511,000 cars of wheat (last year only 447,000 cars) is not sufficient to replenish commodity reserves and meet the public's needs this year, so that imports are inevitable once again. Which will drain off considerable foreign exchange. Then there follows the recent decision allowing supplemental import of 10,000 tons of meat, mostly pork, after the import of 35,000 tons of beef had already been allowed, and the decision to halt exports until this September, which will reduce the inflow and increase the outflow of foreign exchange to import food. To this we should also add the shortfall in the planting of corn, sugar beets and sunflowers because of bad weather and also reduce fattening of livestock. On the other hand there are the ever greater needs for food,

so that the amount lacking from domestic sources will have to be obtained through purchases on foreign markets.

When all these circumstances are borne in mind, it is difficult to believe that the agroindustrial complex will continue to have the favorable trends in its commodity trade with foreign countries in the second half of this year. It would be good if this disbelief proved unfounded, but time will tell.

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OFFICIAL DISCUSSES ECONOMIC STATUS OF CROATIA

Belgrade KOMUNIST in Serbo-Croatian 5 Sep 80 p 7

[Interview with vice chairman of the Executive Council of the Croatian Assembly Dr Ivan Mecanovic, by Viktor Strkalj: "Still Fiercer Battle and Greater Responsibility"; date and place not given]

[Text] [Question] The balance sheet of the Croatian economy for the first 6 months, in spite of a whole series of difficulties, indicates qualitative changes: exports are growing steadily, the payments deficit is decreasing, and the trend of imports has been halted. The difficulties, of course, have still not been overcome, especially those that come with losses in the economy, and also the decline in the rate of industrial output. There are also the problems on the broad capital investment front, where nearly 6,000 projects are under construction. How do you assess the present moment in the Croatian economy?

[Answer] Developments in the Croatian economy show that the process of stabilization is under way. If we examine what the 6-month account furnishes us, we see, among other things, that behavior has changed in organizations of associated labor, manifested by the most tangible result of a real drop of personal incomes. This is only one of the measures of stabilization, and it seems that it was the easiest to achieve. But now the question is this: Where do we go from here in this area?

Other agreed effects of stabilization have also begun to show up. Regardless of what is happening in production and regardless of how we define these developments, it is our assessment that the social product will show a growth of somewhere above 2 percent. Industrial output is showing a definite tendency to increase, which, however, should not deceive us, especially when we know that the growth rate was quite low in the 7th month of last year. The problems are mainly concentrated in machinebuilding, whose output is about 7 percent smaller than last year, and in shipbuilding, where the drop is 17 percent. We are experiencing something similar in petroleum production and refining, but this is a part of the strategy of consuming less. This means that production in other industries is more or less better than in previous years in spite of the fact that the problem of

substitution of imported raw materials by domestic raw materials is becoming more and more acute.

Losses

In the domain of distribution, as I have already said, there is the significant item of a reduction of personal incomes, which has had the result that funds for expansion of the material base of operation are growing faster than in previous periods by all of about 40 percent. However, an item we must be particularly concerned about is losses in economic activity, which in the amount of 5.8 billion dinars constitute almost one-third of total losses in the Yugoslav economy. It seems to us, nevertheless, that we can correct this, since a sizable portion of the losses are seasonable in nature, as is the case with the loss of about 1.7 billion dinars in hostelry and tourism. However, particular attention and analysis should also be concentrated on the losses arising in petroleum refineries and the production of nonferrous metals. By all appearances the devaluation will result in a "reallocation" of the losses, and we expect that they will remain at the present level up to the end of the year.

It is difficult at this point to provide a precise judgment of what is happening on the investment front, but it is significant that certain of the largest projects such as the Ivanja Reka--Lipovljani highway, the bridges on Krk and at Bogojevo, are already completed.

Incomes

[Question] Can we, then, speak of an optimistic autumn start?

[Answer] What is meant by optimism is a big question. It is a fact that economic difficulties do exist, but at the same time we are today much better organized than we were, say, 3 months ago. In other words, the situation is not such that there is no way out, but at the same time we must take a number of factors into account. Social welfare policy first of all. We feel, for example, that it is a good thing that there has been stabilization in the domain of personal incomes, but we also feel that at the present moment we must see whether this can be taken any further, especially in the case of workers with low income. It is obvious that stabilization is transferring the burden from the economy to a portion of social welfare policy, and this obliges us to very quickly put trends in the domain of personal incomes and the tax system on the agenda. In the conduct of social welfare policy we must, of course, show very great responsiveness. That is, it often happens that an individual with a monthly income of 1 million old dinars is in a much more difficult welfare situation than the man with the lowest income who, however, has 3 hectares of land in the suburbs of Zagreb, Rijeka or Split.

[Question] It is in this context that the datum that wages and salaries constitute only 35 percent of personal income is often referred to in public and even from the benches of the assembly. Is this datum correct?

[Answer] It is not, since, for example, it does not take into it the fact that in Croatia there are about 1.2 million people living on pensions. We might speak about a 50:50 ratio. Though even pensions show the false picture, it is obvious that we must examine very precisely what a "half-and-half" ratio means. I feel, for example, that this jeopardizes labor productivity, which is very unwise. After all, over the last 10 years labor productivity has stayed at the same level, while over that same period we have considerably modernized the capacities of the economy. So, a much improved technology has not resulted in higher labor productivity, it has not led to the introduction of a second, third and some places even fourth shift. On the one hand this is a negative result, but on the other it is the position from which we can make a rapid start; that is, it gives us an opportunity to operate more efficiently. However, we must also be aware of the fact that in certain of our economic steps we are "encouraging" this 50:50 ratio. It is clear that we cannot overcome work "u fusu" unless we strengthen small business even in a situation when it is not possible or society is unwilling to tax it. It must also be clear to us that we have a large number of people working in the public sector who are earning an additional portion of their income as farmers or by rendering tourist services. For certain categories, it is true, this may even be a welfare corrective, but it is beyond all doubt that it puts the "pure" worker in an unequal position, so that often his welfare really is in jeopardy even though he has a relatively high personal income. This means that when we speak about wages and salaries, we dare not equate different things, just as we dare not oppose high personal incomes if they represent work performance. We must, however, conduct a policy which will have the result that employees with high earnings will also make larger social contributions.

Investment Projects

[Question] You mention that there has been a change of behavior in organizations of associated labor. Does this mean instead of crash efforts to overcome the consequences they have begun to correct the causes of present economic difficulties, including "assignment" of responsibility for the losses which have occurred, for bad investments, and so on?

[Answer] Of course the entire effort, especially the most recent measures of the assembly concerning further activities to achieve economic stabilization in Croatia, has been aimed at correcting the causes, which are both complex and manifold. When we speak about investment projects, for example, we must say that the technobureaucratic influence is still strong in this area, but there are also a number of economic reasons for the present breadth of the investment fund in that about 6,000 projects are under construction. For example, anyone who saved money at the very high rate of investments ["inflation" is presumably meant] turns out actually to have been a "poor businessman," while he who spent anticipated earnings has brought it about that even the most foolish investment project has become intelligent after a time, since inflation has in effect made it cheap. However, since miracles cannot be worked in this way, society as a whole is

paying for this appearance of sensible behavior. So, it is a question of a change of behavior throughout the system, and not only in certain of its aspects. Our point of departure should be the fact that we have not altogether managed to achieve the goals we have proclaimed. That is why we cannot escape responsibility by saying, as many do, that "the system is no good," but we must implement it consistently. Consequently, we face a still fiercer battle to put the system in effect and to achieve still greater responsibility in that context.

As for personal responsibility, it would be an illusion to suppose we can solve our problems by naming 10 or 15 individuals, if at the same time we do not correct the causes. This does not, of course, mean that we should not accentuate personal responsibility, especially since we have specific motives for this. For example, in the recent "smothering" of the Ivanja Reka--Lipovljani highway, many republic agencies became involved, but not the Croatian SIZ [self-managed special-interest community] for Highways, which bore the greatest responsibility. Though perhaps this is a trivial example, it is a prototype of what we are experiencing in practice.

Responsibility

[Question] A specific question on the topic of responsibility. How should we interpret the fact that in recent years new plants or plants which have undergone reconstruction are among those with losses? In a recent session of the assembly the figure was presented that 34 organizations of associated labor whose plants have been put into operation in the last 3 years recorded losses amounting to 1.84 billion dinars, which represent 37 percent of total losses.

[Answer] One of the most important factors is certainly that we adopt very short payoff periods for investment projects, so that in the first years there are large repayments of principal and high interest on short-term credit, which in itself is not good. At the same time, we often harbor the illusion that we can build a factory in the middle of nowhere and that it can immediately begin to operate. It is precisely these projects of ours which are "producing" losses, by contrast with those built by work organizations with a certain experience. Of course, it is not merely a question of experience in production proper, but also of experience in marketing, sales, and so on.

Another reason for the losses lies in failure to take into account momentary or long-term developments on the world market. A typical example of this is the Jadral Alumina Plant in Obrovac, which, in my opinion, could be an exceptional producer in 6 or 7 years. At present they are paying for the fact that it was built and put into production at a time when the price of aluminum was low on the world market and even lower on the domestic market.

[Question] If you recall, there was a very stormy debate in the Croatian Assembly about Jadral as a major source of losses, and the possibility of "mothballing" it has been mentioned more than rarely. The situation as you put it is not so "black" as it is frequently portrayed.

[Answer] There is a tendency today that indicates that aluminum will be increasingly expensive. And also, this is perhaps the only product which is cheaper on the domestic market than on the world market. It is obvious, then, that a rise in the price of aluminum would make it profitable to undertake not only surface, but even underground mining. But another problem is that we must undertake the higher phases of manufacturing aluminum, which yield 20 or even 30 percent larger incomes than at present. I do not say that this can be done without upheavals; indeed there will be quite a few more problems in the aluminum complex, but, in my personal opinion, Jadral could become a relatively successful factory in the future.

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6 October 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2050

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CONTENTS

INTERNATIONAL AFFAIRS

Aspects of Foreign Currency Payments Among CEMA Members Examined
(Pavel Daskalov; PLANOVO STOPANSTVO, No 6, 1980).... 1

BULGARIA

Proper Utilization of Available Arable Land Surveyed
(Evgeni Petrov; PLANOVO STOPANSTVO, No 6, 1980)..... 11

CZECHOSLOVAKIA

Briefs
Uranium Mines Renamed 21

HUNGARY

Tighter Contractual Discipline Demanded by Ministry of Metallurgy
(MAGYAR HIRLAP, 29 Jul 80) 22

Plight of Disadvantaged Cooperatives Worsened by Specialists
(Nandor Keresztenyi; MAGYAR HIRLAP, 29 Jul 80) 24

Maintenance of Hospital Equipment Shunned by Engineers
(Laszlo Fay; MAGYAR HIRLAP, 29 Jul 80) 27

ROMANIA

Policy Aims at Continued Increase in Standard of Living
(REVISTA ECONOMICA, 22 Aug 80) 31

Plans for 1981-1985 Period, by Dumitru Pugna
Domestic Trade Role Examined, by Virgil Adascalitei, Aurel Valner

Relationship Between Labor Force, Economic Development Viewed
(C. Grigorescu; REVISTA ECONOMICA, 15 Aug 80) 44

Decree on Reorganization of Oltenia Mining Combine
(BULETINUL OFICIAL, 20 Jun 80) 51

Adequate Fodder Base Essential for Animal Production
(Nicolae David; REVISTA ECONOMICA, 15 Aug 80) 55

Decree on Contracting Prices for Animals Amended
(BULETINUL OFICIAL, 20 Jun 80) 62

YUGOSLAVIA

Operation of Economy in First Half of 1980 Analyzed
(Cedomir Dodig; PRIVREDNI PREGLED, 3 Sep 80) 64

ASPECTS OF FOREIGN CURRENCY PAYMENTS AMONG CEMA MEMBERS EXAMINED

Sofia PLANOVO STOPANSTVO in Bulgarian No 6, 1980 pp 46-55

[Article by Pavel Daskalov: "Foreign Exchange Aspects of Bilateral and Multilateral Economic Relations Among CEMA-Member Countries"]

[Text] Determining the nature, place, and role of the specific forms of economic cooperation is of great importance in establishing the nature of integration processes among CEMA-member countries and determining the most effective ways and means for development of economic cooperation among them. Currently, bilateral and multilateral methods are applied simultaneously in intergovernmental economic relations among socialist CEMA-member countries. Since both forms are connected with different national and international institutions, involve different organization of the work, and have different objectives, tasks, and results, legitimately the following questions are asked: How are relations among CEMA-member countries developing, what are the possibilities for combining and interlinking the two forms of economic relations, and what is the optimum relationship for their cooperation.

Long experience in the economic cooperation among CEMA-member countries has confirmed that both organizational forms have their place and basis and that they are closely interconnected and interwoven. A bilateral and a multilateral status are not mutually exclusive. On the contrary, they are interdependent. The use of one of them creates favorable prerequisites and conditions for the utilization of the other organizational form and vice versa. That is why it would be incorrect and one-sided to consider in advance multilateral relations as a superior form of cooperation compared with bilateral relations, or else if priority is given to bilateral methods in the solution of specific economic problems from the practical viewpoint.

The simultaneous use of the bilateral and multilateral methods does not mean, however, that it makes no difference which of the two organizational forms is applied under specific circumstances or in carrying out specific assignments. The specific correlation between the bilateral and multilateral principles in its historical aspect depends on the nature of the problems they are resolving through economic cooperation. The correlation between them is not final or

determined once and for all, but changes depending on the stages of development of socialist economic integration and the objective of the measures to be implemented.

Bilateral relations predominated in the first years of economic cooperation among CEMA-member countries. At that time practical experience (and possibilities) for the use of a variety of organizational forms of international economic relations, most of which dealt with foreign trade, were still lacking. The instruments and institutions of multilateral relations were insufficiently developed. The further quantitative and qualitative development of economic relations called for the broadening of multilateral relations as well. Simultaneously, the necessary prerequisites were being created for that purpose. It became clear that a number of problems could be resolved far more effectively on a multilateral rather than bilateral basis (some problems could not be resolved at all on the bilateral level). This applied, for example, to the formulation of the principles governing the setting of foreign trade prices within CEMA and the area of foreign currency relations. Cooperation among member countries in the area of standardization could have been undertaken, from the very beginning, and developed successfully on a multilateral basis alone. Therefore, the multilateral forms of cooperation in a given area largely earmarked the frameworks within which bilateral relations could develop and, at the same time, played a specific role in boosting them. Thus, for example, the multilateral payments system, which has been used by CEMA for over 15 years, has always encouraged the development of reciprical trade even though its bilateral nature is still strongly emphasized.

Increased comprehensiveness of cooperation in production and research is of major importance to CEMA countries. Despite some unsatisfactorily resolved and still difficult problems, multilateral relations have assumed a solid position within the organizational forms of relation among CEMA countries. The latter have acquired considerable experience and skill in using them properly and expediently, and in effectively linking them with bilateral economic cooperation forms.

To CEMA-member countries the problem of the place, role, and correlation between bilateral and multilateral forms is of particularly decisive and topical significance in the field of planning. The new and higher forms of cooperation in this area called for a basic revision of the ties and relations between the bilateral and multilateral forms. Problems in which all or most CEMA-member countries are interested can be effectively resolved on a long-term basis only following the drafting and adoption of the necessary measures and the consideration of the conditions and possibilities of all the countries. Multilateral decisions must be based on profound studies made by national planning organs, studies which would also contain optimum solutions for the implementation of joint initiatives. The conclusion, therefore, is that the extension of multilateral forms of international economic relations is closely linked with greater comprehensiveness, longer range, and higher levels of analytical preparations for cooperation in various areas.

The close ties between the bilateral and multilateral forms in planning become particularly clear in the joint pooling of enterprises and industrial projects. Currently, a number of projects have been built within which the CEMA-member countries have combined material, financial and mental resources, thus resolving important problems of supplies and of satisfying the national economies with raw materials, energy, and fuels. All these problems, such as the capacity of the industrial facilities under construction, important technical and technological parameters, problems of ownership, reciprocal applications, share of participation, and others, are discussed and resolved on a multilateral basis. On the basis of multilateral agreements (for the joint construction of the Ust'-Ilim Cellulose Combine on Soviet territory, undertaken by Bulgaria, the GDR, Poland, Romania, the USSR, and Hungary, the Kiyembaya Mining-Concentration Asbestos Combine, and a number of other projects), the countries sign bilateral agreements in which they stipulate the details of conditions and reciprocal obligations, such as the variety of goods to be supplied, supply terms, and others. It is thus that in a number of cases multilateral agreements are "refracted" into a number of bilateral relations and it is through them, actually, that they are implemented. In some cases bilateral agreement concluded separately by several CEMA-member countries with the Soviet Union in a certain area would require multilateral talks. This is necessary, for a bilateral relation alone would restrict the finding of the most effective long-term solutions.

The principles governing the bilateral and multilateral methods do not always appear in their pure, ideal aspect. They are not always clearly demarcated, for in a number of cases elements of either of the methods become interwoven with the other. Occasionally, contradictions arise between them in various areas of economic cooperation. The contradictions are mainly between form and content. They arise mainly in the case of insufficient maturity of multilateral relations in a given area where, in fact, they are developing on a bilateral basis, even though from the organizational-technical viewpoint they have assumed a multilateral form.

Bilateral and multilateral features apply both to the commodities area (foreign trade, specialization and cooperation, joint construction, and others) as well as the process of payments. Usually, bilateral relations in foreign economic relations correspond to bilateral forms of account settling. The multilateral organization of payments presumes logically developed forms of multilateral foreign economic relations. In some cases, however, the form of payment relations outstrips the development of economic relations. Relations in the commodity area, still based on the bilateral method, are pitted against the multilateral system governing foreign exchange operations among the countries. A similar picture prevails currently on the international socialist market in which economic relations among CEMA-member countries are characterized mostly by their bilateral nature, even though a multilateral system of payments has been established.

In foreign trade, under socialist conditions, the multilateral method is manifested, above all, in the planning, coordination, and balancing of

commodity deliveries by one country to all other countries put together, rather than separately to individual countries. The latter characterizes the bilateral nature of foreign trade relations. In multilateral trade the need is eliminated for the strictly bilateral balancing of imports and exports in terms of value and quantity. An important characteristic of the multilateral method of socialism is that it is achieved at the planning stage, within the framework of joint planning activities and the coordination of supplies, based on the implementation of the various forms of economic cooperation and on socialist economic integration.

At the same time, multilateral foreign trade consists of a number of bilateral relations, since each country establishes and maintains trade relations mainly on a bilateral basis. Multilateral foreign trade does not mean the elimination of such bilateral relations. It presumes the possibility and conditions for the planning and balancing of foreign trade on the basis of multilateral balancing and equalization.

As we know, currently multilateral foreign trade on the socialist market is virtually not applied for a variety of reasons, even though the necessary organizational and contractual forms for it have been developed: the two-step sequence in the development of trade talks, according to which the first step covers, in general, import and export deliveries without overall balancing, and the second step, which calls for the balancing of reciprocal deliveries on a multilateral basis.

Considered in the area of international foreign exchange relations, the multilateral method is a method of payments in which one country settles in full its foreign exchange obligations to other countries through foreign exchange income it has earned in those countries, with no restriction as to amounts and objectives. This way, the multilateral factor in this area is conceived as the unhindered use of the assets of a country in settling its obligations with the others. Multilateral foreign exchange relations follow the principle of global balancing of payments and income rather than the principle of bilateral balancing, which is known for and characterized by maintaining a strict balance between the assets and liabilities of the two countries for a specific time period.

Multilateral forms of payment began to be introduced in relations among CEMA-member countries at the beginning of the 1960s. Until then bilateral settlement of accounts was the basic principle in balancing foreign trade and payments. Bilateral trade agreements were the main organizational-contractual method used in foreign trade. They were long term, covering a five-year period, and annual protocols. In the area of international payments, they consisted of bilateral clearing agreements. The latter proved to be the most expedient form of payments relations among socialist countries at that stage in the development of their economic cooperation. As the economic potential of the socialist countries rose, and as new, more progressive and more effective forms of economic cooperation appeared on this basis, such as multilateral coordination of national economic plans,

production specialization and cooperation, joint production activities, and others, a strictly bilateral method in trade and payments could become a hindering factor in the development of a rational international socialist division of labor. The strict bilateral balancing of payments forced the countries to limit the size of their imports to that of their export possibilities. In other words, reciprocal trade was limited by smaller export possibilities of one of the two countries.[1]

The establishment of new forms of economic cooperation among the socialist countries, of specialization and cooperation above all, could have sharply clashed with foreign trade and payments systems. The prospects for further expansion and intensification of the international socialist division of labor on a multilateral basis called for a corresponding form of payment relations which would provide scope for and cooperate to a maximum extent in the implementation of new forms of economic cooperation.

Meeting these requirements and responding to the trend of further expansion of economic relations, of total utilization of potential specialization and cooperation possibilities, above all, the CEMA-member countries developed a system for insuring the conversion from bilateral to multilateral settlement of accounts, based on a transferable ruble. The principle of multilateral payments, on which the new system of payments was based, had as its main purpose the acceleration and expansion of reciprocal trade and the further development and intensification of the international socialist division of labor. The main intent of the 1963 agreement was to convert through the transferability of the collective currency from the bilateral to the multilateral balancing of payments and, on this basis, provide an impetus for the development of multilateral economic relations as well within CEMA. The main advantage of the multilateral system of payments, compared with bilateral clearing agreements, is, above all, that from the viewpoint of payments more favorable conditions are created for the expansion of international economic cooperation and for socialist economic integration. A comparison between the two methods of payment shows the main advantage of multilateral payments in terms of foreign trade: they create more advantageous prerequisites for the development of trade.

However, we must emphasize that the introduction of the transferable ruble as a monetary unit for multilateral payments could not immediately bring about an effective multilateral type of foreign trade and payment relations among socialist CEMA-member countries. Past experience shows that at the end of the year payments are balanced almost entirely between the respective pair of countries. This is due, above all, to the fact that the countries plan their foreign trade, which generates most of the payments, as a rule on the basis of a bilateral annual balance. Necessarily, it follows that payments between countries will be equalized on a bilateral basis. Such bilateral balancing was done by the countries on a deliberate and planned basis.

quality and value, adding to them secondary goods as well. In reality, commodities belonging to the second group are subject to additional contracting in the course of multilateral talks. The existing relative shortage of goods important to the national economies of the socialist countries is the main reason for some economists to speak of a certain bartering in trade and of the predominance of distribution functions in foreign trade.[2] The desire to achieve a strict balance in trading commodity groups of the same kind and the exchange of some raw materials for others or of some machinery for a specifically determined other type of machinery hinders the increase in the relative share of goods coordinated on a multilateral basis. Other factors, such as unjustified duplication in the production of individual commodities by several countries simultaneously, the lower quality standard and technical indicators of some export goods, substantially different from contemporary global standards and prototypes, and so on, adversely affect the multilateral aspect of foreign trade.

2. The organizational and contractual forms on which foreign trade, scientific and technical cooperation, crediting, and others are based also play a certain role in the desire to retain bilateral balancing, even though not a decisive one. Long-term agreements and trade protocols consider, as a rule, mainly the possibilities and interests of the respective pair of countries. In the course of over 25 years specific structures and export and import ratios have been able to develop in foreign trade relations among socialist countries, characterizing and distinguishing, from the quantitative and qualitative viewpoints, the trade operations of the individual countries. Until 1 January 1964 the bilateral trade agreements were consistent with the clearing payments system adopted by the countries. Following the introduction of the multilateral system of payments, bilateral trade agreements were retained as the main organizational-contractual foreign trade method. However, the need for strictly balancing supplies between two individual countries was eliminated.

3. Contradictions between the multilateral form of payments and the nature of economic relations among CEMA-member countries are created also as a result of the bilateral nature of the determination of contractual prices in reciprocal trade. We know that different prices prevail in trade relations between a given country and other countries for identical commodities. Even though minor, this price disparity encourages the countries to export more to other countries which pay higher prices and slow down their supplies to countries offering lower prices.

An important question to be answered is that of the extent of multilaterally planned and balanced payments among all partners within CEMA, so that full use could be made of the advantages of the multilateral system of payments in developing reciprocal trade and, respectively, the international socialist division of labor. In our view, in the future as well, a considerable share of reciprocal trade will be balanced bilaterally. The idea of developing the multilateral principle of balancing and equalizing in the area of foreign trade should hardly become a self-seeking aim. Overestimating this

Following the enactment of the multilateral system of payments in transferable rubles, from the foreign exchange viewpoint organizational-technical prerequisites were created which, by themselves, could not insure the development of multilateral trade and the intensification of multilateral cooperation. Indeed, the multilateral transferring of the transferable ruble could be achieved only through the combined effect of the following two factors: the creation of a system for multilateral utilization of the currency (a factor of organizational-technical nature); and development of economic relations on a truly multilateral basis (an economic factor). The latter factor is determinant. In this connection, we must answer the question of what it is that makes it incumbent upon the countries to plan their trade relations on the basis of an annual balance. In our view, the reasons may be found mainly in the material-production area. The essence of the problem would not be affected by reasons such as the bilateral forms of planning coordination, trade agreements, or contractual prices, even though as organizational forms they have a certain influence on bilateral balancing. The essential reasons are deeper: they are found in the material foundations which are the target of planned coordination, trade agreements and the price setting system. The extent to which reciprocal payments may be equalized bilaterally or multilaterally is, above all, less a problem of development of the transferable ruble than of its material foundations. The mechanism of multilateral payments is a necessary prerequisite from the foreign exchange viewpoint. From the economic viewpoint, however, it is insufficient for insuring the conversion to multilateral trade. In practice, prerequisites have been organized in a socialist market for the effect of the former factor without the full operation of the latter, determining factor. Consequently, the reason does not lie in the mechanism of payments but in economic interrelationships, including foreign trade which is continuing to develop essentially on a bilateral basis. This situation triggers contradictions between the multilateral method of payments and bilateral economic relations. The main contradiction appears in the desire of all countries to correlate precisely their sales with the counterpurchases of goods considered identically valuable in terms of quantity and value. Thus, the basic motivation in the conclusion of intergovernmental trade agreements is the bilateral balancing of trade. This conflicts with the multilateral mechanism of payments, which presumes the elimination of the precise bilateral balancing of imports against exports and, hence, of payments against earnings. The high share of reciprocal deliveries which continue to be coordinated on a bilateral basis may be explained by the effect of the following more important factors:

1. The lack of adequate export stocks of some basic commodities is an important economic reason for the underdevelopment of multilateral foreign trade. At the same time, however, there is a relative surplus of low quality goods, of unsuitable appearance and varieties which are not in demand. This leads to the classification of goods into those in greater or lesser demand or with no demand. This also explains the desire of the countries to link in the greatest detail, in terms of quality and technical indicators, the export of "strong" goods with the import of the same type of goods of equivalent

principle could lead to economically adverse consequences both for the individual countries and for the socialist economic comity as a whole. However great the efforts of the CEMA countries might be to intensify the multilateral forms of economic cooperation and, specifically, of foreign trade, they face precisely defined limits. Beyond such limits they find bilateral balancing which can be neither belittled nor ignored. Conversely, in a number of cases it must be developed, intensified, and improved, for it is a decisive factor in economic relations among countries. Thus, for example, trade with the Soviet Union accounts for nearly 50 percent of our country's overall trade. There could be no question here of radically restructuring the bilateral principle governing the planning, balancing, and equalizing of trade between these two countries. This concept is further emphasized by taking into consideration the course charted by our country of comprehensive rapprochement with the Soviet Union. The same applies to the economic relations of the other CEMA-member countries with the Soviet Union. Meanwhile, new ways and means are being sought for purposes of introducing various elements of multilateral relations which would help and boost their relations with the Soviet Union and among themselves. In this light the existence of multilateral forms in the area of industrial cooperation and regulation of trade on a bilateral basis cannot be considered a shortcoming or a contradiction. A large share of the goods in whose production our country has specialized will continue to be handled on the basis of our bilateral relations with the USSR. In our view, this is a normal process. A bilateral balance of payments based on this fact should not be considered a negative phenomenon. Only a situation in which bilateral relations would restrict trade and other forms of economic cooperation could be considered negative. The volume of the controlled balances between the two countries will be determined, above all, by the export possibilities and structures of the two countries and the state of the balance of payments of each country in transferable rubles. It would be difficult to set any kind of quantitative optimum as to the share of the multilateral equalization of payments. The following formulation could be applied in the most general terms: the share of multilateral payments should be such as to stimulate, to a maximum extent, the expansion of trade and the international socialist division of labor. It is a question here not of eliminating the bilateral nature of coordination, trade agreements, or setting of contract prices, but of the drafting of new supplementing instruments in accordance with established material conditions and the qualitatively new requirements arising on this basis.

The CEMA-member countries face exceptionally important problems which must be resolved in order to implement the comprehensive program, related to production specialization and cooperation, scientific and technical cooperation, and development of multilateral foreign trade. The development and solution of foreign exchange problems, whose main element is the even more effective application and improvement of the system of multilateral payments in transferable rubles, will greatly help in the effort to attain these objectives. In turn, this is related to improving the entire system of economic cooperation and of its mechanism, for foreign exchange relations

are the product of cooperation in material production. In order for all the advantages of the multilateral system of payments to be fully used, a number of factors must operate in the fields of management, planning, material-production, foreign trade, and foreign exchange. A really multilateral method may not be achieved in payment relations among CEMA-member countries separately or without the presence or creation of the necessary prerequisites in a number of other areas of economic life and cooperation among CEMA-member countries.[3] In this respect a convincing statement was made by Czechoslovak economist Ch. Konecni: "Replacing bilateral with multilateral principles is not a question of simply a wish or decision to follow one or another line."[4] Such a substitution could be achieved only on the basis of corresponding economic and organizational prerequisites.[5] Such prerequisites should be created through comprehensive measures not only in the foreign exchange area but, above all, in the area of material production, foreign trade, planning, and other fields of multilateral cooperation.

A study of the problems related to the development of foreign economic relations and of payments among countries, arising on their basis, shows the subordinate position of foreign exchange-financial relations within the overall set of economic relations. It indicates that in the conditions of the global socialist market the problem of multilateral payments is a function of the nature of economic relations in the material-production and foreign trade areas and that it cannot be resolved through foreign exchange instruments alone. This leads us to the search for and discovery of conditions, prerequisites, and means for achieving a multilateral type of payments not one-sidedly but comprehensively and all-embracingly. The main ways and prerequisites in this direction could be classified as follows:

Conversion to forms of multilateral coordination and national economic plans among CEMA-member countries;

intensification of international specialization and cooperation;

conversion to forms of multilateral balancing of trade and improving its organizational forms;

improving the system of payments and credits.

All this leads to the conclusion that the implementation of the decisions included in a comprehensive program, aimed at developing a multilateral system of payments among CEMA-member countries, calls for the creation of comprehensive conditions and prerequisites at the respective stage in the development of socialist economic integration.

FOOTNOTES

1. At the end of the 1940s and beginning of the 1950s the socialist countries used the simplest multilateral methods for settling reciprocal payments: trilateral single transfers of balances from one clearing account to another.

2. G. Mazanov. "Mezhdunarodnyye Raschety Stran-Chlenov SEV" [International Settlement of Accounts among CEMA-Member Countries]. Moscow, 1970, p 18; G. Sorokin and P. Alampiyev. "Problemy Ekonomicheskoy Integratsii Stran-Chlenov SEV" [Problems of Economic Integration of CEMA-Member Countries]. Moscow, 1970, p 140.

3. "The expansion of multilateral payments and multilateral balancing must be closely linked with the measures implemented at the respective stages for the intensification of the coordination of national economic plans, the development of production specialization and cooperation, and the improvement of foreign trade relations." Complex Program, p 61.

4. Ch. Konecni, "Convertibility of Currencies Under the Conditions of the Intensification and Improvement of Cooperation and Development of Socialist Economic Integration." BYUL. VUNSHNOIKONOMICHESKA INFORMATSIYA, No 27, 9 December 1977, p 14, IMOSI.

5. We entirely agree with Yu. Shiryayev's viewpoint that "the solution of problems such as the development of multilateral payments and multilateral credits depends, in the final account, on the state of cooperation in the field of planning activities and, above all, on the coordination of national economic plans. It calls for the development of a number of complex methodological problems and the establishment of certain organizational and economic prerequisites." Yu. Shiryayev, "Mezhdunarodnoye Sotsialisticheskoye Razdeleniye Truda" [The International Socialist Division of Labor]. Moscow, 1977, p 73.

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PROPER UTILIZATION OF AVAILABLE ARABLE LAND SURVEYED

Sofia PLANOVO STOPANSTVO in Bulgarian No 6, 1980 pp 18-26

[Article by Evgeni Petrov, senior scientific associate first class, candidate of economic sciences: "Basic Directions for Improving the Utilization and Preservation of the Land"]

[Text] Our country's agriculture is faced with important tasks: increasing the volume of agricultural output in order to meet steadily growing needs and upgrading production effectiveness. The successful solution of these problems depends on the extent of the utilization of land resources and the measures taken for the latter's preservation and reproduction. That is why the BCF Central Committee and the government are paying special attention to the land. As a result of this the output and income per unit of area have been rising steadily. Between 1977 and 1978, compared with 1960-1961, overall output per unit arable land, computed on the basis of comparable 1971 prices, rose by a 2.7 factor while net production rose by a factor of 2.4.*

Production rose as follows: grain, 73 percent; fruits, 70 percent; meat, 14 percent; milk, 65 percent, and so on.

The land resources in the country are divided into three land funds: agricultural (covering 61.9 percent), forests (34.6 percent) and settlements (3.5 percent). The agricultural fund accounts for 97 percent of the pastures; the forest fund accounts for 98.9 percent of the forests and 3 percent of the pastures; the settlements contain the virtually entire built-up area as well as 2.8 percent of the country's arable land.

The bulk of the land, the fertile land mainly, is used for agricultural production. Consequently, the extent of its utilization also determines, in its essential lines, the extent of the management of the country's land resources.

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* All data used in this article come from the 1977 and 1978 statistical yearbooks of the Bulgarian People's Republic and the annual reports of APK [Agroindustrial Complexes].

The basic direction in upgrading the utilization of land resources in agriculture is the steady upgrading of production intensification. Compared with 1960, in 1978 productive capital per unit of arable land rose by a 3.5 factor while production expenditures rose by a factor of 2.3.

Intensification is developing at a fast pace in all directions. New strains of various farm crops are being applied continually. The number of tractors, in terms of 15 hp per 1,000 decares of arable land, has increased by a 4.2 factor; power supply has increased by a factor of 3.2 and chemical fertilizers by a factor of 4.3. The share of irrigated areas of the entire arable land has risen from 14.2 percent to 24.2 percent. As a result, the level of agricultural intensification has risen significantly. Currently it is close to that of the developed countries. Productive capital per decare of arable land has risen to 140 leva while production expenditures have reached 90 leva (Table 1).

Table 1. Growth of Agricultural Production Intensification

Indicators	1960	1965	1970	1978
1. Production costs per decare arable land in leva	38	47	62	88
2. Productive capital per decare arable land in leva	40	63	91	139
3. Tractors in terms of 15 hp per 1,000 decares arable land, number	0.8	1.4	1.9	3.4
4. Power supply per 1,000 decares arable land in hp	66.0	100.6	163.6	210.4
5. Chemical fertilizers in terms of active substance per decare arable land in kilograms	3.2	7.5	13.3	13.8
6. Share of irrigated areas of the total arable land in percent	14.2	18.9	21.0	24.2

Compared with the output before the socialist reorganization of agriculture, farm yields have risen by a 2.3 factor (Table 2).

Despite successes achieved in agricultural production intensification, it will remain the basic direction to be followed in improving the utilization of the land. This is necessitated by the limited size of the arable land and the reduced possibilities to increase it, as well as because of the great potential possibilities offered by the now applied individual crop strains.

In order to upgrade soil fertility, the use of chemical fertilizers and irrigation must be increased in the future. Furthermore, we must continue to introduce new highly productive and better quality strains, expand mechanization in labor intensive sectors (vegetables, tobaccos, perennials and others), and apply industrial production technologies.

Table 2. Average Yields of Main Farm Crops in Agriculture (kilograms per decare)

Средни добиви от основните земеделски култури общо в селското стопанство

(кг от дка)

1) Култури	1934–1939 г.	1958–1960 г.	1966–1971 г.	1971–1975 г.	1976–1978 г.
2) Пшеница	125	174	274	340	315
3) Ечемик	130	196	244	309	311
4) Царевица–зърно	117	187	365	397	379
5) Слънчоглед	83	125	169	170	169
6) Ориенталски тютюн	93	76	102	120	118
7) Захарно цвекло	1572	2035	3228	2928	2895
8) Домати	2367	2844	2899	2805	2935
9) Картофи	605	914	1138	1180	1147
10) Ябълки	267	912	832	783	934
11) Грозде	446	524	581	550	588

Key:
(1) Crop
(2) Wheat
(3) Barley
(4) Corn-grain
(5) Sunflower
(6) Oriental tobacco
(7) Sugar beets
(8) Tomatoes
(9) Potatoes
(10) Apples
(11) Grapes

At the present stage particular attention is being paid to upgrading the quality and utilization of productive capital, including that which is directly related to the utilization of the land.

Natural conditions and, more precisely, soils and solar heat, enable the country to grow a large number of highly intensive crops. The growing of steady high yields is largely determined by the amount of precipitation which may be insufficient and unevenly distributed throughout the year. That is why irrigation is one of the most important factors in improving land utilization.

Our country has built big irrigation systems. Capital investments for irrigation have exceeded 1.5 billion leva. Irrigated areas total 11.3 million decares. However, only about 82 percent of them are actually irrigated. Crop yields from such lands are frequently below their potential possibilities for the following basic reasons: insufficient water supplies, low technical standard (76.8 percent are irrigated gravitationally), insufficient spraying equipment, low effectiveness of the network of canals, and others. Consequently, labor productivitiy in irrigation is low (11 decares per man/shift). A great deal of water is lost (0.50-0.60 efficiency) and the watering regime of the crops is frequently violated, which adversely affects yields. That is why one of the basic tasks facing agriculture is the reconstruction and modernization of irrigation systems with a view to upgrading labor productivity and insuring the maximum utilization of the water and the land in order

to increase agricultural output. Furthermore, the building of new irrigated areas must be continued. Studies have indicated that as many as 36 million decares, or 60 percent of the farmland, could be irrigated. Should such irrigated areas be developed, the volume of agricultural output could be increased by more than 30 percent as a result of irrigation alone. This, however, requires substantial additional capital investments.

Perennials account for 7.2 percent of the arable land in the country. Their yields remain inadequate. This is due to the strains used, type of fertilizer, irrigation, technology, and others. The share of non-fruit-yielding perennials remains high. This lowers the volume of output. That is why the reconstruction of some of the land in perennial crops and upgrading intensification are currently an important reserve for the better utilization of the land.

As a result of the major changes which have taken place in the structure of the national economy and increased mechanization, the size of the manpower in agriculture has been reduced considerably. The process is continuing. However, the size of the manpower is declining faster than mechanization is increasing in a number of basic agricultural subsectors (truck gardening, tobacco, perennials). This is having an adverse effect on these crops. Increased mechanization of labor intensive crops is a necessity both in terms of upgrading labor productivity and improving the utilization of the land.

Another main direction to be followed in the utilization of the land is to improve the structure and territorial location of agricultural production.

As we pointed out, natural conditions in our country make the production of a large number of crops possible. We know that the individual crops have different potentials in terms of investments and labor and, on this basis, growing greater quantities and increasing the income per unit area. Improving the utilization of the land calls for the utilization of all opportunities for expanding areas planted in more intensive crops. Accordingly, the country has been pursuing a systematic policy of increasing the share of such crops. Over the past 20 years areas planted in sugar beets, tobacco, vegetables, and perennials have been expanded considerably while areas in grain crops, wheat in particualr, have been reduced. We must note, however, that even though suitable areas for growing such intensive crops still exist, available manpower resources and the need for substantial additional capital investments will not make substantial structural changes possible over the next few years.

The great variety of natural and economic conditions prevailing in the different parts of the country also make the problem of the territorial location of agricultural production particularly important. Growing

individual crops under the most favorable conditions has a decisive influence on their effectiveness. That is why great attention is being paid to this problem. Respective studies have been made and a chart for the zoning of basic crops and types of livestock have been drafted. In this respect, particularly after the organization of agroindustrial complexes in the country, starting with 1971 a systematic policy has been pursued of decisively improving the territorial location of production facilities. Areas have been specialized in the growing of grapes, apples, sugar beets, and so on. The process has not been completed. In our view, it must be accelerated by paying greater attention to crops whose requirements in terms of natural conditions and the production structure of irrigated areas are greater and specific. All opportunities must be used to increase the share of more intensive and moisture-loving crops on irrigated areas. This would not only improve land and water management but would make it economically expedient to increase capital investments per unit area so that we may convert from gravitational irrigation to spraying and other more productive yet also far more capital intensive irrigation systems.

Packing the cultivated area with the help of secondary and intermediate crops is an important reserve in upgrading the utilization of the arable land. Natural conditions and, particularly, the extension of irrigated areas make it possible to raise as second crops, following the wheat and early spring crops corn for fodder, late vegetables, tobacco, and others and, before the late spring crops, winter vetch, winter peas, mixed vetch and pea crops, some vegetables, turnips, and others. Our country has acquired rich experience in this area. Let us emphasize that this possibility is being underestimated in many respects. In the country at large these crops account for no more than 10 to 12 percent of the cultivated area compared with a possible 15 to 18 percent, and, in the case of irrigated land, up to 25-30 percent. Naturally, the size of such areas largely depends on weather conditions throughout the year, for in some cases such conditions are adverse and result in losses rather than advantages.

Our country has extensive natural pastureland (26 percent of the farmland). This land, however, is used extensively. It is virtually not fertilized or irrigated. The grass structure has worsened. Yields range between 300 and 500 kilograms of green mass per decare. The better utilization of such land presents agriculture with a major problem. For this reason, in recent years the development of grazing complexes has been undertaken. They could resolve all problems related to improving the condition and utilization of pastures: clearing of rocks and bushes, planting grass, fertilizing, road construction, building livestock and residential premises, developing water supplies and others. This would enable us to considerably improve the utilization of such land and double or triple grass yields. In many cases such grass could yield hay as

well. This would create better conditions for the development of sheep breeding and, partially, cattle raising.

The preservation and improvement of land resources is an important topical problem. Let us note, above all, that the share of the land used (arable, pastures, and forests) is low--89.6 percent. Arable land accounts for no more than 42.8 percent. This is due to the predominantly hilly, semimountainous, and mountainous topography.

Not only is the share of the arable land small but it is steadily declining. Between 1960 and 1977 alone it declined by 1,423,000 decares, or 2.9 percent. Every year an average of 83,700 decares are lost to cultivation.

The reduction in the size of the arable land is due to two reasons: allocating land for construction and abandonment of unproductive land.

Every year as many as 50,000 decares are set aside for construction needs. This is the result not only of the extensive amount of construction taking place in the country but the increased norms of the necessary area for individual projects and the desire to build on areas close to settlements, transport arteries, and water sources. This leads to the loss of extensive farmland. Proper measures have been taken to improve control over this process. The National Assembly passed a special law on the preservation of the arable land and pastures. Special rates of payment for such land were introduced, ranging, according to the category of the land, from 400 to 40,000 leva per decare. The construction workers were ordered to preserve the humus of the soil in some areas in the course of earth removal operations. After the exhaustion of open pit mines and quarries, the areas must be rebuilt and become useable for crop growing. Land may be appropriated only by decision of the Council of Ministers.

As the result of these measures, in recent years the amount of land allocated for construction declined considerably. In 1977-1978 it averaged 22,000 decares annually.

The second reason--removing from the arable land fund the underproductive land--is caused by the poor condition of a considerable percentage of this land. Because of the rugged topography and age-old human activities, a high percentage of farmland is subjected to water erosion. About 10 percent of the farmland has become severely eroded.

In 1975 there were 1,848,000 decares of abandoned land; in 1978 the figure was reduced to 1,285,000 decares as a result of the measures taken. Furthermore, as a result of river flooding, construction, or organizational and other reasons, every year about 350,000 to 450,000 decares of arable land remain unused. In other words, about 96 percent of the arable land is actually used.

Our country is applying reclamation and other measures to resolve the problem of the preservation and fuller utilization of the land. All okrugs have set up specialized enterprises in charge of reclamation and other measures for the struggle against soil erosion, land recultivation, draining, clearing, and others. All such measures are financed from a special state budget fund. Practical experience has indicated that this is a successful method for the preservation of the farmland. Furthermore, antierosion measures are being implemented in forest land, most of which consists of sloped and eroded areas.

It is worth noting that periodically, in recent years in particular, extensive wind erosion as well appeared in northern Bulgaria. A considerable share of the soil in some sectors was carried away and crops were destroyed. This is due not only to the strong wind but the system of land management, particularly of open and highly crumbling soil, in the spring. So far, however, no particular measures have been taken in this respect even though the need for them is extremely urgent.

Currently our country is formulating a long-term program for the struggle against water and wind erosion. It covers all land resources. The plan calls for the simultaneous formulation and implementation of all antierosion measures in the individual water basins. The implementation of this program will limit erosion processes to a maximum and will improve the condition and insure the more rational utilization of the land.

Upgrading the fertility of soils which are excessively moist on the surface, acidic, and saline is of great importance to the better management of the farmland.

The country has about four million decares of land which is excessively moist on the surface. This is fertile land with heavy soils and a shallow layer of clay, or else land located near rivers with natural seepage. During periods of heavier precipitation they retain the water while in drought periods some of them are short of ground water. As a result, the crops cannot be planted on time and either require moisture or suffer from a great shortage of moisture. Crop yields on such lands are 20 to 30 percent lower than average and no crops could be planted at all on some of them which must be used as meadows and pasture grounds. In order to improve such soils they must be drained and the plowed stratum must be deepened. Even though essentially the necessary measures to be applied are known, so far nothing has been done to insure the improvement of such lands.

A similar situation prevails with acid soils which total 1,750,000 decares, and with 250,000 decares in salinized soils. The nonutilization of such areas causes the national economy annual losses in excess of 150 million leva.

Preservation from pollution is of major importance for the land in our country. As a result of the development of industry, transportation, and other activities about 550,000 decares of farmland have already become polluted. The main polluters are the cement, metallurgical, chemical, and other plants and the thermoelectric power plants. Decisive, yet still insufficient, measures have been taken in recent years to stop such pollution. With a view to improving work in this respect, in our view, it would be expedient to impose stricter penalties on enterprises which pollute the land, demanding of them to pay for the losses suffered from the worsening of soil fertility and the lowering of yields and of the quality of output.

Every year new land is being developed, even though in small amounts, to compensate for the reduction in the size of the arable land. The basic sources here are the elimination of forests, the plowing of natural pastureland, the draining of swamp land, and the recultivation of areas affected by industry and construction. However, the possibilities in this respect have not been entirely exhausted. In recent years we have been developing an average of 10,000 to 27,000 decares. We still have substantial areas which could be recultivated and drained. A particularly major problem is that of engaging in a more decisive conversion of unsuitable arable land which could be used for the planting of forests and grass, while flat and fertile land currently covered by neglected forests, natural pastures, and others could be developed for farming. This would enable us to stop reducing the size of the arable land, which is an important national problem.

The studies we have conducted on the reduction and increase of arable land indicate that real possibilities exist for the expedient transformation of some soils and for limiting the reduction of the size of the arable land (Table 3).

Table 3. Changes in the Size of the Arable Land From 1980 to 1990

Indicator	Area, Thousand decares
I. Reduction	589
1. High construction	85
2. Highways and railroad tracks	14
3. Dams and Canals	68
4. Mines and quarries	71
5. Corrections of rivers and ravines	6
6. Forestation	177
7. Natural pastures	168

[Table 3, continued]

II. Expansion	751
1. Natural pastures	312
2. Forests	297
3. Swamp draining	48
4. Recultivation of unused land	82
5. Irrigation canals	12
Difference	62

The main idea of the suggested transformation is to plant grass on about 168,000 decares of eroded and abandoned underproductive land and plant trees on 177,000 decares. Conversely, 312,000 decares in pastures and 297,000 decares in forests will be plowed under. This is a minimum amount. Greater possibilities exist for the development of arable land currently in forest resources. However, this should be done gradually following the planting of new forests.

The government's decision to distribute for use by the population some of the abandoned underproductive arable land plays a great role in limiting the reduction in the size of the arable land. So far about 450,000 decares have been distributed. In no more than some 2 years a certain percentage of this land has been radically improved: It has been cleared, terraced, and cultivated. Currently it is used for the production of fodder, fruits, and other valuable farm crops. All this indicates that considerable successes have been achieved and important measures are being implemented to improve the utilization and preservation of the country's land resources. Still, a number of problems must be resolved thus providing real possibilities for the fuller utilization and preservation of land resources. This includes the protection of soil fertility of about 15 million decares threatened by erosion and pollution, flooding, and destruction from construction, and of about 6 million decares of overmoist, acidic, and salinized soils. Corresponding programs have been formulated for the solution of such problems: A national program for the struggle against erosion, a program for upgrading the fertility of 15 million decares, and a program for improving the condition of and developing pastureland complexes covering 4 million decares of natural grazing land.

The implementation of such programs will require capital investments in the hundreds of millions of leva. In our view, this circumstance requires the preliminary clarification of several basic problems.

First, we must determine the ratio which must exist between the engineering-technical and agrotechnical measures aimed at the preservation and

upgrading the fertility of the soil. In a number of cases agrotechnical measures are equally effective and require lesser capital investments, for which reason they are preferable. Such is the case, for example, in the struggle against soil erosion, improving some overmoist soils, and others.

Second, let us note that technologies for the improvement and preservation of individual soils have not been developed in the necessary detail, or else that measures have been suggested whose practical effectiveness has not been proved.

Third, we must increase the availability of specialized equipment for the preservation, improvement, and work of such lands, along with the necessary fertilizers, lime, gypsum, and other means.

Fourth, let us note that our country has a specialized organization in charge of planning measures and well-trained specialists in this area.

Fifth, systematic studies are not being conducted by the complex groups and expeditions studying the condition of land resources in the country for purposes of suggesting specific measures. The National Agroindustrial Union does not have a standard manual on this important problem.

All this indicates the need for the creation of a better organization and for expanding the study, planning and, particularly, the implementation of measures related to the transformation, preservation and improvement of the utilization of land resources in the country. For the time being adequate possibilities exist in this respect. However, they must be used most expediently.

5003
CSO: 2200

BRIEFS

URANIUM MINES RENAMED--Concern enterprise Pribram Uranium Mines [koncernovy podnik Uranove doly Pribram] was renamed on 5 September 1980 the Czechoslovak-Soviet Friendship Enterprise [Podnik ceskoslovensko-sovetskeho pratelstvi]. [Prague MLADA FRONTA in Czech 6 Sep 80 p 2]

CSO: 2400

TIGHTER CONTRACTUAL DISCIPLINE DEMANDED BY MINISTRY OF METALLURGY

Budapest MAGYAR HIRLAP in Hungarian 29 Jul 80 p 6

[Article by N. B.: "On Contractual Discipline"]

> [Text] Recently there appeared a document which sets forth the most important directives in contractual discipline for the sake of the metallurgical and machine industry enterprises. We asked the Ministry of Metallurgical and Machine Industries for information on the purpose of the directives and their new features.

Nowadays the frequent irregularities in contacts between enterprises are called "contractual lack of discipline," on the model of the expression "contractual discipline." Frequently enterprise cooperation is not adequate, and in quite a number of enterprises a contract is only a formality. They often fulfill their obligations late, quality is below the enterprise capability and deliveries are irregular. Breach of contract brings practically no consequences, and enterprises frequently reject justifiable penalties and indemnities.

In the Interest of the Small Consumer

One of the most important purposes of the new directives is to reform enterprise behavior. Thus one result will be that enterprises will respond concretely to orders and solicitations. At present there is the practise of merely stating the possibility of concluding a contract, instead of giving the time and other details. This, for example, seriously damages the availability of goods. Another equally important point in the document is that in the future the interests of the small consumer must not be pushed into the background.

The KGM [Ministry of Metallurgical and Machine Industries] is also proposing to the enterprises that they live more frequently with the idea of preliminary contracts. From a number of points of view preliminary

contracts are advantageous: they help establish long-term economic ties between enterprises and, among other things, they imply adequate bonds on the legal side, in opposition to possible "disappearance" into the industrial background.

On the basis of experience the KGM powers have determined that some of the enterprises do not do enough for the contracts they have made, and in general do not include contractual obligations in their basic tasks. In this connection the document prescribes that contracts must be fulfilled by the appointed date, at the rate decided on and according to the conditions accepted. If any unforeseen situation interferes with this, it is the duty of the consignor to inform the purchaser of the situation in good time.

It is a well-known fact that when enterprises set up their manufacturing schedules, they often cause each other trouble. For example, one firm will plan to export complete assemblies, and in the meantime its partner will drop the production of an electric motor planned for incorporation into the assemblies, or of some other product. According to the directives, it is absolutely necessary for producers to fulfill their accepted obligations, on the basis of pertinent decisions, if they plan to eliminate the manufacture of some products.

The weakest point in the current contractual system is the validation of demands resulting from breach of contract. If a basic charge is justified at all, this is certainly the place. The document particularly calls attention to two essential viewpoints. One is that, although the legal measure refers the decision of validating a demand for a penalty in favor of the wronged party to the competent jurisdiction, it is impossible to understand how the enterprise cannot be obliged to consider the circumstances of breach of contract. In every case it is necessary to examine the real harm done by breach of contract. Another new element is that an economic penalty can be levied on the basis of a government decision of last year, if an enterprise regularly manufactures products of poor quality, if it repeatedly insists on contractual conditions favorable to one party and if there are a number of cases of its not honoring demands caused by having failed to fulfill a contract.

Lack of Internal Organization

According to the KGM authorities the legal and economic work of the enterprises must be continuously improved for the sake of the contractual system. Let us observe that in general the lack of internal organization also works against the fulfilment of contracts. The establishment of contacts between enterprises is inseparable from the organizational level within the enterprise.

6806
CSO: 2500

PLIGHT OF DISADVANTAGED COOPERATIVES WORSENED BY SPECIALISTS

Budapest MAGYAR HIRLAP in Hungarian 29 Jul 80 p 3

[Article by Nandor Keresztenyi: "Indifference"]

[Text] Recently I was able to witness a meeting where the refrain could have been: "Kick a poor man while he's down." Forty chairmen of agricultural cooperatives, not known for their intelligence, presented a picture of their worries. This conference was well-suited to be a day of grievances, since various kinds of management handicaps lay a double burden on these cooperatives, the majority of which fit right in on the path of stragglers.

The repeatedly unbending strictness of the economic measures levies a double burden when the state tries to obviate poor production situations. However, even with pertinent subsidies it cannot reach the same level as previously, and those escaping the "protected circle" are now complaining of this fact, which may also be considered encouraging in itself, since this escape is nothing but a recognition of our economic level.

These and similar paradoxes would be widespread if they provided any information. However, instead of them, let me mention only a single grievance! "What I fear most is the indifference of some specialists, felt here and there, but more and more," said one of the chairmen, stating that the specialists orient one another to different places and methods: here in the megye plant protection station, there in the center of one of the plant production systems, and yonder to a new position somewhere else. "When I wanted to keep one of them at any price, it turned out that I was not in an equitable position, because he was offered more than my chairman's salary," the chairman reflected as he brought up this event, by no means unique.

Let me immediately add that the position of this chairman is not an exceptional one. Just recently I was talking with two chairmen who want to get away. For example, one of them considers himself capable of some kind of environmental protection work.... But let's not talk ironically. Indifference, negligence, is really a sign which we had better heed more than

more than any kind of changes in any economic regulator! This is an unfortunate psychological factor associated with the factor of an unfavorable production site. There is no longer any doubt that rehabilitation of an otherwise incompetent enterprise can have a number of brakes applied to expanded production.

From time to time the ageless subject of the participation of questionable areas comes up. What is this all about? According to a previous study by the Agrarian Economic Research Institute, 83 percent of the cooperatives in question can be found in ten of the country's megyes, while only 17 percent can be found in the other nine megyes. The main areas involved are: Orseg, the Zala hill region, the mountainous area beyond the Danube (Bakony, Vertes) Zselicseg, the Somogy hill area, the eastern mountainous area, Hegykoz, the sandy soil between the Danube and the Tisza, the Alfold plain and the Szabolcs-Szatmar sandy soil area. A document recently compiled by a major cooperative department in the Ministry of Agriculture and Food Administration revealed that 283 of the country's 1339 production enterprises have unfavorable facts and figures. Szabolcs-Szatmar has 70 such in 127 cooperatives, Borsod 39 in 107 cooperatives, Somogy 27 in 82 in joint economy, Zala 20 out of 24 and so on.

The relevant situation in Borsod, Heves and Nograd was discussed in quite a bit of detail and the Ministry personnel, among others, stated that there are chairmen who do not like to take on specialists with a diploma, but on the other hand it is also a fact that the university graduates have no desire to be associated with their poor accomplishments either. This is quite true. I have already seen chairmen who hid and closed professional periodicals fromehead agrarians with a diploma. If there is a reason for discouragement, this fact, trifling only in appearance, is one of them.

However, a definite counteroffensive is developing within the science. For it is not difficult to detect that the best antidote to a desire to go elsewhere can be summarized in funds. Last year the state supplemented the wages of 2,400 specialists with no less than 40 million forints, a form of support which can be maintained. There is also a proposal for reclassification, which again is not a new idea. Let us just think of the erstwhile order 3004 or the host of state farms and professional men "deposited" by the Ministry on the basis of this order, of whom more than a few helped strengthen the cooperatives between 1960-1970.

So, let a new order, numbered or unnumbered, come. If we are provided with anything, let it be orders. At any rate various well-accepted actions and relief could be begun to eliminate the indifference toward these common interests of ours. At the conference mentioned in the beginning, the fact that cooperative managers have been able to buy automobiles to the detriment of the state enterprises was brought up. What need is there of such differentiation, of any kind of differentiation? Following the example of some cooperatives which have moved forward from the ranks of the stragglers, it is possible to judge the scope of their role in the construction of official quarters, so why should this proven system not be accelerated and broadened?

I know that money is necessary in addition to resolutions, and not just a little. However, it is necessary to see that it is really spent directly on the proper purposes, which is economy. This is the way to at least partially eliminate the losses for which the state, in the final analysis, pays several hundreds of millions of forints annually.

6806
CSO: 2500

MAINTENANCE OF HOSPITAL EQUIPMENT SHUNNED BY ENGINEERS

Budapest MAGYAR HIRLAP in Hungarian 29 Jul 80 p 5

[Article by Laszlo Fay: "Healing Engineers; Train Yes, Use No?"]

[Text] At present the value of the Hungarian stock of medical instruments is approximately 6 million forints. Some 25 percent of this is unusable or bad. An annual total of 20-30 percent of the industrial engineers, trained at a cost of 100,000-150,000 forints each to implement and repair the technical medical equipment, finds employment in the health service.

These data were presented at a specialized conference ten days ago before the lift-off of the first Hungarian cosmonaut. On the basis of our health plans, worthy of recognition on a worldwide scale, health service has advanced to a mass supply condition. However, service of such a nature requires a greater degree of automation, more and better equipment, and specialists of suitable training and in necessary numbers. Let us take a look at the men we can call medical-technical specialists in the contemporary sense.

Indispensable Collaborators

In the general view today these basically trained technical workers are considered to be in the group whose work is involved with healing or assists it in some way. A well-functioning hospital can be boldly compared to a factory operating according to a strict technological order. Here are found the same general supply areas (sanitary engineering, power, TMI [Preventive Maintenance]) and the so-called hotel services (kitchen, laundry) as everywhere else, and they do not demand any special health knowledge. On the other hand, because of the technical development in the last decade, the employment of a competent technical staff is a more and more urgent task. Specialists are needed who know how to implement, maintain and repair modern health equipment, devices, and apparatus and special instruments at a proper level. The healing teams, of which an indispensable member is the technical worker who takes an active part in the technological

operation of the hospital, are in development. Today in many developed countries it is already impossible to perform certain operations without the presence of the hospital engineers. Prevention, as opposed to healing, is playing a greater and greater role in the everyday activity of physicians, so it is easy to understand the importance of proper maintenance and reliability of the equipment to obviate random repairs. We are emphasizing their importance because the attitude has not prevailed everywhere yet that the presence of technicians is indispensable for providing high-grade health service.

An interesting matter is the training received by medical technical specialists. Naturally a pertinent differentiation is necessary here, since today both trained workers and certified engineers can be found in health service. When we speak of the level of training, we can in general distinguish three levels: certified engineers, industrial engineers and technicians.

Of these three groups the Kando Kalman Technical Electrical Institute seems appropriate only for the graduate training of industrial engineers. If certified engineers want to specialize in this area, they can simply acquire the desired information in special engineering postgraduate education, and since such postgraduate training is a matter of the budget, the number of participants is limited. The greatest concern is for those in the third class. Technician training disappeared from Hungary more than 10 years ago and the technician-quality system, which has taken its place, has received and is receiving a great deal of justified criticism. While this last problem requires a general solution, it is not a question of special medical technology, and still this is where the least development can be found: the shortage of medium-trained specialists is extremely perceptible in health service.

It is possible to establish all kinds of educational needs on the basis of an exact recognition of requirements, and this is the point where the opinions of interested parties diverge. In the past the educational leaders waited for a solution from the competitive system. However, they have had to realize that, as long as the enterprises are not obliged to fill the written competition places, they will ask for an unjustifiable number of engineers and afterwards make a selection based on their own approval. Thus the competitive system does not provide a reliable base for fulfilment of the requirements. (Presumably the enterprises would determine their needs more precisely if, for example, they paid the training expenses of engineers, instead of the central budget!).

We can get approximately exact data on the anticipated demands if we begin with the 6 billion forints worth of instruments mentioned above. In line with the method adopted in international practise, 10 million forints per specialist, it seems that 600 persons are required, but this is far from the approximately 300 medical-technical staff currently employed in health service.

There may be a mistake in the figures, but it is clear that in both cases the needs considerably outdistance the current staff, while we are not even mentioning industrial demands for 200-300 persons and the need to expand the personnel awaited in both areas.

What is the cause of the migration? How can it be that there are scarcely 40 workers in the health area and 40 in the medical-technical industry out of the 200 industrial engineers trained in this specialty at the Kando Institute during the past 10 years?

The Causes of Migration

At the conference mentioned above, the representative of the Ministry of Health spoke of a shortage of 50-80 technical experts on the highest level and 100-150 on the intermediate level, while at the same time a radio report stated that this year the health service advertised a total of three positions to be filled by new graduates.

These contradictions can be the result of inaccuracies in estimates, organizational questions or, most probable, personnel problems. It seems as if the health service authorities do not feel this situation themselves, and somehow view these events from the outside. In Hungary there has never been a census of medical-technical engineers or of industrial engineers. The majority of hospital and healing institutions do not know about this form of training, and therefore cannot demand such specialists. This lack of orientation and enlightening information can lead to millions being tied up in a shortage of components or, what is even worse, in a lack of proper maintenance and data processing.

More and more physicians are incapable of dealing with the technology and of acquiring the technical knowledge, if they did want to use the modern equipment entrusted to them. It is long since time for technical knowledge to be included in the training of physicians, and especially in refresher training. But when we speak of the technical training of physicians, we must not forget that their main mission is healing.

The Big Question

Thus the main question is not one of recent origin. We must accept the fact that the task of healing is a team task, under the guidance of a physician, and that the technicians in this group of workers are just as necessary as the representatives of other branches of science. Concrete institutions are necessary for this purpose, in addition to the readiness of every participant, since an enormous amount of energy has been lost in the past 10 years as a result of the lack of harmony, although most of the information acquired has been generally known.

The establishment of an interdepartmental committee, familiar with the difficulties caused by the divergence of the medical system in two special

directions (ministry, councillors) could lead to a solution by involving all interested parties (education, industry and others). The Medical-Technical Specialty Division of MATE [Scientific Association on Measures and Automation], which perhaps feels the problem most keenly, put this matter on the agenda of an international conference as early as 1972. Within the scope of the recommendations adopted there, the BME [Technical University of Budapest] implemented the training of engineers with diplomas in 1978, and the Kando Institute did so in 1979.

In the recent past we awere able to watch the program entitled "Palyakorrekcio" [Course Correction] on television. In it two young men discussed the results of uniting the studies taken at medical and technical universities. One of them, already a physician, was a student at the Technical University, and the other was in his last year at the Technical University when he was able to realize the great dream of his life and became a student at the Medical University.

These were naturally subjective decisions, but the effect of the social environment can be seen in their motivation. Would this be the solution?

6806
CSO: 2500

POLICY AIMS AT CONTINUED INCREASE IN STANDARD OF LIVING

Plans for 1981-1985 Period

Bucharest REVISTA ECONOMICA in Romanian No 34, 22 Aug 80 pp 9-10

/Article by Dumitru Pugna: "Continual Growth of the Well-Being of the Whole Populace--the Supreme Goal of the Party's Policy"/

/Text/ Thirty six years of new history, each year bringing with it new and graphic proof of the continual progress of our society. The development of the production forces, their balanced distribution over the territory, the modernization of the structures of the economy, high rates of economic growth, among the highest recorded on a world level, and substantial increases in labor productivity in all sectors--these are some of the most significant elements for characterizing the country's economic and social development, the realism and scientific character of the view that lies at the basis of this development. The anniversary of the memorable historic act on 23 August 1944 constitutes an occasion for also bringing up other significant achievements, those obtained on the plane of well-being, of spiritual development. Because everything that is created on the land of Romania pursues, as the secretary general of the party, Comrade Nicolae Ceausescu, pointed out in the speech given recently at the grand people's assembly in the municipality of Braila, "the general development of the country, the raising of the well-being of the whole populace--the supreme goal of the party's policy, the essence of the multilaterally developed society in Romania."

A Profound Humanism of Our Socialist Order

In our party's view, the possibility of providing as diversified consumption as possible for all the working people, of continually raising the standard of living and the quality of life, is based on the constant development of the production forces, their sensible distribution over the territory, the priority growth of the efficiency with which the resources of society are expended. Only in this way is it possible to ensure the growth of national income, of the newly created value as a unique source for raising the population's incomes, its standard of living. At the same time,

the establishment of a fair division between the accumulation fund and the consumption fund, depending on the conditions specific to each stage of development of the economy, and the setting of the part of national income earmarked for development at about one-third have permitted the creation of the material support for dealing with the consumption demand of the population. Favorable premises for reducing the objective gap between the consumption demand and the economy's capacity to meet it have been created by founding every year new units in the branches and subbranches that respond directly to public consumption, by increasing, diversifying and qualitatively improving their production.

However, it is unquestionable that the sphere of the concept of well-being, of standard of living and quality of life, is more comprehensive. The quality of life under socialism expresses the totality of the conditions that provide for the harmonious development of the human being--on a biological, social and spiritual plane--the satisfaction of his aspirations at a higher and higher level. On another plane, the obtaining of a higher quality of life presupposes the harmonization of individual interests with society's general aspirations, the multilateral fulfillment of the human personality, the utilization of all the capacities and talents of each for the common good.

Exhibiting a more concrete, more "quantifiable" character, the concept of standard of living refers to the degree to which the material and spiritual needs of a society, social class or person are satisfied, under the given conditions of development of the production forces, of social production. A number of quantitative and qualitative determinations expressed by means of economic and social indicators are utilized to characterize the standard of living. These indicators pursue the measurement of the level of the population's nominal and real incomes, of the level of the consumption of material goods and services per capita, of the population's state of health and of accessibility to services of health care, of education, culture and art, to working, housing and recreational conditions, and to the general state of the natural environment in which the people live and work. At the same time, these economic and social indicators permit the distinguishing of the ways, the directions of action by means of which a continual rise in well-being will be provided.

The Progress of the Economy's Development--the Basis for Raising the Quality of Life

The development of the national economy at a high rate in the period of socialist construction has provided the material base needed to continually raise the well-being of all the working people. Occupying the leading places in the world with regard to the progress of economic development, Romania achieved a 13-fold increase in national income, with an average annual rate of 9.7 percent, in the 1950-1978 period. The increase in national income and the achievement of a sensible allocation of it to the development fund and the consumption fund have permitted, along with the rise in

the rate of the development fund, a continual increase in the consumption fund. At the same time, the consistent application of the policy of socialist industrialization and of harmonious development of all branches of the national economy has had major effects on the employed population. Thus, the percentage of the population employed in the nonagricultural branches has risen from 29.5 percent in 1950 to 70.9 percent in 1980, including 44.4 percent in industry and construction, as compared with 12 percent in 1950. The attraction of a larger and larger volume of manpower to the nonagricultural branches and the systematic growth of the population's incomes from wages have led to the growth of the wage fund by a factor of 21 in 1980 as compared with 1950. The average net wage has risen to 2,261 lei (at the end of this year), as compared with 1,595 lei in 1975 and 337 lei in 1950.

In their turn, the peasantry's incomes obtained from work in the CAP /agricultural production cooperative/ and on the personal farm, calculated per employed person, have risen 8.3-fold, with a significant role going to the providing of an increase in the guaranteed minimum income to 1,500 lei per month for those who work in zootechny and irrigation and to 1,200 lei for those who work in vegetable-, vine- and fruitgrowing. In addition, the incomes obtained by the population from the social consumption funds have risen, especially through the increase in pensions, in the state allocation for children, in the funds earmarked for the development of education, health care, social and cultural actions.

The increase in incomes, concomitant with the growth of production, the continual diversification and improvement of the quality of consumer goods, has caused a substantial rise in the population's consumption for all categories of products. The growth of the average annual consumption per capita for a number of basic food products is indicative in this regard: from 16.7 kg in 1950 to 62.4 kg in 1980 for meat and meat products; from 107.6 liters to 220 liters for milk and milk products; from 79 units to 270 units for eggs; and from 6.9 kg to 30 kg for sugar and sugar products. The level of the consumption achieved for the main food products provides to the whole population a balanced state of nutrition, in relation to the physical effort exerted and to age. For nonfood goods the average annual consumptions per capita are also continually rising. The development and modernization of light industry and the diversification of the production in this branch are providing for the population's consumption needs for the main products. The average annual consumption per capita has risen from 13.19 square meters in 1950 to 29.10 square meters in 1980 for cloth (including garments) and from 0.62 pairs to 4.10 pairs for footwear--to refer to just a few usual indicators.

Along with the growth of the population's incomes and the fuller and fuller satisfaction of the need for food and clothing, the degree to which the population is supplied with durable goods has also risen--this constituting in fact a significant change in the structure of the population's consumption, one that indicates the approach of the type of consumption in our

country to that existing in the industrialized states. In addition, the degree to which the population is supplied with devices for home use (refrigerators and washing machines), with radios, television sets and other goods, has risen. Remarkable results have been obtained with regard to the housing conditions of the population. In the current five-year period alone, about 1 million apartments will be achieved from state funds. Over 15 million citizens in cities and villages now live in houses built in the past 30 years.

1981-1985: a New and Significant Stage in the Process of Growth in Well-Being

The basic coordinates of the growth of the material and spiritual well-being of our people in the 1981-1985 five-year period have found themselves a coherent and harmonious expression in the Directive Program for Increasing the Standard of Living in the 1981-1985 Period and Continually Raising the Quality of Life, a document adopted at the 12th Congress of the Romanian Communist Party. Being based on the objectives established by the congress with regard to the transition of Romania to a new phase of development, in which the strong affirmation of the scientific and technical revolution will occur, and the speedup of the process of turning the economic and social activity to a new quality, this program incorporates in an organic whole the main orientations and means that will permit the raising of the well-being and the level of civilization of our whole populace to a new stage in the next 5 years.

Starting from the direct correlation that is established between the growth and development of the national economy in general, between the growth of national wealth and the possibilities of raising the material and spiritual well-being of the population, the necessity of acting to achieve a new, higher quality in all economic activity is stressed in the party documents. The management of material and financial resources with maximum efficiency and the achievement of a substantial rise in labor productivity in all economic units--these are the real ways by means of which it is possible to provide the necessary conditions for satisfying the population's demands and raising its standard of living. "It is necessary," Comrade Nicolae Ceausescu stated in the report presented at the 12th party congress, "for all working people and all party organizations to do everything so that our entire economic activity is performed with the highest efficiency, providing for the continual growth of national wealth, the sure basis--and the only basis--for continually developing the homeland, for raising the well-being of the people."

As thus far, the development of the national economy at a steady rate, the more marked growth of national income and its sensible allocation--70 percent to the consumption fund and 30 percent to the accumulation fund--will constitute the basic premises for enlarging the wage fund and increasing the amount of expenditures for social and cultural actions and the investments for the facilities from which the population benefits directly. The

growth of national income at an average annual rate of 6.7-7.4 percent will permit the growth of the wage fund by 43.3 percent in 1985 as compared with 1980 and of the expenditures for social and cultural actions by 25 percent, including those from the state budget by 24 percent. In the next five-year period, another 930,000 new workplaces will be created--an action with a direct effect on the growth of the number of worker personnel, especially in industry and construction, and on the growth of the incomes of the working people by this means too. Significant changes will occur in the structure of the employed population, a process with similar effects.

The provisions on growth in the population's direct incomes from work in accordance with remuneration according to the quantity, quality and social importance of the work occupy an important place among the ways to systematically improve the material, social and cultural living and working conditions of the population (also see Table 1).

Table 1. The Main Indicators of the Population's Incomes in 1980-1985*

	1980 (lei per month)	1985 (lei per month)	(provisions) Growth in 1985 as compared with 1980 (%)
Average real wage	2,261	2,670	16-18
The peasantry's real incomes resulting from work performed in agriculture, per employed person, including:	1,380	1,725	25
Incomes of cooperative members	1,388	1,741	25.4
Incomes of peasants with an individual farm	1,340	1,650	23.1

* Drawn up on the basis of "Programul-Directiva de Crestere a Nivelului de Trai in Perioada 1981-1985 si de Ridicare Continua a Calitatii Vietii" /The Directive Program for Increasing the Standard of Living in the 1981-1985 Period and Continually Raising the Quality of Life/, Politica Publishing House, Bucharest, 1979.

The increases in pay will be achieved in such a way as to maintain a fair ratio between the minimum wage and the maximum wage in the economy, which is 1 to 5.5 for the current stage. On this basis, the net minimum wage will amount to 1,630 lei, as compared with 1,425 lei in 1980. In addition, in the next period of the five-year plan, on the basis of fulfilling the targets for growth in economic efficiency and labor productivity, the sums allocated to the profit-sharing fund will be gradually raised, providing an increase in the average sum per person by about 50 percent in comparison with 1980. The peasantry's incomes resulting from agriculture will be raised 20-25 percent.

The increasing of the funds earmarked for social and cultural actions constitutes an important way to raise the standard of living and improve the

quality of life. In this regard, it is expected that the total social and cultural expenditures will rise 37 percent in the 1981-1985 period, amounting to 14,200 lei per family in 1985, with the social and cultural expenditures financed from the budget coming to 12,950 lei per family, as compared with 10,000 lei in 1980. As a result of the growth of the state social security pensions, the military pensions, the pensions for IOVR /invalids, orphans and war widows/ and other categories of pensions on the average by about 23 percent for the nominal ones and 15-16 percent for the average real pension, the expenditures for them from the state budget will rise 38 percent on the average for the five-year period in comparison with the 1976-1980 five-year period.

The rise in the monetary incomes of the population under the conditions of a rigorously controlled evolution of the price and rate index will be correlated with an increase in the volume of the retail sales of goods by 36.5 percent in comparison with 1980. As follows from Table 2, the biggest increases will be registered for the consumption of nonfood products and especially of durable products.

Table 2. The Level of the Consumption of the Main Food and Nonfood Products in the 1980-1985 Period*

	Unit of measure	1980	1985	Growth in 1985 as compared with 1980 (%)
Food products per capita				
Meat and meat products	kg	62.4	68-72	9.0-15.4
Milk and milk products (excluding butter)	liters	220	230-240	4.5-9.1
Sugar and sugar products	kg	30	33-35	10.0-16.7
Eggs	units	270	275-280	1.8-103.7
Vegetables and vegetable products	kg	143.6	150-160	4.5-11.4
Fruit and fruit products	kg	63.0	75-85	19.0-34.0
Nonfood products per capita				
Cloth (including garments)	square meters	29.1	35.9	23.4
Knitwear	units	9.9	14.2	43.4
Footwear	pairs	4.1	4.1	-
Durable good per 1,000 inhabitants				
Radios	units	247	300	21.5
Television sets	units	203	245	20.7
Refrigerators	units	157	220	40.1
Washing machines	units	100	153	53.0
Automobiles	units	28	57	103.6

* Drawn up on the basis of "Programul-Directive de Crestere a Nivelului de Trai in Perioada 1981-1985 si de Ridicare Continua a Calitatii Vietii."

Along with the increase in the degree to which the food and nonfood needs are satisfied and the rise in the degree to which the population is

supplied with durable goods, a rapid increase and a wide diversification of the population's demand for services will occur. Accordingly, a rise in the volume of services by 54 percent, representing 74.6 billion lei in 1985, is expected. In addition, in the next 5 years the efforts to provide better and better housing conditions will be increased. Thus, about 1.10 million apartments will be built from the investment funds of the state, including 440,000 apartments earmarked for sale to the population. About 100,000 dwellings will be built from the population's own funds. For improving the comfort, the number of apartments with 3-4 rooms will increase, there being provided an average number of rooms per apartment of 2.52 and an increase in the average floorspace per capita in cities to 10.6 square meters, as compared with 9.7 square meters in 1980.

Inseparable components of the quality of life, education, culture and art, health care, sports and tourism, and their development will be supported by significant budgetary allocations. Thus, the expenditures for education will increase over 36 percent. The conditions for preparing for the generalization of secondary education, for expanding higher education and for more closely connecting all education with the practical needs of socialist construction in our country will be created. The expenditures for health care will be increased about 32 percent, and those for culture and art will be increased 26 percent. In addition, as a result of the growth in the degree of technical equipping of the economy, the improvement in the organization of production and labor, and the increase in labor productivity, the 2d stage of the program of measures for reducing the duration of work to 44 hours will be undertaken in the next five-year period.

All these orientations and measures established by the 12th congress reflect the constant care and concern of our party and state for achieving a higher and higher level of well-being for our whole population.

Domestic Trade Role Examined

Bucharest REVISTA ECONOMICA in Romanian No 34, 22 Aug 80 pp 11-12

/Article by Dr Virgil Adascalitei and Dr Aurel Valner of the Institute of Economics of Domestic Trade and Tourism: "Socialist Trade's Contribution to Implementing the Policy of Raising the Standard of Living of the Whole Population"/

/Text/ In the 36 years that have passed since the revolution of liberation, Romania has experienced immense revolutionary changes, splendid achievements in all fields of activity. The successful performance of the historic work of socialist construction and the transition to the forging of the multilaterally developed socialist society have been marked, for the whole populace, by the results of attaining the basic goal of our party's policy--continual growth in material and spiritual well-being, a process that, especially after the Ninth RCP Congress, has accelerated and has considerably expanded its sphere of inclusion, involving on a general plane

the creation of a new quality of life. Socialist trade, which, as an important component of our national economy, has continually increased its contribution to raising the standard of living of the population in the cities and villages, has joined in this dynamic process with a significant role.

The country's economic potential in a continual quantitative and qualitative upswing, the growth in national income, the improvement in the socialist relations of production and distribution, and the greater and greater, continually renovated and diversified production of consumer goods are causing the year-to-year growth both of the population's purchasing power and of the possibilities of covering it with a suitable supply of goods. Limiting ourselves just to the analysis of one of the indicators that characterize the vitality of the purchasing power—namely, the evolution of the average net wage of the worker personnel—we find that an increase of it to more than double, that is, from 1,028 lei per month in 1965 to 2,108 lei in 1979, occurred in the past 15 years.

Having the mission of putting at the population's disposal a supply of goods undergoing continual growth, renovation and diversification, capable of satisfying the many and varied consumption demands, Romanian trade has experienced, especially in the period of a decade and a half that has passed since the ninth party congress, systematic, complex and innovative development. Illustrative in this regard is the "retail sales of goods" indicator, which totals over 1.92 trillion lei for the whole 1966-1980 period, under the conditions in which the achievements in 1980 will be about 3.5 times greater than those in 1965. The fact that the average volume of sales per quarter in 1980 is equivalent to that achieved in all of 1964 is extremely revealing.

Moreover, we can deduce how much the dimensions of commercial activity have grown from the fact that in 1980, on the average per workday, goods with a total value of over 700 million lei, as compared with 306 million lei in 1970 and 208 million lei in 1965, and 17.5 times higher than in 1950 are sold.

As an embodiment of the strategic choices of great importance to the present and future of our homeland, established by the Romanian Communist Party and its secretary general, Comrade Nicolae Ceausescu, the rate of growth of the sales of goods in the past 15 years is characterized by high levels with a trend of growth (Table 1).

Another extremely significant aspect also follows from the data presented: the continual and substantial increase, from one period to another, in the absolute value of 1 percent of growth in the retail sales of goods.

Trade has made a notable contribution to our party's continual effort to provide to the people material conditions of life and comfort closer and closer to those in the economically advanced countries, there being

suggestive in this regard the fact that, under the conditions of the growth of the country's population from 19 million inhabitants in 1965 to over 22 million at present, the average sales per capita have risen from 3,350 lei to about 9,600 lei.

Table 1. The Evolution of the Retail Sales of Goods

Period	Volume of sales of goods (billions of lei)	Average annual rate of growth (%)	Absolute value of 1 percent of growth (millions of lei)
1966-1970	406	8.0	638
1971-1975	599	8.5	940
1976-1980	about 917*	8.7	1,407

* The data for 1980 represent estimates.

The steady orientation of the party's policy in the direction of achieving a harmonious territorial structure for the Romanian economy, based on scientific objectives and criteria, has also been reflected in the development of socialist trade. The trend of marked homogenization, on a territorial basis, of the supplying of goods to the population is characteristic, especially of the past three five-year periods. In this regard, the evolution of the retail sales of goods shows that rates appreciably higher than the national average have been registered in counties like Bistrita-Nasaud, Botosani, Covasna, Gorj, Ialomita, Olt, Salaj, Teleorman, Vaslui and others, once lagging behind from this viewpoint too.

Continual qualitative changes have also occurred in the structure of commercial activity. The changes in the content of the supply of goods put at the population's disposal are situated in the forefront. Along this line of thinking, two extremely significant traits are noted:

A better and better positioning of food products with a high nutritive content among the sales;

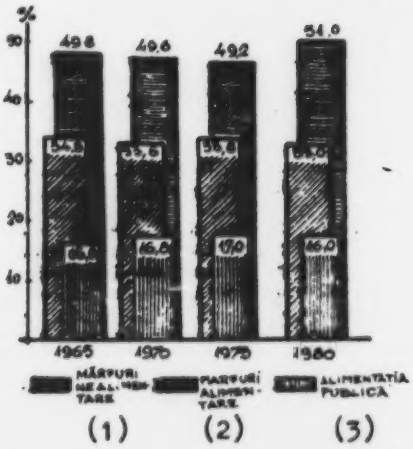
The growth, at extremely fast rates, of the sales of industrial products that contribute directly to raising the degree of civilization and comfort.

In synthetic terms, these changes are reflected in the elements of the graph below, from which it follows that, according to the laws of consumption, a percentage of 51 percent of the total sales goes to nonfood goods in 1980, as compared with 49.8 percent in 1965.

Referring to food products, more marked increases in sales have occurred for dressed meat (3.1 times more in 1980 than in 1965), meat preparations (4.7 times) and fresh fruit (7.2 times). As a consequence, significant changes regarding the ratio between the sales achieved for various food products, in favor of those important for rational nutrition, have occurred during this period of time:

To 100 tons of bread sales there correspond (tons):	1965	1980*
Dressed meat	8.9	19.1
Meat preparations	3.1	10.0
Cheese	2.2	4.6
Sugar	10.8	15.9
Sugar products	3.4	6.2
Fresh vegetables	18.2	59.0
Fresh fruit	2.8	13.8
Canned vegetables	2.5	6.6

* Estimates.



Graph: The Evolution of the Structure of the Retail Sales of Goods According to Sectors in Socialist Trade

Key: 1. Nonfood goods 2. Food goods 3. Public food

One characterisitc of the rise in the standard of living of the population in our country is, beyond doubt, also that the wardrobe of all categories of citizens is more comprehensive at present than in the past and, at the same time, the range of the articles of clothing and footwear is more diversified and more rapidly adapted to the demands for rational renewal. In illustration, we state in this regard that the sales of garments and knitwear will total nearly 22 billion lei in 1980, 3.4 times more than in 1965. Regarding footwear, the 76 million pairs provided for sale this year will exceed by a factor of 2.1 the level in 1965.

The data on what we could call the impressive dynamics of the market for durable goods for home, social and cultural use, for recreation and tourism, are illustrative for characterizing trade's contribution to raising the population's degree of comfort and civilization. Over 6.2 million radios, 5.3 million television sets, 3.8 million refrigerators, 2.5 million

clothes washers, 572,000 automobiles, and furniture with a value of about 64 billion lei have been sold in the 1966-1980 period. It is estimated that at the end of the current year the average number per 1,000 inhabitants will be 247 radios, 203 television sets, 157 refrigerators, 100 clothes washers and 28 automobiles.

A multicriterional judgment of the development of trade also entails the stressing of the continual expansion of the commercial assortment, now composed of a total of about 320,000 positions, of which 200,000 belong to the sector of textile goods and footwear, 90,000 to the sector of metal and chemical goods and 30,000 to the food sector. It is a question, in fact, of an assortment amplification--in horizonal and vertical terms--of great proportions, which closely reflects the continual growth, diversification and renovation of the Romanian production of consumer goods, on the basis of the special programs adopted by the party, on the initiative and with the direct participation of its secretary general, Comrade Nicolae Ceausescu.

However, the results presented regarding trade's contribution to better and better satisfying the consumption demands of the population cannot be judged fully if what has been achieved in the field of the material base of the sector is not taken into consideration. In proportion to the rise in the degree of complexity of commercial activity, in close connection with the structural changes at the level of the consumer, the expansion of the technical and organizational capacity of the trade apparatus has constituted one of the most important lines of action. As a consequence, socialist trade now has over 78,000 retail-trade and public-food units, with an area of nearly 8 million square meters--over 2 times more than in 1965 (see Table 2).

Table 2. The Evolution of the Retail Trade and Public Food Network

Period	The net increase in:		Average annual rate of growth (%)	
	The number of units	The commercial space (thousands of square meters)	Number of units	Commercial space
1966-1970	8,185	1,260	2.9	6.4
1971-1975	10,058	1,625	3.1	6.1
1976-1980*	7,200	1,850	2.0	5.2

* The data for 1980 represent estimates.

This quantitative growth of the network has occurred concomitantly with the concern for increasing the functionality and the degree of modernization of the units of all categories, thus creating ever better conditions for practicing modern, civilized trade. The qualitative changes occurring from this viewpoint are expressed synthetically in, among other things, the continual and appreciable growth of the average area of a unit and the significant improvement in the trade-network/population ratio, as follows:

	1965	1970	1975	1980*
Average area per unit (square meters)	65	77	89	104
Number of units per 1,000 inhabitants	2.8	3.0	3.3	3.5
Commercial space per 1,000 inhabitants (square meters)	182	232	298	366

* Estimates.

Such features as the following are characteristic of what can be called the quality of the trade network:

The reconstruction of trade on modern bases in the central zones, in the capital and in many other cities of the country (Focsani, Galati, Iasi, Piatra Neamt, Ploiesti, Pitesti, Tulcea, Suceava, Vaslui and so on);

The putting of many new stores into operation on the ground floor of the apartment blocks in the recently built districts;

The delineation of an individual character of the network of Romanian trade, characterized by functionality, modernity and diversity;

The concern for as good a placement as possible of the network throughout the country, concomitant with such a structuring in which the most suitable types of units turn up. Indicative in this regard is the fact that 60 large department, general and "BIG"-type /expansion unknown/ stores, with a total commercial space of 350,000 square meters, which achieve a total volume of sales of nearly 15 billion lei per year (11 percent of the total sales in the system of the MCI /Ministry of Domestic Trade/), are operating in 1980;

The founding of a comprehensive network of specialized stores, according to the principle of "the complexes of needs," which operate in many of the cities of the country;

Constant concerns for restructuring the public food network and orienting it toward an accentuated culinary profile;

The construction of new agricultural and food markets and the modernization of the existing ones.

In order to raise the social efficiency of trade, for a greater contribution to the sensible utilization of the time of the consumers, steady action has been taken to promote the modern forms of service. Indicative in this regard are the data from the end of 1979, which show that in the total commercial space of the network of food stores in the system of the MCI those in which self-service is practiced have a percentage of over 7.7 percent. In the sector of nonfood goods too, the modern forms of service have been expanded considerably, especially by means of open display and free choice of the goods, so that over half of the number of units in the system of the MCI operate on the basis of this form of service.

The notable accomplishments obtained by socialist trade are, beyond doubt, the result of the constant activity performed by the worker personnel in this branch, who now exceed 450,000 workers, as compared with 142,000 in 1950 and 293,000 in 1965. Of course, it is also a question of an increase in quality, obtained by means of continual concern for raising the level of professional instruction and conduct.

Like the other branches of our national economy, trade's vigorous development has been based to an ever growing extent on the contribution of scientific research and technical progress. The Institute of Economics of Domestic Trade and Tourism is tackling complex research problems, making many studies for forecasting of the retail sales of goods, at the level of the whole country and on a territorial basis, and studies for complex prospecting of the market for groups of products and main products, which are helping to more sensibly substantiate, on scientific bases, the plan for sales of goods and the territorial distribution of the supply of goods and to better correlate the supply with the demand. In addition, by means of selective field research, by means of panels of consumers and of stores and by means of opinion polls carried out year by year at the Fair for Samples of Consumer Goods, information and analyses of the most useful kind for restructuring the supply of goods in accordance with the demand of the population are put at the disposal of trade and industry.

The path taken by socialist trade and the consistent implementation of the instructions given by the secretary general of the party, Comrade Nicolae Ceausescu, at the National Conference of Working People in Socialist Trade in the summer of 1978 constitute a solid foundation for continual progress in this branch, for a firm engagement in the direction of implementing the historic decisions of the 12th party congress. There is the certainty that socialist trade will register new and numerous achievements in the next five-year period, creating a new, higher quality, under the conditions of an ever greater contribution to increasing the standard of living of the whole populace and continually raising the quality of life.

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RELATIONSHIP BETWEEN LABOR FORCE, ECONOMIC DEVELOPMENT VIEWED

Bucharest REVISTA ECONOMICA in Romanian No 33, 15 Aug 80 pp 13-14, 20

[Article by C. Grigorescu: "On the Relationship Between Labor Resourrces and the Modernization of Romania's Economy"]

[Text] Equalization of Labor Productivity Levels

The development of the economy and the modernization of its structure have gone hand in hand with an increased social productivity of labor. During the 1950-1978 period for instance, the employed population grew 1.3-fold while the national income increased 13-fold; this means that during this period, the social productivity of labor, expressed as national income created by one person employed in the economy, has increased 10.6-fold.

This increased social productivity of labor has been supported primarily by a shift of the employed population toward branches with relatively high labor productivity. As has been shown elsewhere, industrial labor productivity during the first years of the building of socialism was about 10 times higher than labor productivity in agriculture. The consequence has been a significant reduction in the population employed in agriculture and forestry -- from 74.3 percent in 1950, to 32.8 percent in 1978 -- and a corresponding increase in the percentage of the population employed in non-agricultural branches, particularly in industry and constructions, during the same years -- from 14.2 percent to 42.5 percent.

The increased social productivity of labor has also been supported by a greater economic efficiency in all branches of the economy. During the 1950-1978 period for instance, labor productivity (calculated as the ratio of net product to employed population) has increased 9.3-fold in industry, 4.0-fold in constructions, and 6.3-fold in transportation and telecommunications. And finally, the increased social productivity of labor has been due to a 5.0-fold increase in agricultural labor productivity, a branch whose labor productivity was the lowest at the onset of the economic reconstruction on socialist bases.

Table 1. Labor productivity levels in branches compared to the average for the economy.

	1950	1965	1970	1978
National economy	100.0	100.0	100.0	100.0
Industry	366.7	254.7	262.2	172.8
Constructions	272.7	126.7	125.6	113.3
Agriculture	37.5	51.3	39.7	47.1
Transportation and telecommunications	195.5	108.1	93.0	115.8

Source: Romania's Statistical Yearbook, 1978, pp 92, 111 (calculated on the basis of the ratio between the branch structure of the national income in current prices, and the branch structure of the employed population).

The changes that have occurred in the branch distribution of the employed population, together with technologic progress throughout the economy and higher qualifications in the labor force, have contributed to reduce the gaps between labor productivity levels, and to introduce a homogeneization of labor productivity in economic branches and sectors (see table 1).

The trend toward homogeneization can be clearly seen in the table. Its important aspect is that it is taking place under conditions of increased labor productivity in all branches of the national economy. One noteworthy feature is the change in agricultural labor productivity as compared to industrial labor productivity. Up to 1970, industrial labor productivity increased much more rapidly than agricultural labor productivity, but after that time the latter overtook the former, and in the 1970-1978 period labor productivity growth was 2.4-fold in agriculture and only 1.6-fold in industry. The fact that agricultural labor productivity increased more rapidly than industrial labor productivity results from the development and modernization of the economy as a whole, the changes that have occurred in the branch distribution of the employed population, and the formation of new professional structures.

Projections of the Employed Population in 1990

Romania is currently undergoing an intense process of economic development and modernization, creating a materially and culturally advanced civilization placed entirely at the service of man. As indicated in the documents of the 12th Party Congress: "The 1981-1990 decade is the decisive stage in fulfilling the fundamental objective of the Party Program for building a multilaterally developed socialist society and for creating the social and material premises for gradual transition to communism." The achievement of this goal imposes a large increase in production forces -- on the basis of a balanced development of industry, agriculture, and the other branches of the national economy -- the adoption of the newest

Table 2. Projected employed population in 1990.

	Number in thousands		Percent structure	
	1980	1990	1980	1990
Employed population	10,400	12,000	100.0	100.0
Industry and constructions	4,663	6,240	44.8	52.0
Agriculture	2,975	1,800	28.6	15.0
Other branches	2,762	3,690	26.6	33.0
Working personnel	7,420	9,500	71.4	79.2

advances in science and technology, a superior utilization of material resources and social labor, and a modernized production structure, so that the 1981-1990 decade will trully become "the decade of science, technology, quality, and efficiency." During the next decade, Romania will become a country with an intermediate level of economic development, and will hasten its equalization with economically advanced nations.

The current stage of socioeconomic development requires that the superior utilization of social labor acquire new quantitative and qualitative values. The objective of achieving, by 1990, the broad outlines for building a multilaterally developed socialist society, and for more fully satisfying the needs of all the nation's inhabitants, imposes a rapid rate of economic growth with higher efficiencies in all sectors of activity. A special position in this framework is filled by continued improvements in the utilization of the work force, linking this process with the modernization of the economic structure and with a better distribution of the work force among branches. According to present estimates, the population employed in the national economy, and its distribution among branches in 1990, will appear as shown in table 2.

The trends in the branch distribution of the employed population obviously correspond to the country's present stage of development. As has already been shown, a country's transition into the stage of developed nation assumes an increase in the size and proportion of the population employed in non-agricultural branches.

By continuing its industrialization policy, by having 52 percent of its employed population in industry and constructions, and by maintaining a sustained growth in the efficiency of social labor, Romania will become a powerfully industrialized nation, a decisive condition for its entry into the ranks of economically advanced nations. But it is also true that at an advanced stage of economic development the industrial population undergoes a certain reduction. In some economically developed countries such as Italy and England, the proportion of the employed population in industry and constructions fluctuates around 40 percent, whereas this percentage is much higher in FRG -- 45.1 percent in 1978.

It is well known that Romania has the soil and climate needed to achieve a strong, efficient, and highly productive agriculture. That is why agriculture is a basic branch of the economy in our country, and why its current and future development is one of the highest priorities of the economic reconstruction. The profound agrarian revolution which will take place during the 1981-1985 five-year plan, and which will cover both the technico-material base and the organization of production, will increase agricultural production and yields and will further reduce the agricultural population. Unlike other countries however, the population employed in our agriculture will be significantly larger, estimated at about 15 percent. But the achievement of the agrarian revolution also requires a revolution in the training of agricultural workers, as well as improvements in the sex and age distribution of these workers.

During the 1981-1990 decade, conditions will be created for a stronger development of activities in the tertiary sector. At the same time, an optimum development of this branch is an essential condition for increased economic efficiency and for satisfying the needs of the population: hence the increased percentage of the population employed in this sector, from 26.6 percent in 1980, to 33 percent in 1990.

In final analysis, the branches and sectors of the national economy develop as a function of the population's needs. As such, the distribution of the labor force among branches depends on these needs and on the social productivity of labor. It is therefore evident that the structure of the labor force will change together with these factors. Yet, the facts show that labor productivity and the population's needs are growing at unequal rates. After 1970 for instance, industrial labor productivity was surpassed by agricultural labor productivity. But compared to the productivity in these branches, labor productivity in many branches of the tertiary sector is undergoing moderate growth. As to the elasticity of the population's demand for goods and services, the data shows that this elasticity is higher for industrial products than for agricultural ones (for some of these goods, the elasticity is even less than one).

It should be mentioned however, that as incomes increase, and as the demand for agricultural and industrial products becomes saturated, there will also arise a large increase in the demand for consumer services and implicitly for employed manpower. Given the high elasticity of the population's demand for some activities in the tertiary sector, it is not impossible that as a whole, the population employed in this sector will exceed 33 percent. Following 1990, however, this proportion will be much higher, and could even reach much higher values than those currently found in economically developed nations. But the structure of the tertiary sector will be quite different from that of capitalistic countries. The preponderant activities will be those which serve the natural needs of the population, especially creative activities. At the same time, we can already suggest that by 1990 there will occur a slight reduction in the population employed in industry, because labor productivity will reach the levels found in advanced nations, and because the elasticity of the population's demand for industrial goods is relatively low when needs are well satisfied.

Sources of Necessary Manpower

Projections of the population employed in the national economy and in branches, as shown in table 2, assume that the 1981-1990 decade will see a rapid rate of economic growth based on a 30 percent capital growth and on greater efficiency in all branches of the economy. As has been true until now, the achievement of this capital growth requires a significant increase in labor resources. The data indicates that the next decade will witness an increase of 1.6 million employees in the economy as a whole (a rate of 1.4 percent), of 2,775,000 persons in the non-agricultural population (a rate of 3.2 percent), and of 2,080,000 industrial workers (a rate of 2.5 percent). The additional demand for labor resources raises the problem of meeting that demand; to what extent therefore, will the sources of manpower (numbers) and implicitly the mobility of the work force among branches and professions according to these projections, assure a rapid rate of economic growth.

To begin with, we note that during the next decade the growth rate of the population employed in the entire economy is much higher than that recorded for the 1951-1978 period, namely 1.4 percent as compared to 0.7 percent. If we consider that during the next decade the natural increase in the working-age population will be only 787,000 people (a rate of 0.6 percent), it will be necessary to bring into the working ranks significant contingents of housewives, or of those who although of working age, are not employed for one reason or another. Another source of employees could be those who are retired but who want to continue their activities. Of the total increase in the population employed in the national economy, 50 percent will therefore have to be derived from the natural increase in the working-age population, and 50 percent from housewives and others categories of the population. To the extent to which these population categories do not provide the expected increase in the population employed throughout the economy, the labor force appears as a restriction on the development and modernization of the economic structure. All of which is further argument for the best utilization of the existing work force and for a considerable increase in labor productivity.

The figures in table 2 show a more rapid increase of the population employed in non-agricultural branches than that of the total employed population, both as absolute numbers and as percentages. And while it is true that the growth rate of the non-agricultural population is somewhat lower than during the 1971-1980 decade (3.2 percent compared to 4 percent), its absolute magnitude is estimated to be sensibly larger (2,775,000 persons against 2,400,000 persons).

The problem of meeting the projected increase in the non-agricultural population is the same as the one that arises for the total employed population. A primary source is found in all the population categories which provide the total growth of the population employed throughout the economy (natural increase in the working-age population, housewives, retirees, and so on). But these sources cover only about 58 percent of the

Table 3. Sex and age characteristics of the agricultural population.

	1956	1977
Agricultural population	100.0	100.0
Women in the agricultural population	53.7	57.8
Up to 29 years-old	38.0	10.9
30-39 years-old	17.0	17.6
40-49 years-old	17.9	24.7
50-54 years-old	7.9	21.9
55-59 years-old	6.9	18.8
60-64 years-old	12.3	6.1

Note: The 1977 data refers to the cooperative sector.

increase in the non-agricultural population. Another source for covering the additional needs for workers in non-agricultural branches will therefore have to be the population employed in agriculture, which in turn will be reduced by the mechanization of agricultural operations; these people will thus be drawn into industry, constructions, and other non-agricultural branches. However, the proportion of this source in the total growth of the non-agricultural population will be smaller than in the past, namely 42 percent as compared to 60 percent during the 1951-1978 period.

Although this proportion is smaller than in the past, the agricultural population will continue to play a significant role in providing the work force necessary for a continued policy of national industrialization and modernization of the economic structure. To be sure, this raises several problems: on one hand, the extension of mechanization in agricultural work must make available the agricultural manpower while improving this agricultural work; and on the other hand, agricultural workers must become qualified to perform industrial, construction, and other non-agricultural trades.

While stressing the need that the agricultural population contribute to an increase of the personnel in non-agricultural branches, we must at the same time note that as compared to the situation of the first years of the building of socialism, the current labor resources in agriculture have some age and sex characteristics that limit their entry into non-agricultural branches (see table 3).

The data in table 3 is eloquent. It indicates a modification in the sex and age structure of the agricultural population, due to the fact that the non-agricultural branches have attracted primarily the young and male work force. However, a continuation of this process would create difficulties for the development and modernization of agriculture, and would further stress the lack of young manpower which is observed in many agricultural production cooperatives.

There is no doubt that more extensive mechanization will release the agricultural manpower which would then become employed in non-agricultural branches, but as we have noted, its age structure limits its attraction into non-agricultural branches. First of all, the schooling of the agricultural population is poorer, which implies the entry of this population into trades that require relatively low qualifications. And we are equally aware of the fact that given the inertia of an older population, it is difficult for it to adopt new work methods, which are specific to industrial activities and which usually are conducted outside of the localities in which this population lives. In the light of the above, the location of industrial objectives, small enterprises, or sub-sections of enterprises in neighboring towns, will ease the attraction of the agricultural population into non-agricultural branches.

We therefore draw the following conclusions:

1. During the 1981-1990 period, the work force and particularly the natural growth of labor resources, will restrict the development and modernization of the economy. To overcome this restriction, we must expand the intensive factors of economic growth, improve the organization of production and labor, and promote technical and scientific progress on a wide scale.

2. Because the modernization of economic structures requires significant changes in the structure of the work force by professions and branches of the economy and industry, and because the natural increase in labor resources (young population trained in professional schools, high schools, and higher education) is relatively low compared to the growth of the non-agricultural population (28.4 percent), it must be assumed that professional mobility among the ranks of the employed population will intensify during the 1981-1990 period. The most efficient achievement of this process requires improvements in the broad specialty education of young workers, as well as broader retraining and better professional training.

3. A policy for encouraging birth rates and for a normal population growth rate, remains the basis for assuring the work force resources necessary for the development of the national economy.

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DECREE ON REORGANIZATION OF OLTENIA MINING COMBINE

Bucharest BULETINUL OFICIAL in Romanian Part I No 49, 20 Jun 80 pp 1-2

/Decree of the State Council of the Socialist Republic of Romania on Some Measures for Reorganizing the Oltonia Mining Combine/

/Text/ The State Council of the Socialist Republic of Romania decrees:

Article 1. On the date of 1 June 1980, the Rovinari-Rogojelu Mine, the Rosia Jiu-Pesteana Quarry and the Lupoaia Quarry, economic units without a legal personality, under the subordination of the Oltenia Mining Combine, are reorganized as follows:

a) The Rovinari-Rogojelu Mine, into "the Urdari Mining Enterprise," with headquarters in the Bilteni Commune, Gorj County, having as an object of activity the extraction of lignite, the execution of mine-opening work and geologic, hydrogeologic and drainage work and the execution of repair work on equipment and services;

b) The Rosia Jiu-Pesteana Quarry, into "the Rosia Jiu-Pesteana Mining Enterprise," with headquarters in the Parcasesti Commune, Gorj County, having as an object of activity the extraction of lignite, the execution of geologic, hydrogeologic and drainage work and the execution of quarry-opening work, repair work on quarry equipment and services;

c) The Lupoaia Quarry, into "the Lupoaia Mining Enterprise," with headquarters in the Catunele Commune, Gorj County, having as an object of activity the extraction of lignite, the execution of geologic, hydrogeologic and drainage work and the execution of quarry-opening work, repair work on quarry equipment and services.

Article 2. The enterprises founded in accordance with Article 1 operate under the subordination of the Oltenia Mining Combine, on the basis of the principle of economic and financial self-administration, with a legal personality, and are organized on the basis of the legal provisions on the organization and management of the socialist state units and of the uniform structural standards for the coal industry and the mining extractive

industry, approved by means of Decree No 162/1973 on the Establishment of the Uniform Structural Standards for the Economic Units.

Article 3. On the date of 1 June 1980, the Station for Heavy Equipment for Construction, an economic unit without a legal personality, in the structure of the Oltenia Mining Combine, will operate within the Rovinari Transportation Enterprise, which is reorganized into "the Rovinari Enterprise for Transportation and Heavy Equipment for Construction," with headquarters in the Farcasesti Commune, Gorj County, having as an object of activity the performance of transportation with motor vehicles, the maintenance and repair of construction equipment and of its own fleet of means of transportation, and services.

The Rovinari Enterprise for Transportation and Heavy Equipment for Construction operates under the subordination of the Oltenia Mining Combine, on the basis of the principle of economic and financial self-administration, with a legal personality, and is organized in accordance with the legal provisions on the management of the socialist state units and with the uniform structural standards for the activity of transportation and for the activity of industrial construction, approved by means of Decree No 162/1973.

The Rovinari Enterprise for Transportation and Heavy Equipment for Construction belongs to grade I of organization and to group IV of branches. The enterprise will have distinct indicators established for the basic activity--automotive transportation and services.

The Station for Heavy Equipment for Construction maintains its grade II of organization and its placement in group IV of branches.

Article 4. The Urdari Mining Enterprise belongs to grade I of organization, group II of branches, and applies for mineworkers pay level B of the network of, respectively, underground or surface mines, in accordance with the provisions of Law No 57/1974 on Payment According to the Quantity and Quality of Work.

Article 5. The Rosia Jiu-Pesteana Mining Enterprise belongs to the special grade of organization, group III of branches, and applies for workers who operate high-capacity equipment, as well as for workers who work in the maintenance, inspection and repair of it, pay level B, piecework or overhead, respectively, of the surface mine network, in accordance with the provisions of Law No 57/1974 on Payment According to the Quantity and Quality of Work.

Article 6. The Lupoaia Mining Enterprise belongs to grade I of organization, group III of branches, and applies for workers who operate high-capacity equipment, as well as for workers who work in the maintenance, inspection and repair of it, pay level A, piecework or overhead, respectively, of the machine-building network and for quarry mineworkers pay level B

of the surface mine network, in accordance with the provisions of Law No 57/1974 on Payment According to the Quantity and Quality of Work.

Article 7. The structural standards for the units in the coal industry, approved by means of State Council Decree No 270/1977 on Some Measures for Improving the Organization and Activity in the Coal Industry, are modified in accordance with Appendix 1.*

Article 8. The subunits that are founded or are reorganized within the coal industry belong to the grades of organization stipulated in Appendix 2.*

Article 9. The worker personnel who move to the units that are founded or reorganized in accordance with the provisions of the present decree are considered transferred for the sake of duty.

Article 10. The worker personnel transferred for the sake of duty or moved in the same unit to positions with lower pay levels, as a result of the application of the provisions of the present decree, have the right, for 3 months after the date of transfer or movement to such positions, to the basic wage possessed, in accordance with Article 21 of Decree No 162/1973 on the Establishment of the Uniform Structural Standards for the Economic Units. The difference in pay is borne by the units at which the personnel will be employed.

Article 11. The assets and liabilities established on the basis of the balance sheet concluded on 31 May 1980, together with the economic and financial plan indicators, as well as the economic contracts concluded, pass, on the basis of a protocol, from the Oltenia Mining Combine's own activity to the Urdari Mining Enterprise, the Rosia Jiu-Pesteana Mining Enterprise, the Lupoaia Mining Enterprise and, respectively, the Rovinari Enterprise for Transportation and Heavy Equipment for Construction.

Article 12. The Urdari Mining Enterprise, the Rosia Jiu-Pesteana Mining Enterprise and the Lupoaia Mining Enterprise are supplied with one automobile each for the transportation of persons on official business.

Article 13. Appendices 1 and 2 are an integral part of the present decree.

Article 14. Appendices 1 and 2 to Council of Ministers Decision No 367/1973 on Some Measures for Reorganizing the Industrial Centrals, the Units Equivalent to Them, and State Enterprises are amended in accordance with the present decree.

Article 15. Articles 1, 3 and 7, Paragraph 1, of State Council Decree No 27/1978 on Some Measures for Improving the Organization of the Oltenia

* The appendix is communicated to the institutions involved.

Mining Combine, under the Guidance and Control of the Ministry of Mines, Petroleum and Geology, are repealed.

Nicolae Ceausescu,
Chairman
of the Socialist Republic of Romania

Bucharest, 18 June 1980.
No 187.

12105
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ADEQUATE FODDER BASE ESSENTIAL FOR ANIMAL PRODUCTION

Bucharest REVISTA ECONOMICA in Romanian No 33, 15 Aug 80 pp 10-11

[Article by Nicolae David]

[Text] The biological production capability of animals, even for the most productive breeds, can be exploited only when they are adequately maintained and receive complete and balanced fodder rations. Fertility, fecundity, birth rate, prolificness, death rate, viability, and rate of growth for young animals or for those being fattened, as well as the index of feed conversion, are all directly or indirectly influenced by the quantity and quality of the fodder that is being administered.

Modern feeding techniques seek to establish not only a physiologic balance, but maximum production as well, by supplying fodder rations that vary as a function of age, sex, direction of growth, production, and so on. This is the only way to provide the animals with optimum conditions for utilizing their production capabilities. Rational feeding also guarantees a better capability for defense and resistance against various diseases. If to this, we add the fact that feed expenses are the major portion of animal husbandry costs for all breeds and categories of animals (50 percent for dairy cows and 70-80 percent for meat animals), we complete the range of arguments in favor of devoting particular attention to the feeding of animals.

The secretary general of the party, Nicolae Ceausescu, clearly stressed this need at the Workshop of the Central Committee of the RCP, on 25-26 February of this year: "... the matter of fodder for animals is an exceptionally important task: we will not have the needed animals and animal production unless we assure their fodder base."

Some of the basic requirements for instituting a rational feeding system for animals, are:

a) Assuring the quantity of rations, according to breeds, ages, species, sexes, direction of growth, and productive capability of animals;

b) Assuring the quality of rations, expressed in terms of ratios between various nutrients, energy substances, total digestible protein, minerals, vitamins, amino acids, and so on, and the amounts of these nutritional elements in the total quantities of consumed fodder;

c) Assuring the continuity of feeding with the most suitable fodder throughout the year and all year long;

d) Optimum preparation and administration of feeds (in terms of consistency, humidity, number of feedings, and so on);

e) Minimum costs for fodder rations, consistent with obtaining maximum production.

To organize the most efficient feeding for animals, the decision-making organs of agricultural units are faced with a number of technico-economic alternatives, which can lead to various options depending on specific conditions:

Selection of type of feed, taking into consideration agricultural zones, system of maintenance, technology being used, and direction of growth;

For each category of animals, selection of feed varieties with the highest economic efficiency, taking into consideration anticipated productions;

Feeding animals with purchased combined feeds, or producing mixtures of feeds within enterprises (including the purchase and addition of high potency fodder or protein-mineral-vitamin complexes);

Organizing the fodder base and the structure of fodder crops as a function of feed requirements and the technical demands of fodder crops.

Decision-making groups in agricultural units must quantify the respective advantages and disadvantages of each of these alternatives -- and of others that have not been mentioned here -- and must select those with maximum economic efficiency.

Natural Pastures: First Order Fodder Resource

One of the highly valuable fodder resources in our country is the more than 4 million hectares of natural pastures, representing about 30 percent of the nation's agricultural area. Calculations show that natural pastures can provide 40-50 million tons of fodder (in equivalent green mass). The role and importance of natural pastures consist not only in the fact that they cover a large portion of the country's land resources, but also in the economic advantages they have over other fodder. Their low cost per nutritional element and per kilogram of digestible protein, as well as the fact that the fodder is consumed by animals directly in the field (without requiring additional costs for mowing, gathering, transportation, and feeding in stables or corrals), make the green mass in natural pastures into one of the least expensive fodders.

Despite the apparently evident advantages of maintaining animals in pastures, Romania's natural pastures are not used to their full capacities: they are lightly exploited with rather low investments (about 150^lei per hectare). Their yields are consequently small, with low contents of nutritional elements and digestible protein. In hillside areas for instance, the current yield per hectare is 4500-5600^kg of green mass, as compared to 2200-5500^kg in the flatlands, and 2400^kg in the mountains.

Given the extremely important tasks assigned to animal husbandry (in order to increase the number of animals and production, so that animal production will be preponderant in the total agricultural production), it is absolutely necessary that we adopt an intensive system of cultivating and utilizing pastures, so that by 1985 the average production per hectare will double (reaching 10,000-12,000^kg/ha, as included in fodder balance calculations).

As pointed out by the secretary general of the party, we must decisively undertake the cultivation of all pasture and hayfield areas, at least once every four years: "A cultivation plan for pastures and hayfields must be drawn, just as it is for wheat and corn; and this plan must cover seeds and all that is necessary to assure fodder for animals." These cultivation plans and the necessary technical and organizational measures for natural pastures will of course differ for different agricultural zones, or at least for the major natural geographical areas. For the flatlands, the cultivation will include operations similar to those of field crops (plowing, disking, sowing, harrowing, maintenance, fertilizing, harvesting), while for hillside and mountain areas, the major operations will be specific for these zones: mound scattering, removal of bramble patches, tree shoots, and rocks, destruction of weeds, top seeding with perennial grasses of high nutritional value, and soil fertilization (chemically, and especially with organic fertilizers).

At the same time, the intensive and efficient utilization of natural pastures demands that in addition to technologic steps for higher yields, we also take the organizational measures that will allow the most effective exploitation of pastures according to specific conditions.

For instance, for mountain pastures located at large distances from inhabited areas and with poor channels of communication, we must:

Build animal shelters to prevent diseases and death during pasturing periods, wherever there occur premature or late snows;

In addition to shelters, create fodder reserves in pastures, so as to extend pasturing periods and provide fodder in case of bad weather;

Tap springs to assure water for animals and avoid their movement over large distances;

Provide quality bulls for pasturing heifers or cows, especially in poorly accessible areas and those located at large distances from artificial insemination centers;

Provide mechanical milking systems for cows that have beeen accustomed to this type of milking, during the entire pasturing period;

Create access roads between pastures and shelters;

Organize rational pasturing through rotation of several lots;

Organize the gathering and processing of milk in pastures, depending on specific local conditions.

All of these organizational measures are also valuable for other zones in which animals are being pastured, adapting them as needed to the specific conditions of each zone or animal husbandry unit. And finally, flatlands and hillside units also have to solve the problem of fitting pastures into the framework of green belts adopted by each enterprise.

The agricultural units which have taken appropriate technical and organizational steps have succeeded in obtaining spectacular crop increases in pastures, reaching 20,000-40,000 kg of green mass per hectare. In Arges County for instance, the cultivation and rational exploitation of pastures has become a tradition in many localities (Cateasca, Schitu Golesti, Podul Dimbovitei, Dealul Sasului, and so on), where the density of animals per 100 hectares of natural pasture, and animal production, are much higher than the county or national averages.

Superior Exploitation of Secondary Vegetal Products

As a big producer of grains and leguminous seeds, Romania disposes of large amounts of secondary vegetal products (straw, cobs, stalks, and so on), which currently reach about 15-20 million tons per year, the equivalent of 4-6 million nutritional elements.

These secondary products (used as coarse fodder in animal feeding) are known to contain little protein and to have a low index of consumability and digestibility. But the results of scientific research and the experience gained in leading units demonstrate that the preparation and enrichment of coarse fodder before administration to animals increases its protein content as well as its consumability and digestibility, while the additional expenses incurred are recovered in higher animal production and a higher index of fodder conversion. The methods used for preparation can be mechanical (chopping, wetting, scalding, steaming, salting, mixing with molasses), chemical (treatment with alkalies or acids), and biological (fermentation). A particularly important and efficient method has been the use of fodder urea in combination with coarse fodder; and in spite of the positive results obtained with it wherever it has been used, this method has not yet been adequately expanded.

Also increasingly being felt, is the need to adopt steps designed to help and encourage agricultural workers to completely and most efficiently use secondary vegetal products in feeding animals:

a) Planning and record keeping should include a most accurate evaluation of the amounts of secondary products that can be used as coarse fodder, keeping in mind that in the last decades the quantities of secondary products have been reduced with respect to major products, as a result of efforts made to improve the biologic potential of crops, and of the extension of industrial techniques;

b) Measures must be taken to counter the tendency to reduce the amount of secondary products harvested; this is the result of extensive combine harvesting, and of the practice on the part of operators to adjust their machines for higher speeds and consequent higher labor productivity in the case of high crop densities and heavy harvests; however, this sometimes also results in a 20-30 percent loss of the growth mass, which remains in the field;

c) Machines must be provided for the rapid and inexpensive transportation of secondary products. As quantities of baling wire are being reduced, it appears absolutely necessary that agricultural units be provided with an adequate number of specialized machines for straw gathering and transportation (MAC and PAC).

d) In order to increase the nutritional value of straw and cobs, more farms must be endowed with fodder equipment and kitchens for preparing coarse fodder;

e) Greater concern is required on the part of animal husbandry management organs to disseminate the results obtained by experimental stations and leading units, in preparing and enriching coarse fodder, using special courses, exchanges of experience, visual aids, and so on;

f) In order to vest economic interests in the more extensive use of coarse fodder, production cost plans must include the proportion in which this category of fodder is being used and its real cost (although its price per kilogram is low, the cost of a nutritional unit, and especially of a kilogram of digestible product, is much higher than for other fodder categories, as a result of the expenses incurred from harvest time to the time it is administered to animals).

Animal Feeding Solely According to Scientific Standards

Consumption quotas in animal production can be calculated either per unit product (milk, meat, eggs, and so on) or per average animal in a given category (when several products are obtained). The most important of the many consumption quotas is the rigorous foundation of production plans, as well as of income and expenses budgets. The necessary resources of various categories of fodder are calculated on the basis of consumption quotas and plan tasks regarding numbers of animals and animal production. Limiting the amount of fodder that can be consumed to obtain a unit product, to the strictly necessary amount, is an instrument for reducing specific consumption, with outstanding effects on fodder savings, on its superior exploitation, and on more profitable production.

Another function of consumption quotas is the foundation of technical and material supply plans wherever --^in addition to production tasks^-- production stocks and the amount of fodder obtained from internal production are basic indicators which to a large extent determine the fulfillment of the plan.

Both for planning and for analysis, it is extremely important to take into consideration the content and structure of consumption quotas at various stages of supply and production activities. If a technical consumption quota established first by research institutes in a laboratory phase, and then by an experimental phase, represents the amount of material (fodder) effectively used in the production process and therefore at a work site, then a supply consumption quota additionally includes non-technological losses that occur during supply, transportation, preparation, storage, and delivery of the material (fodder) to be used in the production process.

Whereas technical losses, that is the fodder lost during feeding or that which remains unused in stalls, are small compared to the total amount of effectively consumed fodder, non-technical losses represent large amounts which must be included in calculations for determining fodder needs and balances, and the fodder base. Non-technical losses differ greatly for various fodder groups (from 1-5^percent for concentrates up to 10-20^percent for fibrous or succulent fodder, and much higher in some other cases), depending on the technology used in gathering, transportation, and storage, and on the sense of management existing in each agricultural unit that produces, handles, or uses fodder.

Technical consumption quotas refer to the quantity of fodder that must be consumed by an animal in a given period in accordance with planned production, also taking into consideration the technology being used, as well as the level of organization of production and labor.

Although the consumption of fodder in Romania is determined by a regulatory act (Law No^22 of 17^December 1971), the practical application of scientific requirements for feeding animals in all agricultural units has not been fully completed.

The task of agricultural units is to start with established maximum acceptable fodder consumption quotas, as provided by law or by central organs, and taking into consideration the varieties of fodder that can be assured as well as other specific conditions, to establish their own consumption quotas so as to guarantee not only the fulfillment of planned production, but its increased efficiency as well. So that agricultural units which raise animals can formulate more rigorous fodder consumption quotas for themselves, it is imperative that they be provided --^for each category of animal^-- with as many orientation models as possible (from researchers and specialized organs), models which will take into account the productive capability of animals, their physiology, production technologies, type of fodder base, feeding systems, agricultural zones, and so on. At the recent conference with animal husbandry staffs, Nicolae Ceausescu justifiably

criticized the fact that these farms still have few specifications for animal feeding, and he asked that the Ministry of Agriculture, in collaboration with ICNA [expansion unknown], animal specialists, and veterinary doctors, establish specifications for fodder preparation, starting with the best results obtained in our units, and disseminate these recipes to all animal husbandry farms for the rational organization of fodder utilization.

Another requirement is that new tables of nutritional values of fodder (the current ones being mostly outdated) be established based on laboratory analyses conducted during the last ten years, and taking into consideration the changes that have occurred in the structure of the fodder base.

A major need is an improved organization of the feed testing network (particularly of combined feeds), and the establishment for each county, of the nutritional value of fodder as a function of the large variety of conditions in each enterprise.

Only in this way will animal husbandry units be able to benefit from perfected methods in order to establish fodder needs in strict relation to production tasks and specific local conditions, so as to guarantee highly favorable effects on production organization, and on technical and financial results, thus assuring the transition to a new and superior quality in this basic sector of Romanian agriculture.

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DECREE ON CONTRACTING PRICES FOR ANIMALS AMENDED

Bucharest BULETINUL OFICIAL in Romanian Part I No 49, 20 June 80 pp 3-4

/Decree of the State Council of the Socialist Republic of Romania for Amending Appendix 2 to Decree No 410/1973 on the Improvement of the System of Contracting and Purchases for Animals, Poultry, Fish and Eggs and the Modification of the Retail Prices for Meat, Meat Products, Poultry, Fish and Eggs/

/Text/ The State Council of the Socialist Republic of Romania decrees:

Article 1. Appendix 2 to Decree No 410/1973 on the Improvement of the System of Contracting and Purchases for Animals, Poultry, Fish and Eggs and the Modification of the Retail Prices for Meat, Meat Products, Poultry, Fish and Eggs, as it was amended by means of Decree No 170/1975, is amended in accordance with the appendix to the present decree.

Article 2. The State Planning Committee and the Ministry of Finance, together with the Ministry of Agriculture and the Food Industry, will make proposals for modifying the economic and financial plan indicators and the state budget for 1980, as a result of the influences that result from the application of the present decree to the plan titulars within the Ministry of Agriculture and the Food Industry, with the indicators for the ministry as a whole remaining unchanged.

Nicolae Ceausescu,
Chairman
of the Socialist Republic of Romania

Bucharest, 18 June 1980.
No 189.

Appendix

Containing the Contracting, Production and Purchase Prices for Live Hogs

Weight groups	Contracting and production prices (lei per kg liveweight)	Maximum purchase prices (lei per kg liveweight)
A. The agricultural production cooperatives, the intercooperative economic associations, and the population's farms		
From 80 to 90 kg liveweight inclusive	8.50	8.50
Over 90 to 100 kg liveweight inclusive	10.50	10.50
Over 100 to 110 kg liveweight inclusive	12.00	12.00
Over 110 kg liveweight*	12.50	12.50
B. The state agricultural units		
From 80 to 90 kg liveweight inclusive	8.30	-
Over 90 to 100 kg liveweight inclusive	9.50	-
Over 100 to 110 kg liveweight inclusive	10.50	-
Over 110 kg liveweight*	11.00	-

* With the exception of culled sows and boars, which will be paid for in the category of "fat hogs of 100-110 kg liveweight."

12105
CSO: 2700

OPERATION OF ECONOMY IN FIRST HALF OF 1980 ANALYZED

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 3 Sep 80 p 10

[Article by Cedomir Dodig: "Adjustment as Stabilization Progresses"]

[Text] Economic developments in the first half of this year have taken place, as is well known, in the context of the conduct of stabilization policy, that is, the goals and tasks contained in the resolution on the country's economic and social development during the current year.

Especially important to achievement of the measures of stabilization policy are relieving the burden on the economy, bringing all forms of final consumption within the bounds of real capabilities while at the same time ensuring that public and social service expenditure increase more slowly than the social product and income, a more moderate rise of prices, equilibrium in the country's balance of payments, and linkage of personal incomes to the rise of labor productivity in the socialized sector of the economy.

The figures in the table below illustrate the main tendencies of economic developments:

	Index Jan-Jun 1980 / Jan-Jun 1979
Physical volume of industrial output	105
Gross income	134
Costs	135
Income	131
Income distributed	131
Portion of income to finance social services	124
Portion of income to meet general public needs	120
Producer's prices in industry*	122
Prices of farm products	125
Retail prices	127
Cost of living	127

Table (continued)

	Index Jan-Jun 1980 / Jan-Jun 1979
Value of exports	132
Value of imports	108
Investments in fixed capital--total**	125
Economic	120
Noneconomic	138
Current losses	127

* January-July. Unweighted average of monthly index numbers for retail prices and the cost of living.
** January-May 1980.

Favorable Results

One can conclude from the data given and an analysis of their dynamic behavior that the growth of the physical volume of industrial output has been more moderate than in the previous period, which indeed was a goal of the stabilization policy in order to restrict demand on the domestic market and re-establish equilibrium in commodity-money relations.

The pressure on prices rose even more, since in the period January-July 1980 producer's prices of industrial products rose 22 percent over the same period of the previous year, while retail prices and the cost of living rose 27 percent and farm products 25 percent (January-June).

The growth of the physical volume of output and particularly the rather intensive price rise were involved in the relatively high rise of gross income and income of the socialized sector of the economy.

Deterioration of the economic efficiency of the conduct of economic activity is indicated by the fact that costs (index number 135) increased faster than gross income (index number 134). The devaluation measures carried out in the first half of this year had favorable results in that they boosted our economy's exports to the foreign market, but at the same time they tended to increase the operating costs of organizations of associated labor oriented toward imports, which to a considerable extent determined the dynamic relations between costs and gross income.

The measures of stabilization policy and especially the devaluation of the dinar have tended to re-establish more harmonious relations between domestic prices and import prices, which also tended to create more favorable relations in foreign trade, since the value of exports is rising considerably faster (index number 131.8) than that of imports (index number 108.3). However, problems in the field of foreign trade are still very urgent because of the size of the country's payments deficit.

Investment expenditures are restricted to a certain extent, but it should be noted that the growth of investments in fixed capital is still quite high, especially in the noneconomic sector.

Favorable Proportions in Distribution

Secondary distribution: One of the essential prerequisites for fulfilling the Social Plan and also the resolution on economic and social development for this year is to bring public, social service and personal expenditures within the limits of the income the economy earns. That is, redistribution of income outside those limits is a significant source of economic instability and one of the key problems in future development and in strengthening self-management relations in associated labor.

The figures in the table below illustrate relationships in the distribution of income:

	Amounts, in billions of dinars			Composition, %	
	Jan-Jun 1979	Jan-Jun 1980	Index	Jan-Jun 1979	Jan-Jun 1980
Distributed income	392.1	514.5	131	100.0	100.0
A) For social service expenditure	72.0	89.4	124	18.4	17.4
B) For general public expenditure	14.8	17.7	120	3.8	3.5
C) For other purposes	78.5	102.9	131	20.0	20.0
D) For OOUR [basic organizations of associated labor]	226.8	304.5	134	57.8	59.1

The socialized sector of the economy distributed 514.5 billion dinars of income in the first half of this year, which is 31 percent more than in the same period of last year. Proportions in the distribution of income are much more favorable than in previous periods, which means that the measures of relieving the economy of obligations to meet social service and general public purposes are being achieved in part. For example, while the distributed income of the economy was rising at a rate of 31 percent, the share of income for social service expenditures increased 24 percent and the share for general public purposes 20 percent. However, the economy's appropriations to meet social service and public needs are still considerably greater than the proportions set forth in the resolution. Reduction of the share of this portion of income in distributed income helped to increase the share of income for OOUR's from 57.8 percent in the first half of 1979 to 59.1 percent in this period, which has helped to re-establish considerably more favorable relations in secondary distribution of income and to a material strengthening of the position of associated labor.

In Conformity With Economic Policy

Internal distribution: One of the important goals of the resolution for this year and of the measures of stabilization policy as a whole has been to reestablish more harmonious relations in the distribution of net income, that is, in internal distribution. The figures in the table below show relationships in the distribution of net income.

	Amounts, in billions of dinars			Composition, %	
	Jan-Jun 1979	Jan-Jun 1980	Index	Jan-Jun 1979	Jan-Jun 1980
Net income distributed	282.6	270.0	131	100.0	100.0
A) For personal incomes	206.8	254.1	123	73.2	68.7
B) For social service expenditure	27.5	33.4	122	9.7	9.0
C) For expansion and improvement of plant and equipment	40.7	71.9	176	14.4	19.4
D) For reserves	7.6	10.7	141	2.7	2.9

The figures on internal distribution of income indicate quite favorable tendencies which are in conformity with the goals of economic policy for this year. Relations have been established in distribution of net income which by virtue of funds for expansion of the material base [plant and equipment] of associated labor ensured the most intensive growth--index number 176.4 and about 71.8 billion dinars in absolute amount. If we add to these the funds set aside for depreciation at the prescribed minimum rate (60.8 billion dinars), we obtain the amount of 132.6 billion dinars, which is considerably more than in the previous periods.

Because of the more difficult economic situation in the world and in our country as well basic organizations of associated labor have been behaving rationally with respect to appropriation of funds for personal and social service expenditures. Personal incomes rose 23 percent and social service expenditures 22 percent, which is in conformity with the growth of economic policy for this year.

Relations of this kind in secondary and internal distribution of the income of the socialized sector of the economy and especially the very intensive growth of capital formation were involved in the 18-percent rise of the rate of reproductive capacity and the 34-percent rise of the rate of capital formation.

The level of the economy's indebtedness drops from 76.8 percent in the period January-June 1979 to 63.2 percent in the same period of this year, since the economy was able to finance a sizable portion of its expansion with its own funds on the one hand, while on the other opportunities were limited for making investments in new projects.

Problems in Financing

Working capital: The level of working capital, efficiency of its utilization and its composition have great importance in financing the process of expanded reproduction. The figures in the table below illustrate the principal forms of working capital:

	Amount, in billions of dinars			Composition, %	
	Jan-Jun 1979	Jan-Jun 1980	Index	Jan-Jun 1979	Jan-Jun 1980
Principal forms of working capital—total	883.6	1,172.1	133	100.0	100.0
Cash and securities	140.7	180.4	128	15.9	15.4
Total receivables from customers	303.1	437.7	144	34.3	37.3
Total inventories	439.9	554.1	126	100.0	100.0
Raw materials, supplies, expendable items and containers	168.0	219.1	130	38.2	39.6
Work in process	83.3	100.5	121	19.0	18.2
Finished products	61.9	72.2	117	14.1	13.0
Commercial goods	126.7	162.3	128	28.7	29.2

The figures show that receivables from customers (index number 144) have been the item in the composition of working capital that increased the fastest, and then came cash and securities (index number 128). The growth of inventories has been somewhat more moderate, and in their composition the fastest growth was shown by inventories of raw materials and containers (index number 130). These relations show that the economy's liquidity is not at a satisfactory level, since a sizable share of working capital consists of receivables from customers and inventories. This is creating problems in financing expanded reproduction.

Sources of business capital: From the standpoint of the economy's liquidity it is very important to examine the distribution of sources of business capital, since this shows to what extent the principles of pooling capital and relations based on income-sharing are being implemented, this being one of the most important elements of faster development as a whole. The figures in the following table illustrate relations in sources of business capital.

In the distribution of sources of business capital pooled capital (index number 140) had the fastest growth, and it was followed by credits for working capital (index number 126).

However, even though pooled capital showed the most intensive growth, its share in total sources of business capital is still relatively low. This

indicates that the pooling of labor and capital on the basis of income-sharing is not proceeding fast enough, and this is creating certain problems for faster economic development of the economy and for improvement of its economic position as a whole.

	Amount, in billions of dinars			Composition, %	
	Jan-Jun 1979	Jan-Jun 1980	Index	Jan-Jun 1979	Jan-Jun 1980
Principal sources of business capital—total	2,022.6	2,522.7	125	100.0	100.0
Permanent sources	1,092.8	1,356.1	124	54.0	53.8
Pooled capital	56.7	79.4	140	2.8	3.2
Credits for fixed capital	460.8	568.9	123	22.8	22.5
Credits for working capital	412.3	518.3	126	20.4	20.5

Losses Remain an Urgent Problem

Over the last several years losses in the economy have been a serious socioeconomic problem in spite of a certain reduction. The measures taken to solve the problem of losses and in particular the measures of financial rescue policy have had definite results, but their implementation is not consistent everywhere.

The causes of the occurrence of losses vary, but in the main they can be reduced to low labor productivity, underutilization of production capacities, inappropriate organization of work, discrepancy between the distribution of income and actual achievement, running from improper assignment of funds to personal incomes all the way to high obligations on the basis of interest on credits, taxes and contributions for public and social service expenditures, and so on.

The table below shows in more detail the trend of losses by the sectors of the economy:

	Amount, in billions of dinars			Composition (entire socialized sector of economy = 100)	
	Jan-Jun 1979	Jan-Jun 1980	Index	Jan-Jun 1979	Jan-Jun 1980
Total current losses	13,140.5	16,705.3	127	100.0	100.0
Industry and mining	8,522.7	10,692.7	125	64.9	64.0
Agriculture and fishing	337.9	420.3	124	2.6	2.5
Timber and lumber	26.3	26.6	101	0.2	0.2
Water management	29.8	38.2	128	0.2	0.2

Table (continued)

	Amount, in billions of dinars			Composition (entire socialized sector of economy = 100)	
	Jan-Jun 1979	Jan-Jun 1980	Index	Jan-Jun 1979	Jan-Jun 1980
Construction	324.9	571.5	176	2.5	3.4
Transportation and communications	1,189.0	1,822.5	153	9.1	10.9
Trade	356.2	303.2	85	2.7	1.8
Hostelry and tourism	1,888.1	2,292.2	121	14.3	13.7
Crafts and trades	155.2	256.2	165	1.2	1.5
Housing and municipal services and utilities	257.5	193.2	75	1.9	1.3
Financial and other organizations	52.8	88.7	168	0.4	0.5

The largest growth of losses in this period occurred in construction (index number 176), financial and other organizations (index number 168), crafts and trades (index number 165), and transportation and communications (index number 153). In the breakdown of the total losses of the socialized sector of the economy 64 percent occurred in current business operation in the sector of industry and mining, 13.7 percent in hostelry and tourism, and 10.9 percent in transportation and communications. The share of the other sectors in the total losses of the socialized sector of the economy is considerably lower. In trade and housing and municipal services and utilities the losses were lower than in the same period of last year.

All this indicates that the problem of losses, especially in basic organizations of associated labor in the sectors of industry and mining, construction, transportation and communications, and hostelry and tourism, is a very urgent one and requires much more consistent efforts at solution involving all factors, beginning with basic organizations of associated labor and running all the way to sociopolitical communities.

[Box] Encouragement and Warning Signs

On the basis of figures from semiannual statements for the period January-June of this year, compared to the same period of the previous year, we can observe that the socialized sector of the economy has achieved satisfactory results in this period in certain sectors of economic activity, as manifested in the following:

A sizable growth of gross income and income of the economy was achieved along with a more moderate growth of the physical volume of output and a more moderate movement of domestic demand;

Investment expenditures show certain signs of more moderate growth in comparison with previous periods;

Relations in secondary and internal distribution of the income of the socialized sector of the economy are considerably more favorable, since appropriations for social service and public needs increased more slowly than income, and personal incomes and funds for social services of OOUR's increased more slowly than the net income of the economy. Objective opportunities were thus created for augmenting the material base of associated labor and also raising the economy's ability to form capital and reinvest. Trends in the distribution of income and net income were in conformity with the goals of economic and stabilization policy for this year;

More favorable relations were recorded in foreign trade, since the value of exports has been growing considerably faster than imports, though the country's payments deficit is still very large.

However, in spite of these constructive trends in operation of the socialized sector of the economy, problems are still present which are frustrating more rapid socioeconomic development.

The pressure on prices is still present, which could secure ["devalue" is presumably meant] favorable results in the conduct of economic activity;

The supply of the domestic market with consumer goods is also an urgent problem that demands a more consistent solution.

The growth of losses, especially in the sectors of industry, construction, trade and hostelry, and also transportation continues to be quite marked and is a major socioeconomic problem.

We can expect the tendency of favorable results in economic activity to continue in the coming period and that the influence of the adverse trends will be considerably mitigated, especially in the domains of primary distribution and foreign trade. It is expected that the problems causing losses will be resolved more consistently.

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JPRS 76598

9 October 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2051

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9 October 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2051

CONTENTS

INTERNATIONAL AFFAIRS

Briefs
Yugoslav-Albanian Trade 1

ALBANIA

Role of Financial Organs in Improving Economy
(Haki Toska; RRUGA E PARTISE, Jun 80) 2

Improved Technology Needed in Consumer Goods Production
(Shaqir Prizreni; RRUGA E PARTISE, Jun 80) 18

CZECHOSLOVAKIA

Two Years of Economic Experiment Evaluated
(Jaroslav Vacha; STATISTIKA, No 7, 1980) 27

Slovak Deputy Minister Defines Agricultural Targets
(Julius Medved; HOSPODARSKE NOVINY, 22 Aug 80) 41

GERMAN DEMOCRATIC REPUBLIC

Briefs
Rostock Port Expansion 49

HUNGARY

Economic Relations With Developing Countries Described
(Janos Tormasi; NEPSZABADSAG, 13 Aug 80) 50

[III - EE - 64]

Improvement, Shortcomings in Trade Balance Viewed
(Istvan Foldes; NEPSZABADSAG, 24 Aug 80) 54

Deputy Minister Interviewed on Future of Mining Industry
(Laszlo Kapolyi Interview; MAGYAR HIRLAP, Sep 80) 58

POLAND

Six-Month Fulfillment of 1980 Plan Assessed
(Stanislaw Gebala; ZYCIE PARTII, Aug 80) 62

Problems in Implementing Housing Construction Program Described
(Aleksander Kapustka; INWESTYCJE I BUDOWNICTWO, Jul-Aug 80) 67

ROMANIA

Agricultural Development in 1950-80 Period Reviewed
(Oprea Parpala; REVISTA ECONOMICA, 1 Aug 80) 74

Provisions of Forest Conservation, Development Program
(Viorel Hampu, Petre Cioclu; REVISTA ECONOMICA, 22 Aug 80). 83

BRIEFS

YUGOSLAV-ALBANIAN TRADE--In the first 8 months of this year trade in goods and services between Yugoslavia and Albania totaled $74 million in value, ($38.6 million in Yugoslav commodity exports, $10 million in Yugoslav services, and $25.4 million worth of imports from Albania). Problems in trade between the two countries (largely late deliveries) are expected to be overcome, so that this year's trade will probably reach $100 million to $120 million in value, or 52 percent more than the volume planned for 1980 which was $78.6 million. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 19 Sep 80 p 2]

CSO: 2800

ROLE OF FINANCIAL ORGANS IN IMPROVING ECONOMY

Tirana RRUGA E PARTISE in Albanian No 6, Jun 80 pp 17-31

[Article by Haki Toska, member of Politburo of Albanian Workers Party Central Committee: "Let Us Measure the Perfection of the Work of Financial Organs by the Fulfillment of the Tasks for Improving the Effectiveness of the Economy"]

[Text] In the execution of directives and decisions of the Seventh Party Congress, of the tasks assigned by the plenums of the party Central Committee after the congress and of Comrade Enver Hoxha's recommendations, the financial workers have increased their mobilization and efforts to continually improve the quality of their work, and to improve the active role of finances in the economy, in planning and in executing, thus, to make an ever greater contribution, together with all the people, to the development of the economy and culture, strengthening the defense capacity of the country and improving the living conditions of the masses.

However, seeing the problems from the vantage point of the tasks assigned by the 7th Plenum of the party Central Committee and of the recent recommendations of Comrade Enver Hoxha, the further perfection of the organization and management of work remains an important task for all financial workers, at the center and at the grassroots. The issue is that all the links of the financial system should deal much better than now with the basic economic and financial problems, especially with those matters directly connected with the increase of production, with the further improvement of the effectiveness of the economy and of accumulation and with the continual improvement of monetary circulation, of the strengthening of control by means of the lek, and of the further perfection of work and management in every link of the economy.

The economy and finances develop together and in harmony. The correct understanding of this unity by all workers, especially by the workers of the financial system, requires that we use our mental and physical forces and energies on a calculated basis, with effectiveness and with profitability so that we will protect and use the lek of the people properly, so that every expenditure is carried out strictly within the

requirements of established plans, norms and laws. The implementation of the tasks in these fields to the very last, with initiative and in a creative manner, takes on a particular importance in the present and future situations, when we are building socialism in a hostile capitalist-revisionist ocean that tries directly or indirectly, with all the means at its disposal, to hamper and sabotage the building of socialism in our country.

1.

The improvement of work of financial organs and organizations is rated in accordance with the uninterrupted increase of production and of its effectiveness, constituting the sole source of our social accumulation. Financial means are entrusted by the party and government with very important functions, first of all with the task of playing their active role in increasing and mobilizing the resources of accumulation and in distributing and controlling its correct use. Precisely for these great issues, the scientific, economic and financial thought must be activated in the best way possible, dealing more thoroughly with economic processes and phenomena and keeping better in mind the requirements of the objective economic laws of socialism in every production activity and in other social activity, so that not only the general social product, but also the effectiveness of social production will be increased. "And, when it comes to the laws that deal with the effectiveness of social production," Comrade Enver Hoxha pointed out at the Seventh Plenum of the Party Central Committee, "we must be very careful, because, this is a great and pressing problem for all our economy. Effectiveness is, so to say, the result of all the factors of development of socialist production, the factors which depend on work, struggle and the efforts of all workers."

The problems of the increase and effective use of accumulation have been and are the main issues of the economic policy of the party, closely linked with the implementation of the revolutionary principle of relying on one's own forces. Our socialist state does not accept credits and aid from any capitalist, bourgeois-revisionist country. During the entire 35-year-old historical period of the building of socialism, the financing of the needs for the development of the country has been met mainly by the accumulation of our economy. The year 1979 was the first year that the state budget completely relied on our financial resources; it was successfully fulfilled. Our economy has been financed and has developed in an uninterrupted manner and at high rates. During the first four-month period of the current year, the budget revenues and other financial indicators also were, in general, well fulfilled. These victories have their foundation in the correct party line and in the heroic and empassioned work of our people.

A number of factors, linked and woven together, have influenced the increase of accumulation.

The basic factor for raising accumulation is the increase of production at high rates in all branches. In its struggle with the difficulties of growth and with the obstacles which the imperialism-revisionist encirclement is creating for us, production in our country has been continually increased and has always satisfied, in the best way possible, the needs of the country and of the people. Nevertheless, the party has drawn the attention of its organizations and of the governmental and economic organs to the fact that, in regard to this great problem, we must show more concern, because, the shortages created time after time in specific branches and enterprises cannot help but have negative consequences on the economic and financial situation of the country.

However, to increase accumulation, the reduction of expenditures for production, constructions and services has been and remains a very important factor, from which it is expected to assure the largest part of the growth of accumulation. During the first 4 years of the Sixth Five-Year plan, the majority of economic enterprises, especially those of the machine industry, the chemical fertilizer production industry, the garment and footwear industry and so forth overfulfilled their tasks for the reduction of production costs. However, opportunities and reserves are still very great. There are disturbing problems, especially in the enterprises which do not fulfill the tasks planned for the reduction of costs. Therefore, Comrade Enver Hoxha recommends that, in this field, the bull must be taken by the horns and we must carry out deep plowing.

Practice shows that efforts for the reduction of costs are not as serious as those carried out for the other indicators of the plan. And, in this field, there are important problems that concern planning and implementation, the methods that are being used and record keeping. But, there also is global fulfillment. Thus, for example, in some cases, the tasks for cost reduction in enterprises, districts and ministries are not set on the basis of a scientific work, but on the basis of some general calculations that become the reason for manifestations of subjectivism and voluntarism. In certain enterprises, this important indicator is not analyzed for every factory, department, plant and sector; while, in the clothing, glass and shoe plants we still do not have a cost for production unit; it is calculated and maintained in accordance with the level of expenditures--a fact which obstructs the expansion of the economic-financial analysis for the discovery of internal reserves, for improving the effectiveness of expenditures of work and of materials.

We have a good work experience in the evaluation and pursuit of the problems of costs, especially in the textile combine, the chemical enterprise in Durres, the cement plant in Vlore and in other places. The finance and planning economists of these enterprises are doing a good study work for planning their costs and, on this basis, they are also setting their tasks for applying them to every production link and process. In these enterprises, the cost is not considered as an indicator that concerns the plan and finance branches alone; on the contrary, all the branches, and not only the economists and the plan and financial

specialists, but also the specialists in techniques and technology, must deal with planning and with the pursuit of its execution. Under the concern of the party organizations, the cost has become the object not only of quarterly analyses, but also of monthly analyses and even more frequent analysis in all the links and fields of these enterprises. In the meantime, it has also become the problem of the working collectives.

However, people are not working with the required seriousness, especially planning and finance workers, for the generalization of work experience in these enterprises. There is still no serious effort, a work with scientific bases, to penetrate these great problems, whose solution requires technical, vocational, organizational and managerial capacities; it requires the implementation and improvement of methodology and of the methods of production costs, the direction of the scientific organization of work and harmonization of work between planners and finance workers and other specialists and cadres, beginning with the enterprises and extending to the central departments.

The problems of costs, of profitability and of socialist accumulation, it was stressed at the Seventh Plenum of the Central Committee of the Albanian Workers Party, are of vital interest for the dynamic development of the economy and, as such, they must be considered thoroughly and as a whole, from the time of planning and, later, must be monitored during their execution. Practice shows that, in the specific enterprises, plans for the reduction of costs with reserves are carried out, or that tasks for the reduction of costs are stipulated without harmonizing them with the tasks for the increase of the net revenues of the enterprises. Such cases of disharmony have also been observed in the quotas sent by the ministries for the draft plan of the Seventh Five-Year Plan (1981-1985). Various factors, mainly of a subjective nature, are responsible for such shortcomings and weaknesses; but, the planning and finance workers and economic directors at the grassroots and in departments, by the means of a detailed analysis, can and must know these factors and must exert influence more actively in those directions that bring the improvement of the profitability of the economy and the increase of resources of accumulation. Among other things, it is necessary that, within the framework of improving the methodology of planning, in addition to the tasks for the reduction of costs and for the net revenues of the enterprise, which are plan indicators, it is necessary to stipulate, give and set profitability as a plan indicator, so that the economic cadres will have this indicator as a lever of control for verifying the quality of the planning and execution of the economic and financial indicators.

Time has come for the cadres of the economy to improve their knowledge about these fields, so that they will know and master all the keys of management of enterprises and branches. Above all, it is necessary for finance workers and all specialists and other cadres to become more aware of what Comrade Enver Hoxha said--that production does not mean quantity and quality alone; on the contrary, it is a complex which includes

productivity, costs, profit and profitability, distribution and so forth. Therefore, one of the main fronts for perfecting the direction and organization of work is the struggle against one-sidedness observed in this field which obstructs the entire examination and treatment of the processes of the dynamic development of the economy.

Comrade Enver Hoxha teaches us that the "financial problems, the assurance of domestic resources of accumulation and the problems of the effectiveness of social production in the Seventh Five-Year Plan will be among the most acute problems that require a greater level of guaranty." The deep understanding of this party recommendation requires complete coordination and complete merging, in one single effort, of the work of workers and specialists in planning, finance, and technology and of other cadres with the problems of production, of distribution, of costs and of the effectiveness of social production that insure the socialist accumulation and the continual financing of our socialist economy.

The monitoring of the economic-financial activity of the enterprises which have losses and which absorb a part of accumulation demands a special attention. The analyses which have been made show that the main reason for these enterprises' unplanned losses is the weaknesses observed in the organizational and management work of the government and economic organs, especially in the work method of some leadership cadres who do not understand and do not correctly evaluate the unity between economic indicators and financial indicators and, consequently, do not struggle with the necessary concern to fulfill all production indicators with full harmony. Life gives us many examples showing that, when this problem has been correctly evaluated and handled, good results have been achieved. Thus, for example, some years ago, the meat and milk combine in Tirana used to have losses; but, when the party organization took the problem in its hands and put all its levers in motion, making the problems of production costs, losses and profitability of the enterprise the concern of the entire collective, of cadres and of specialists, the means to take the enterprise out of its backwardness and to convert it into a fruitful enterprise that gives considerable accumulation to the economy were found.

On the basis of data from progressive enterprises and the work experience of other enterprises, enterprises which used to have losses, but, which now have been converted into fruitful enterprises, there is no reason at all for some agricultural and fishing enterprises to have losses when they have a powerful technical-material base, trained manpower and so forth. Therefore, the financial workers, led by the party organizations, are involved in a serious work to implement the recommendation of the Seventh Plenum of the Central Committee of the Albanian Workers Party, that is, to re-examine and analyze with a critical eye the activity of the backward enterprises and, during this year, to establish concrete measures for improving their economic and financial situation.

Practice shows that some agricultural enterprises and cooperatives make their expenditures for machinery, fertilizer, irrigation, seeds, improvement of livestock breeding and so forth in accordance with the plan and, even, overfulfill them; while, they do not fulfill the planned tasks for increasing yields, production and accumulation. Thus, for example, last year in the agricultural cooperatives, while the revenues for 100 leks materials expenditures were increased by 15 leks more than in 1978, again the effectiveness of expenditures was fulfilled about 11 percent. The use of credits, despite the improvements that have been made, still is not resulting in the required efficiency, especially in the livestock sector. Here, the reasons are mainly of a subjective nature, linked with the failure to fulfill the production tasks, with the insufficient evaluation of financial matters and with weaknesses in the organizational and management work.

Our socialist economy is developing in an uninterrupted manner; therefore, production expenditures are also being increased. However, the issue is that every single lek spent must be calculated "with a well sharpened pencil;" we must have the lek continually under control, taking into consideration its effectiveness and aiming at increasing revenues for every lek spent, because, there are leaders who do not take into consideration the issue of production costs and how production can be fulfilled with as few expenditures as possible, or, if planned expenditures are exceeded, they do not take into consideration the fact that they should be accompanied and justified by an above plan increase of production and accumulation. The party organizations, the government and economic organs and the finance and planning workers must deal better than hitherto with these important problems, carrying out studies, analyses and uninterrupted controls and by drawing the necessary conclusions for improving management and organizational work.

In the past years, a great ideological, explanatory and convincing work has been carried out with the masses of cooperative members for a thorough understanding of the role of accumulation in our present and future conditions, as a basic resource of expanded socialist reproduction in the agricultural cooperatives. As a result, an increase of the accumulation norm has been observed in almost all the districts. The circulating funds and wage guarantee funds have been increased in many agricultural cooperatives; and the initiative of Vlore District to make advance payments not with bank credits but with the means of the cooperatives is being expanded. In this field, however, there are problems that require extended economic-financial studies and concrete measures. First of all, it is necessary that all opportunities to increase accumulation must be used, especially those from industrial crops and from the livestock and fruit growing sectors. But, along with this, it is just as necessary for the use of the accumulation fund to be kept under better observation and under a continual control, because, not infrequently it happens that the accumulation created is not used to the extent required for expanded socialist reproduction, especially for the expansion, protection and supply of the land, for the development of fruit tree growing and livestock

raising and for other purposes. During 1979, some 262 million leks of investments were not made in the agricultural enterprises and cooperatives; and what is worse, some cadres and workers consider this failure to fulfill these planned investments as a savings. Such a concept and practice has negative consequences for increasing production and improving the well-being of the masses. Deficits in investments obstruct the rates of development and compromise the fulfillment of production tasks for the future and, consequently, affect the profitability, the extent of accumulation and the revenues of the members of cooperatives. Along with shortcomings and weaknesses in the fields of management, organization and supply of the necessary material base, erroneous concepts about the role of investments prevent the proper struggle for fulfilling the plan and make them fail to make better use of the many environmental means and other internal reserves for fulfilling their plans. In these circumstances, it is necessary that the responsibility and control of government and economic organs be further strengthened, especially, of the finance and bank organs, in order to influence the complete fulfillment of the tasks in the field of investments in the agricultural cooperatives.

Last year, the financial organs made some serious efforts to participate more extensively in the economic-financial activity of foreign trade and, as a result of this, there were improvements. Nevertheless, the Seventh Plenum of the Party Central Committee recommended that the finance organs further strengthen their influence on the fulfillment of export-import plans. The task is set forth that, along with increasing goods for export and their range, they also improve the effecitveness of foreign trade. But, how can its effectiveness be improved when, in some cases, articles with high production costs of poor quality and badly packaged are being exported? These things happen because the problems of export are not considered thoroughly and as a whole by some cadres and because it is not properly taken into consideration that the profit from the goods that we export depends, first of all, on how much and how we have seen the quality, quantity and value of the goods that we export as a unit.

The quality of goods for export is one of the most acute and most complex problems, reflecting the awareness of workers, the effect of the ideo-political and organizational measures and the level of production technology and so forth. And, it is a fact that improvements in this field are significant. However, there are euphoria and self-contentment that become obstacles in the work for the further and continuous improvement of the quality of goods and of their packaging and labelling in accordance with the requirement of the times. Thus, for example, last year, Albkontrol [the bureau for inspection and control of import and export goods] blocked some kinds of goods because of their poor quality; these goods, in order to respond to the requirements for export, need supplementary expenditures which are payments completely without production; while, some other goods, also for similar reasons, are sold at low prices on the world market. Therefore, the party recommends that it is essential for its basic organizations to deal with these problems in better way;

they must exert control over the government and economic organs and ask them to report on the correct execution of the guidelines and directives given in this field. In a particular manner, export-import problems and those of currency require more concern and preoccupation and more work and studies on the part of financial and bank organs. It is important that, in regard to these problems, the finance workers operate more actively in the enterprises and cooperatives which produce goods for export and which use imported materials; they must organize meetings and talks and take measures together with production workers and cadres so that they will directly and from close range influence the improvement of work and anticipate situations, not only when everything has ended, when the damage has been done and when supplementary work and materials are needed to put the defects right.

The correct determining of investments on the basis of extensive studies and, especially the use of investments with great effectiveness, is an important field where the work of the finance workers can and must be further strengthened. The deficits that occur in the fulfillment of the investment plan and, consequently, in that of the use of accumulation and, especially, in the creation of new accumulation, show that there is no correct response to the party criticism in regard to surpluses in the planning of investments and in regard to the weaknesses in the organization of work during execution. Despite improvements, the extension of work in many projects at the same time still continues--a fact that influences, in a negative manner, the rates of construction and assembly and the quality and costs of construction. The financing of investments, too, continues to be carried out with shortcomings. In some cases, relations between investors and executors are characterized by a spirit of reciprocal concessions, or reciprocal bureaucratic obstructions are created. In Korce District, for example, after a project was completed and put into operation, the investor and the constructor, instead of settling together the financial problems that had emerged, started sending reports of many pages and of many points to each other. And, such activities, that create artificial difficulties and obstacles, sometimes to the construction itself and sometimes to the investors, which take whole months to settle because of the slowness of the financial and bank organs, exist in many districts. The task is that we must raise the economic-financial work in investments to a higher level, that more studies and analyses must be carried out, that the profit from every project in the construction-assembly sector and in exploitation must be better documented and that the extension of investments below limits must not be permitted, as happens in some districts. Everything must be carried out with calculation, pencil in hand and under strict control, correctly solving the technical-technological and economic-financial problems so that projects are put into operation as soon as possible and with full capacity. In this field there is a great deal of rich experience, such as the experience of the nitrogen fertilizer plant in Fier District, of the superphosphate plant in Lac, of the auto-tractor combine in Tirana, of the copper metallurgical plant in Rubik and so forth, where the

planned capacities have been overfulfilled and where the profitability of production has been continually improved. However, this experience must be generalized, taking into consideration the fact that production capacities, technology and profitability in enterprises are not static data, which are given once and for all; on the contrary, they change continually in the dynamism of development because of the work and struggle waged by workers, specialists and cadres for putting production on more and more scientific bases.

The effectiveness of our economy is closely linked with the increase of the purchasing power of the lek and with the continuing improvement of monetary circulation. Knowing and better implementing the requirements of the laws of the money in circulation, the government and economic-financial organs at the center and the base, under the leadership of the party organization, have made improvements in the field of planning and execution. However, the finance and bank workers, as Comrade Enver Hoxha teaches us are assigned great tasks so that they will be more sensitive to any phenomenon connected with monetary circulation and that they must not be lulled to sleep by the idea that no evil can happen to us because we are a socialist country. We must be vigilant; we must foresee the events; we must close all the paths to the possible manifestation of inflation.

In this framework, along with the priority increase of the production of the means of production, special importance is assigned to the continuing increase of consumer goods. In this field, the party has assigned a number of concrete tasks to the production enterprises, the trade enterprises and the financial and bank organs. However, the influence of financial organs on the production, distribution and circulation of goods cannot be exerted from the office nor by letters; on the contrary, it can be exerted by moving the work as near to the enterprises and cooperatives as possible, where production, assortments, quality, contracts, difficulties and obstacles that emerge, as well as the opportunities and roads to overcome them, can be seen with the eyes and touched with the hands. We stress this because many finance and bank workers do not show proper concern for fulfilling the production plans and for their distribution on schedule, for utilizing all their possibilities and domestic reserves and for increasing production and improving its quality. Let us be more anxious when we see that in some enterprises the use of raw materials and of other materials is not given proper attention on the basis of established norms and, consequently, the norms are exceeded; when we still have materials whose norms for consumption have not been established; and when the coefficients for the utilization of steel, timber and so forth are still low. Let us think hard and work with pencil in hand to prevent everything that is produced with the efforts and sweat of the people from being wasted and to further increase the range of the production of consumer goods, because, this is how we will further increase production and accumulation and satisfy more and more the increasing needs of the working masses.

The correct and economical use of the wage fund is given a particular importance, especially in the conditions of the comprehensive development of our economy. Improvements have been achieved continually, and other improvements must be made, in the field of the planning, use and control of the wage fund, on the basis of thorough studies. Nevertheless, there are still enterprises that exceed the wage fund without documenting it with production and accumulation; or there are agricultural cooperatives which do not reach their expected results in production and in revenues in harmony with the wage fund that has been consumed. The positive experience gained by some economic enterprises, where the influence of financial organs has been greater, must be disseminated in the other enterprises, especially in the agricultural cooperatives where problems in connection with planning and the correct use of the wages fund have emerged and continually emerge.

As practice has shown, the effectiveness of the use of wage fund is improved when it is seen and used in close correlation with the quantitative and qualitative indicators of production, with the perfection of the forms of compensation for work, correctly executing the requirements of the socialist economic law on compensation in accordance with the quality and quantity of work, so that the workers who work more and better are encouraged. Of course, those are matters that require thorough studies with great responsibility in accordance with the special characteristics of every branch of our people's economy. However, the correct solution, in a scientific manner, of the problems that arise in the field of the wage fund also requires more powerful and effective struggle against the manifestations of liberalism and bureaucracy observed in many cases. In some bank branches in the districts, the functions of control of the wage fund are extended up to the enterprise management and do not go further down, where the excess of expenditures has been made and where the situation can be improved. Even less do they go to the agricultural cooperatives, especially to sectors and brigades. To improve work in these fields, the finance and bank workers must play their proper role in regard to the correct execution of the socialist principles of distribution, so that wages will be earned through sweat and useful work for s ciety, preventing all the cases of irrational use of the wage fund which can become a source of many evil things of an economic and social nature and, in a particular manner, can become an obstacle for increasing the effectiveness of production. Correct relationships between production, labor productivity and the average pay of workers must be established from the time of planning and be maintained, especially, during the period of implementation.

2.

The Seventh Plenum of the Party Central Committee opened new horizons for the further perfection of the work method of finance and bank workers. The party demands that we become involved in concrete actions for perfecting organizational and management work, especially at the grassroots,

where petroleum and minerals are extracted and where machinery, equipment, spare parts, raw materials and consumer goods are produced and in the enterprises which produce goods for export; and that we pursue the implementation of our programs in a broad front, because, there are cases when our workers shut themselves in their offices and deal with paper work more than they should. The nearer to the workers, cooperative members and finance workers, who struggle at the grassroots, we go, the better the situation will be known, the more valuable studies will be carried out and the better the financial thought and the active role of all financial workers at the grassroots and the center will be. The systematic monitoring of the plan tasks requires special attention, with the organizing of a quicker and more complete system of reports on revenues and expenditures, from the enterprises, cooperatives and the sections of the executive committees of the people's councils in the districts up to the ministries.

Good experience has been gained in the monitoring of tasks by financial organs; this must be generalized and further expanded; however, there still is superficial work, especially in some districts. Thus, for example, the financial sections of the executive committees of the people's councils of Tirana, Berat and Kolonje districts and the finance directorate of the Ministry of Light Industry and the Food Industry work much better than the finance sections of the executive committees of the people's councils of Elbasan, Fier, Librazhd and Tepelene districts. The effectiveness of credits is better evaluated by the Durres Bank than by the Korce Bank. The financial organs of the Vlore District study and solve the export problems better than those of Lushnje and Mat districts. The social security branches in Elbasan and Mirdite monitor temporary work disability much better than the Tirana, Gjirokaster and Diber branches. The agricultural banks in Tirana and Gjirokaster monitor the use and banking of credits in agriculture much better than those in Kruje and Shkoder and so forth.

The improvement of scientific direction and organization requires, first of all, the further perfection of financial planning. On the basis of experience gained, the quality of financial plans has been continually improved; and serious efforts are being made to better and better coordinate the financial indicators and other economic indicators of production. But, in this field, much remains to be done, especially in regard to the drafting of a scientific and mobilizing plan, discovering all the reserves and planning their complete activation, because, only where the plans are tight, Comrade Enver Hoxha teaches us, are mobilization, struggle and efforts of workers, and their successes, greater. The opposite takes place where plans with reserves are drawn up. In particular, attention must be given to the drafting of tight plans for costs, for product on and for quality and for the other qualitative indicators of the plan, because, they will become a lever of encouragement in order to vitalize and strengthen work in enterprises and cooperatives.

To avoid cases of setting tasks lower than the real possibilities that these indicators have, it is essential that, when planning them, we rely on the progressive average, on the experience of advanced workers. However, to avert formalism, subjectivism and voluntarism in this issue, it is necessary that we study the progressive experience extensively and discover the ideological, political, technical and organizational factors that have led to the achievement of high results and, on this basis, the concrete measures must be established in accordance with the conditions of every economic enterprise, agricultural cooperative and state institution. The driver Dhimiter Delijorgji made extensive changes in using motor fuel sparingly, in the technical-utilization indicators of his vehicle and in prolonging the life of his vehicle. Lida Thomo, a teacher in the Agricultural Institute in Korce gave a distinguished example in the application of mathematics in the economy. Ollga Konomi, a worker of the Stalin textile combine in Tirana, became the initiator of a whole movement converting temporary disability to permanent work ability. But, such examples that tell about the high awareness of our people educated by the party, about their inspiring and passionate work and about their minds and golden hands, that can create wonderful things, are found everywhere. The financial workers should not only record these precious morals and material values; the main thing is that they should devote all their capacities and exert all their influence so that it is planned on the basis of these successes. "The active role of the plan and of finances," Comrade Enver Hoxha stresses, "would appear even greater when it includes, as tasks of the plan, the best achievements of advanced workers and of the progressive working brigades within the enterprise and the cooperative and outside them as well."

Coordination, from the time of planning, of economic indicators of production and the financial indicators is a problem requiring continual attention, because any change carried out in economic indicators of production, without being accompanied by relevant changes in financial indicators, would create disharmony and would bring anomaly to the production process and financial activity. Cases of superficial work and failure to reflect in the financial indicators the changes made in the economic indicators were also observed during the work for drafting the 1980 plan. In regard to such manifestations, first of all, the financial workers, from the control departments and districts down to the grassroots workers, in the economic enterprises, agricultural cooperatives and in every unit of social production, must find their own responsibility.

An erroneous tendency, which must be fought more vigorously, is that of setting more pressing tasks for the last quarter of the year. Thus, for example, the planned accumulation in the second half of last year was 18 percent greater than that of the first half. Despite improvements, this problem, in some cases also appears in the plan of this year. However, such work practice becomes the cause for creating an unjustified euphoria in the first months of the year, and later on weaknesses and irregularities are created in the execution of economic-financial tasks.

This is why, it is necessary for the financial organs to work with more responsibility during all the phases of planning and implementation, struggling against any manifestation of formalism.

In the field of planning and implementation in general, and also in the financial field, important problems arise in regard to the execution of the party line, such as, for example: How much are the plan targets being explained to the workers and cooperative members? How is the opinion of the grassroots workers taken into consideration by the state organs in the districts and how is the opinion of the district state organs taken into consideration by the central ministries? Do they develop debates so that one link can convince an other link through arguments, or, under the pretext that "there is no time," are changes made in an arbitrary manner by the higher organs? Is there a principled struggle, or are compromises made, such as, "you let go a little, so that I also can let go and, thus, we arrive at the same idea, together, in order to avoid headaches," as happens sometimes in the course of discussions between the ministries and the sections of the executive committees of the district people's councils.

These are problems of an ideo-political, economic and organizational nature that deserve a greater attention than they have received so far so they can always be solved with party-mindedness. The finance workers, like the planning workers and all specialists and cadres, must always give their opinion on every economic-financial problem, relying on the party line, on the study of phenomena, on the economic laws and on our revolutionary law, giving importance to revolutionary debate, as a means that expands and further improves work, the economic-financial thought and studies and that discovers and solves the contradictions that arise on the road to our socialist development. The party recommends that we be top revolutionaries, always on the attack. Correctly and consistently developing the class struggle, let us not be satisfied with small plans in production, accumulation and exports or with keeping manpower above the plan or with having expenditures without production; and let us not tolerate the cover up and softening of attitudes toward cases of violation of the law, cases that are discovered by the control-review process. We must allow with anything that contradicts the financial policy of the party.

On the basis of the party directives, work continues everywhere for the drawing up of the draft of the Seventh Five-Year Plan, a plan that fully relies on our own forces. For the first time, in this five-year plan, the financial indicators will be discussed and drafted in detail along with the economic indicators. This is a great and responsible task for all finance workers; it requires a total mobilization, knowledge and precision for planning the state financial and monetary resources and for a distribution of these funds as wisely as possible, with profit and with precise calculations.

One of the main characteristics of the new five-year plan, which is being drafted, is the harmonization, the organic relationship of the economic aspect with the financial aspect of the plan, meaning that the process of the drawing up of the draft plan will unite the economic indicators and the financial indicators, doing this work at the same time, with the same reliability and with responsibility. The correct understanding and execution of this unity by the state and economic organs in general and by the financial organs in particular will make it possible to avoid cases when extensive operations to increase revenues and to reduce expenditures are made at the center. These operations must be carried out on schedule in the economic enterprises and agricultural cooperatives, where the resources of accumulation are produced and the reduction of expenditures takes concrete form. The party has stressed that the guiding quotas for the monetary and hard-currency revenues should be considered as a minimum and that, during the discussions and drawing up of the plans, they must be increased, discovering the internal reserves which our socialist economy has and continually creates; while, the guiding quotas for the monetary and hard currency expenditures must be considered as a maximum limit and that efforts must be made to reduce them by finding ways to strengthen the system of savings. It is precisely in these fields that it is necessary for the economic and financial ideas of our cadres to be elevated higher by implementing the criteria, methods and methodology of our socialist planning more broadly and more thoroughly, especially in order to execute the tasks assigned to us by Comrade Enver Hoxha's recommendation that only by the means of a most scientific and most tight planning would it be possible to implement the party directives on the improvement of the effectiveness of the economy and on the increase of material, financial and hard currency reserves.

In strengthening the dialectical unity between economic and financial indicators, both in planning and in implementation, an important role is played by the 10-day and monthly economic and financial analyses in economic enterprises, agricultural cooperatives, in districts and ministries, including data not on the books. These analyses, which must be used in discovering and analyzing the concrete economic and financial phenomena, the relationships between economic and financial indicators, weaknesses and shortcomings and their causes and determining the measures that should be taken, will also serve as schools for increasing the knowledge of cadres and of the masses for managing the economy and as schools for learning the requirements of the objective economic laws of socialism.

In the enterprises, agricultural cooperatives, the executive committees of the district people's councils and ministries, the party has brought in and trained new cadres, and will continually bring in and train new cadres that distinguish themselves by their work, management and administration--such as engineers, agronomists, economists and others. But, in order to properly execute the tasks entrusted to them, these comrades must work more and with determination to extend their knowledge in accordance with the new tasks entrusted to them in their trusted functions.

For example, how much does an engineer or economist know about the economy and finances and how much do they know about the science of management of the enterprise or of the cooperative they are managing? Likewise, the question is asked: how much does an economist know about agrotechnology, techniques and technology? It is through economic and financial analyses, when these problems are debated, in their complexity, in sessions in which all cadres and workers participate, that people learn how to manage and to administer, therefore, how to hold the keys of the management and organization of the economy. However, in the present stage, the time has come to think better about and better execute the work forms for improving the economic and financial knowledge of cadres and the masses, such as the courses with and without interruption of work, to be attended by brigade workers and persons in charge of sectors, work centers and plants, directors of enterprises and chairmen of cooperatives and so forth. There is no scientific management of the economy without a knowledge of finances, just as there is no scientific management of finances without knowledge of the economy.

The solution of the problems, that emerge every day from the development of the economy, requires the continuous improvement of the level of training of workers of the financial system. The initiation of a postgraduate course is a good thing; but, this is insufficient. Therefore, measures have been taken to start such courses not only at the central level, but also in the districts, in order that all the workers of the financial system will be able to supplement and enrich their financial knowledge every 4-5 years. Within this framework, tasks are also set for the training of youths and students who are attending schools with or without interruption of work. This problem is also very important for the workers of the financial system who do not have the necessary vocational education, using different work forms, such as seminars, consultations for special problems, schools of progressive experience and so forth.

The administration and preservation of socialist property have always been and remain in the center of attention of finance workers. The party sets, as the main task, the implementation of preventive measures for the protection of property against appropriation, bad administration, damages and abuses. Of course, in regard to this, priority has been given and must be given to the educational work and to the knowledge of the laws by workers; but, of no less importance is the perfection of the record keeping that accompanies the movement of property and the perfection of other organizational and administrative measures, on the one hand, so that the workers themselves will protect socialist property and, on the other hand, to close the gaps as much as possible through which the abusers and damagers of socialist property might infiltrate. Within this framework, it is necessary to strengthen control over production and distribution by the means of the lek and over any work process by making calculations with a pencil in hand and by comparing material assets according to their weight, number and value and by noting the differences

and their causes. However, these controls are not the task of the examiner or the auditor alone, as some people may think; on the contrary, they are the task of all those who are entrusted with the organization and management of production in the brigade, unit, sector, plant, enterprise and cooperative, of all those who carry out the work processes and of the worker, cooperative member, brigade worker, examiner, auditor, agronomist, engineer, brach leader and of the director and so forth. The party demands that he who produces and manages must also examine. Of course, in this field, the specialized organs of the control-review department and the worker-peasant control, led by the party organizations, have special tasks with great responsibility.

Our working masses, under the party leadership are tackling the job with great revolutionary spirit so as to fulfill the 1980 plans; and, in general, the results achieved so far are good. The finance workers, as the Seventh Plenum of the Central Committee of the Albanian Workers Party has recommended, are required to work with taut nerves, to totally mobilize their mental and physical energies and coordinate their activities with all the governmental and economic links. Let us take into consideration the fact that we had failures in fulfilling the plan in some economic and financial indicators during the past five-month period. Therefore-it is necessary to correctly understand and correctly implement Comrade Enver Hoxha's recommendation that finances must have great assurance of accumulation; and this must be reached not only in the drafting of the Seventh Five-Year Plan, but also in the fulfillment of the plan tasks for 1980, the last year of the Sixth Five-Year Plan. The issues of increasing production and accumulation and the continuing improvement, at high rates, of the effectiveness of the economy are the capital problems of the economic policy of the party; their implementation requires the further pefection of the management and organization of work by the party organizations and by state, economic and financial organs.

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IMPROVED TECHNOLOGY NEEDED IN CONSUMER GOODS PRODUCTION

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[Article by Shaqir Prizreni: "Perfection of Techniques and Technology in Consumer Goods Production--an Important Field of the Technical and Scientific Revolution"]

[Text] During the Sixth Five-Year Plan, our people, confronting and overcoming the difficulties of growth and the many obstacles created by the capitalist and revisionist encirclement and blockades, by complicated international situations and circumstances, have made important steps forward in the building of socialism of the country. Especially important are the achievements in the further invigoration of our socialist economy and in the improvement of its independence and self-sufficiency. During this period, many acute economic and social problems were solved. The study, designing and construction of many important projects by our people in the branches of the economy and, especially in industry, and the completion and putting into operation of dozens of projects, which were abandoned and sabotaged by the Chinese revisionists, are a living proof of the vitality of our socialist economy, of the awareness and creative capacity of our working class and people's intelligentisa, of the life-giving force of Marxism-Leninism and of the correctness of the economic policy pursued by our party.

Our party, relying on the objective economic laws of socialism, on Marxist-Leninist ideology and on Comrade Enver Hoxha's teachings, in accordance with the concrete conditions prevailing in our country and with the international situations, has built and is implementing an economic policy on the basis of which the development of the different branches of the economy will be carried out in established relationships and in full harmony between them. It is true, for example, that in the party policy for the socialist industrialization of the country, priority has been given and is being given to the development of the industry for the production of the means of production, as the main supporting base for the development of all economic branches and to the invigoration of the defense capacity of the fatherland. However, in full harmony with this, the rapid development of the other branches of the economy and, within

this framework, the development of the consumer goods industry, have never been underrated, so as to satisfy more and more, in quantity and in quality, from a revolutionary point of view, the always increasing needs of the people and of the economy for products of this industry. This fact is proven by the 35-years of activity after the liberation.

During these decades of the people's government, the overall industrial production increased more than 125 times, while that of light industry and the food industry increased about 75 times. And, if we take into consideration the fact that in the structure of the overall industrial production before the liberation the products of light industry and the food industry accounted for about 70 percent of the overall industrial production, then, the rapid development of this industry during these 35 years is more apparent. Now, our light industry and food industry is a multi-branch industry, mainly relying on the processing of the raw and auxiliary materials of the country and, first of all, on the products of our socialist agriculture. As all our industry, the consumer goods industry is a new industry, created on the basis of advanced techniques and technology of the times. It is meaningful that our country, which before the liberation used to import almost every industrialized article, today not only satisfies more than 80 percent of its needs with products from our industry, but even exports some of its goods, thus, guaranteeing considerable hard currency in revenues.

However, in spite of the great and rapid progress in the development of the light industry and the food industry, in order that the increasing needs of the masses will be satisfied in the best way possible and the production of consumer goods will cover the purchasing power of the population in best way possible, the party has assigned the tasks so that this branch of our socialist industry will undergo a further quantitative and qualitative development, especially in the coming five-year plan. The fulfillment of these tasks requires that the working people of light industry and the food industry, and workers, technicians, engineers and specialists in production enterprises and scientific-research centers think and work better than upto now in order to know, analyze and implement the directives and guidelines of the party and further perfect their style and work method, mainly dealing with the key problems of the development and modernization of this industry, correctly and most effectively utilizing the great opportunities that the party has created for the further development and expansion of the technical and scientific revolution; and, in this important sphere of social production, especially in those main fields where problems requiring solution are more acute and, aiming at discovering and using internal reserves in the best way possible, they must think and work better for improving production capacities, for the complex and judicious processing of raw and auxiliary materials and for improving the quality of products and so forth.

In the present conditions, the continuing perfection of existing techniques and technology of the consumer goods industry and the gradual introduction, in a studied and organized way, of modern techniques and

technology constitute the basic directions of the development and expansion of the technical-scientific revolution in this branch of the economy.

We stress this not because little has been done in this field; on the contrary, from one five-year plan to the other, there have been reconstructions, expansions and technical-technological improvements in the existing lines, departments, factories, plants and combines, as well as new constructions, in this industry. And, in these expansions and reconstructions and in these new constructions, the new techniques and technology have been continuously replacing what has been "out-moded" by the time; mechanization of the work and production, processes has been improved and automation and chemical, thermophysical and biochemical processes and so forth are being introduced at a more and more expanded level. However, it is a fact that, despite the continuing invigoration of this branch of the industry, still it does not always and properly respond to the quantitiative and qualitative requirements of the people and the economy, and to the requirements of exports. The food and light industry enterprises are not always in a position to "absorb" and process, rapidly and without waste, all the agricultural and livestock products. Despite the technical and technological changes carried out in the canned goods and sugar products, leather shoe ready-made clothes, and glass and ceramics factories and so forth, their level of mechanization and automation is still low in comparison with some other new branches of industry, such as the electrical, chemical, and machine branches and other branches; the technological processes are getting out-moded in some cases; and, in some other cases, there are some artisan forms of work and of production. As a result, in these branches of light industry and the food industry, labor productivity is still relatively low, the quality of goods does not fully respond to the requirements of the times and the norms for the consumption of goods and for raw and auxiliary materials are high. All this results in the fact that the goods of these industries are produced at relatively high costs and also results in the failure to produce the necessary accumulation, and some enterprises of this industry even create a "heavy burden" for our economy, in general. Therefore, the further development and extension of the technical and scientific revolution in the sphere of production of consumer goods has become an essential requirement and has a very large field of action.

In regard to technical progress in the enterprises of light industry and the food industry and in regard to the implementation of techniques, technology and most advanced methods of work organization in production, it is necessary that all be interested, whether they are simple workers or specialists and cadres of production and of the scientific-research institutions, in finding the best means, according to requirements and concrete conditions, with the foremost aim that every advancement in techniques and technology will not only be socially necessary and technically feasible, but also economically profitable, in harmony with the requirements of the principle of relying on one's own forces. These requirements are the foundation of every study and design for the technical and technological perfection of the enterprises of the consumer goods industry.

On the basis of the concrete conditions and possibilities and the present stage of development, the main directions assigned by the party for the perfection of techniques and technology in the consumer goods industry are: first, the most rapid transition in some enterprises from the artisan phase to the organization of mass production by specializing production within the unit, plant, or production center in general, by increasing the coefficient for the complex utilization of raw and auxiliary materials and by mechanizing the work processes which, presently, are done by hand. Second, the passage of production from the existing situation, a situation with stabilized techniques and technology, but relatively backward in some enterprises, to a new and more advanced situation, in accordance with the higher level that has been achieved in the units, plants, and workshops with similar processes. Third, the application of the best achievements of science and of advanced technology, theoretically documented and realized in practice on the national and international level in one established branch or sector of production for the perfection, in their totality, of work means and production processes.

It is understood that such levels of transforming processes, to be achieved through the expansion of the technical and scientific revolution, cannot be reached everywhere at the same time and, especially, in their highest level. As everywhere else, in this sphere of social production, this transformation will be carried out on a well studied and well organized basis, within the limits allowed by our possibilities and circumstances, gradually and in accordance with the concrete conditions where it will be carried out. Priority is given to the solution of those links which are more acuite and which cause more disturbance to the unit, plant or enterprise, always pursuing the principle of relying on one's own forces, a fact which does not mean that we should not profit from the experience and from the achievements of science and technology in the other countries through the utilization of foreign literature and the specialization of cadres outside the country even, to the extent of bringing, from abroad, machinery, complete lines and advanced technology when the latter is necessary, especially in the case of the production of a product for the first time, for which the necessary experience is lacking. And, within this framework, the first place is initially taken by the problems that deal with the increase of the productivity of social labor through the improvement of the level of mechanization with our domestic possibilities in order to replace manual labor at the highest level, especially in such work operations which are similar for all industrial branches, such as those of the loading and unloading of raw materials, of auxiliary materials, of ready made products and of the remnants of production, as well as their internal transportation. Also, it is necessary to replace, as soon as possible, some mechanical and physical processes with periodic activity, such as, for example, the processes of washing, cleaning, filtering, filling, packaging and labelling in the food industry and the processes of cutting and assembling in the shoe industry, the machine industry and the electrical machine industry. Preparatory operations of dyeing and stiffening in the leather and textile industries and so forth

can be replaced with uninterrupted processes, by introducing more and more elements of automation, especially in the control and direction of the processes for facilitating the work of people and for the possible elimination of subjective factors in the application and interpretation of the best parameters of established processes.

Because of the work done for applying the guidelines of the party in these fields, a good experience has been gained. Thus, for example, along with the work carried out for extending the processing capacities of the sugar plant in Maliq, by our own forces, many technical and technological improvements were achieved, further increasing the level of mechanization and automation in comparison with the situation of the existing plant. In the food industry, the use of clean crops is being intensified, and the biochemical and microbiological processes are also being intensified in the production of yeast for the bread, dairy products, wine, beer and alcohol industries, and so forth, which increase labor productivity, the level of utilization of raw materials and the quality of products. The application of some physical-chemical processes has also improved the effectiveness of refining oils, of crystallizing sugar, and of dyeing textiles and so forth. However, these processes must be applied in a broader way to the drying of food products by the means of the use, especially, of the techniques of drying by vacuuming, by corrugated layers, infra-red rays and so forth. It is necessary to work more seriously on experimentation with processes of preserving food products by means of antibiotics and radioactive izotopes and so forth. Of course, all this cannot be done easily and immediately. A wide path must be opened to the expansion of the technical and scientific revolution in these fields by struggling, among other things, against the restraining concepts of certain cadres and workers and some specialists that, allegedly, the use of such advanced processes on a large scale belongs to a remote future. The pace at which the science and technology of production are developing and the needs for consumer goods set forth the requirement for the use, at a wider and wider level, of new processes and methods. Studies, research-works and experiements of this nature must find more space, especially in the annual and future themes of the study and research centers, such as the Institute for Chemical-Technological Research.

The party has assigned the task that, along with increasing the level of the complex and rational utilization of raw and auxiliary materials, the opportunities must also be found to replace the deficient raw and auxiliary materials with other materials and to find the way to replace those which we continue to import such as, for example, hides, cotton, synthetic fibers, natural rubber and plastics, organic acid and dyes and so forth, and to replace them with domestic materials. In this field, too, the technical and scientific revolution has a very broad field of action. The main thing is that the possibilities that have been created and the considerable funds that have been allocated for their production, in imitations or as actual products, must be utilized in the best way possible, on the basis of the further development of biosynthetic processes

or of organic synthesis. However, the important task of our workers, specialists and scientists in production and study and research centers is, along with providing these products in the country, to discover the most technically suitable and most economically profitable ways of using and processing them, by utilizing the existing production capacities or by creating new capacities. This is very urgent, especially in the textile and knitwear industries, so that, with the existing stock of machines and by carrying out the necessary adaptations, clothes with a mixture of wool and "terital" fibres, cloth with a mixture of cotton-polyester and so forth, will be produced not only to compensate for the lack of natural raw materials, but also to increase the range and quality of their products.

Natural relationships and dependency exist between techniques and technology. Under established conditions, they help in the development and perfection of each other. Therefore, it is essential that any improvement carried out in technology must be harmonized with the perfection of techniques and vice versa, both in the simplest production units and in the most complex workshops.

It is known that such advanced technological processes as, for example, the homogenizing of fruit juices or of food for breat-fed children, the compression of carbonic gas that is formed in the processes of fermentation, separated distillation, hydrogenization of vegetable oils, and the processes of thermofixation and of preshrinking and so forth cannot be implemented in the conditions of low technology with ordinary work means. Likewise, it would be paradoxical to apply out-moded technological processes to completely automatic lines. If such a thing is allowed, modern technology would be converted into an "ornament," stripped of its functional aspect; we would have unilateral and partial developments and disharmony which obstruct the synchronization of production processes and, consequently, the effectiveness of social work would not be elevated to the required level nor to the level of the existing possibilities. "There is no justification," Comrade Enver Hoxha teaches us, "for placing a modern machine or a modern line in a work place, and for an established operation, at a plant or at a unit, with high productivity, when it is not accompanied by new organization of work, by the level and culture of production and by the capacities of the other links, because, in these conditions, these links become a bottleneck with all the anomalies that stem from this."

This is why the perfection of techniques and technology and the introduction, on a broader and broader scale, of the latest achievements in production are closely linked to and directly dependent upon, among other things, the level of the management and of scientific organization of work.

It is a fact that, in some branches of light industry and the food industry there still is a disharmony between the pace in increasing production and the pace of improvement of techniques and technology. It is disturbing

that, in some branches of production, for example, in the canned fruit and vegetable, alcohol and cold drinks, and hide and shoes, ready made garments industries and so forth, of unified technological processes are not applied everywhere in all their enterprises although they have the same type of production, nor are the necessary efforts made to unify them, on the basis of the best achievements, studies, experiments and implementations on the industrial level; and, this negligence and carelessness is reflected in certain cases even when reconstructions, extensions and new constructions are carried out.

The technical bureaus and the study-design work groups in enterprises and research centers have not yet properly tackled this problem with all the necessary seriousness. In their study work and, especially when it comes to carry out their design and decision, not infrequently one can observe the tendency to choose the "shortest" way, the way that causes less trouble and which, in its exterior appearance, seems to be most "profitable," and copy the ones which is the simplest and the easiest to make without bringing any improvement to it at all; the fact that its technical, technological and economic-financial production indicators are low does not disturb them at all. Thus, for example, this is what was done in the food industry for the construction of some plants for milling flour, for the extraction of oils, for the production of sauce and for the drying of vegetables and so forth, instead of taking, as a model, the flour plants and the plants for the production and refining of sun-flower oil and for the extraction of sauce in Lushnje, Fier, Elbasan, Vlore and other districts, which have a more advanced technology and, later, on this basis, introducing the new elements of techniques and technology that have been achieved in the other countries.

A typical case of superficial study--the unsatisfactory results of which have not yet served as a lesson--is that of the extension of the vegetable drying industry. During the past 10 years, in accordance with the party guidelines for improving vegetable processing, drying lines have been built almost in every district of the republic, building them as near to the raw material as possible. Considering that in this field we had to deal with the beginning of a new production, it would have been very profitable for these lines to be designed and built on the basis of the most advanced techniques and technology, in accordance with the best requirements of production and of export. But, this was not done. Starting the easiest way, mistakes were made in the selection of technology. And, failing to draw lessons from the past mistakes, the routine continued and was repeated later on, when the need arose to improve the effectiveness of production in vegetable drying lines. Instead of making this improvement on the basis of the extension of the existing lines by bringing into them the most advanced elements of techniques and technology, that required less expenditures, new lines were built with the same technology within the same enterprise, repeating the same work operations and using the existing equipment and machinery.

As a typical example of this research work, technical, technological and organizational weakness, is the case of the "Ali Kelmendi" food processing combine in Tirana, where, within the past 6-7 years, 4 special lines for vegetable drying were built and put into operations one after the other, each having the same production capacities and the same techniques and technology, with 3-4 times more expenditures for their building and assembling and with as much expenditures for production, manpower and so forth. This problem could have been best solved when the task was assigned to double the production capacities on the basis of extending the technical-technological processing of the first line. But, this required more extensive studies, experiments and the use of advanced experience and advanced achievements in this field. However, had it been done in this way, not only would much less expenditure would have been needed for the reconstruction and expansion of the existing line, but also 90 percent of the duplicate operations could have been averted, the level of mechanization and of technology would have been improved and the production expenditures would have been decreased and the quality improved.

The reasons for these weaknesses is to be found not only in the insufficient efforts carried out by the party organizations and leadership organs of this enterprise to undertake and complete such a study, but also in the partial study and the failure to choose the best solution for this problem by the Institute for Chemical and Technological Research and the Institute of Construction Designs for the creation of the so-called "model line" for vegetable drying which was characterized not only by its partial mechanization of work processes, but also by the complete lack of opportunity for future expansion. The clear-cut "decisions" of the Executive Committee of the Tirana District People's Council and of the Ministry of Light Industry and the Food Industry have also influenced these new constructions, starting with the incorrect idea that "let us first overcome the situation, later we see and act."

The selection of a model for reproduction to replace an out-moded one, with limited production capacities and with low technical and technological indicators which, in its complex, creates a semi-artisan technical and organizational situation, with many work operations by hand, is the consequence of a superficial study work. The argument that they were made for constructive simplicity and for the urgent needs of production are groundless. Referring to these problems, Comrade Enver Hoxha stressed that "the passing from the artisan phase to the field of organization of work and production requires a broader conception and a more organized struggle. Today, this issue constitutes one of the great reserves for increasing production and labor productivity. The completion of studies and the adoption of concrete measures in this field are of great effectiveness and less expensive.

Undoubtedly, in the field of techniques and technology, the perfection of the organization of production is closely linked with the expansion of the technical and scientific revolution, because, new techniques

and technology can give the greatest results if they are used on the basis of a new, adequate organization of production.

In all these directions, always promoting techniques, technology and organization of production, a broad field of study and of implementing work is assigned to all elements of production and management at the grassroots and the center and to the scientific institutions, especially the Institute for Chemical-Technological Research. These problems must take the place they deserve in their themes, especially in the content of studies, designs or dissertations, because, it is in this way that their scientific value increases and the implementation of these studies becomes more useful for our socialist economy.

In all the cells of production and scientific research institutions the people have worked and are working to draw up the draft 1981-1985 Seventh Five-Year Plan. The fulfillment of the pressing tasks that are stipulated in the field of increasing the production of consumer goods at a high pace will further increase the mobilization and feeling of responsibility of the workers of light industry and the food industry toward the people and the party in order to tackle the expansion of the technical and scientific revolution with increased forces, for the implementation of the tasks linked with the satisfaction, better and better, of the increasing needs of the people and the economy with consumer goods, in the necessary quantity and assortment, less expensively and with higher quality.

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TWO YEARS OF ECONOMIC EXPERIMENT EVALUATED

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[Article by Jaroslav Vacha, Federal Office of Statistics, Prague: "The Second Year of the Experiment in the Management of Efficiency and Quality in Industry"]

[Text] 1. Evaluation of the Results of the Experiment for 1979

In 1979 the Comprehensive Experiment In Efficiency and Quality Management was carried out under economic conditions markedly different from those of the preceding period.

The shortages of electric power experienced in 1979 were the major reason for production shortfalls and the resulting failure to fulfill production plans throughout the industry.

At the beginning of the second year of the experiment the VHJ's participating in the experiment had to deal with substantially more demanding economic tasks since the production shortfall was reflected in other areas, smooth the flow of supplier-customer relations was, in particular, being affected.

Production shortfalls resulted from these causes in all the VHJ's participating in the experiment, but in the course of the year the majority of the VHJ's were able to make them up. Consequently, the unfavorable situation with respect to the formation of resources at the beginning of the year had only a partial effect on the annual results and was evident only in a somewhat lower fulfillment of the plan in the areas of economic results and marketing as against 1978. The plan for the basic indicators of efficiency and quality was, however, not affected.

In this direction, the experiment indicated that its rules make it possible, even under difficult economic conditions, to respond more rapidly to problems as they arise and handle possible difficulties that may occur and, in some cases, to limit their adverse effect on management.

The focal point of the experiment in verifying the new system of plan indicators is the financial indicators with return on production assets leading the list.

The VHJ's participating in the experiment are devoting special attention to fulfilling the plan for this indicator, since it is also the major criterion for the wage incentive system.

In 1979, 10 of the 12 VHJ's participating in the experiment surpassed the planned level of return on production assets. Overall, the planned profitability was exceeded by 3.5 percent.

The creation of profit played an important role in fulfilling and exceeding the plan for return on production assets.

In 1979, 10 of the VHJ's in the experiment exceeded the planned profit, overall fulfillment was 103 percent, the creation of profit rising 19.1 percent over 1978. The planned profit was exceeded by those VHJ's in the experiment that focused to a greater extent on innovations in production, primarily as a result of preferential pricing.

Table 1. Evolution and Fulfillment of the Plan with Respect to Selected Indicators for the VHJ's in the Experiment for 1978 and 1979

	Měrová jednotka (1)	Prováděcí plán 1979 (2)	Skutečnost 1979 (3)	% plnění plánu 1979 (4)	% plnění plánu 1978 (5)	Index 1979 – 1978	Index 1978 – 1977
Vlastní výkony (6)	mil Kčs	41 563	42 282	101,7	102,2	107,8	108,0
Hrubá výroba v cenách k 1.1. 1977 (7)	mil. Kčs	98 028	98 448	100,3	100,7	104,8	106,0
Finální odbyt celkem (8)	mil. Kčs	37 376	38 370	102,7	104,7	105,4	108,2
Objem dodávek ve VC pro: (9)							
– investice (10)	mil. Kčs	4 017	4 629	115,2	126,3	100,6	118,7
– vnitřní obchod (11)	mil. Kčs	11 292	11 362	100,6	101,1	104,2	109,5
– vývoz do S Z (12)	mil. Kčs	12 658	12 881	101,8	104,3	105,3	103,5
– vývoz do N S Z (13)	mil. Kčs	9 409	9 498	100,9	100,8	109,7	108,4
Průměrný evidenční počet pracovníků (14)	osoby (15)	430 951	430 782	100,0	99,7	100,9	100,7
Produktivita práce z vlastních výkonů (16)	Kčs	96 565	98 274	101,8	102,5	106,8	107,3
Produktivita práce z hrubé výroby (17)	Kčs	227 469	228 533	100,5	101,0	104,0	105,3
Průměrná měsíční mzda pracovníka (18)	Kčs	2 568	2 586	100,7	100,6	103,5	103,4
Rentabilita k výr. fondům (19)	%	10 84	11,22	103,5	106,7	×	×
Rentabilita k nákladům (20)	%	13,73	14,18	103,3	106,0	115,5	114,1
Podíl celkových nákladů na upravených výkonech (21)	%	87,99	87,66	99,6	99,7	98,4	98,8
Podíl materiálových nákladů na upravených výkonech (22)	%	65,81	65,71	99,8	99,5	98,5	98,0
Zisk (23)	mil. Kčs	12 791	13 177	103,0	106,1	119,1	119,2

[Key to Table 1]

(1) Unit of measurement
(2) Implementation Plan, 1979
(3) Actual, 1979
(4) Fulfillment of the 1979 plan, in percent
(5) Fulfillment of the 1978 plan, in percent
(6) (Labor) value added
(7) Gross output at 1 January 1977 prices
(8) Total final sales
(9) Volume of supplies at whole prices for:
(10) Investment
(11) Domestic trade
(12) Export to socialist countries
(13) Export to nonsocialist countries
(14) Actual average number of workers
(15) Personnel
(16) Labor productivity based on value added
(17) Labor productivity based on gross output
(18) Average monthly wages
(19) Return on production assets
(20) Return relative to expenditures
(21) Percentage of total costs to adjusted output
(22) Percentage of material costs to adjusted output
(23) Profit

All aspects of this type of price incentives were fully taken advantage of by 11 of the VHJ's in the experiment whose number of preferentially priced items increased over last year. Overall the advantage derived from preferential pricing in 1979 reached Kcs 810 million, or 45.6 percent more than in 1978.

The greatest advantage of preferential pricing was achieved by the participating VHJ's under the CSR Ministry of Industry, namely Vlnarsky Prumyal Brno, Kcs 305 million, and Pisek Pletarsky Prumysl [Knitting Industry], Kcs 139 million. In VHJ's in the engineering industry these include the Tovarny Strojireske Techniky in Prague, Kcs 120 million, and Zavody Vseobecneho Strojirenstvi in Brno, Kcs 76 million.

On the other hand, the amount under penal price reductions dropped Kcs 4 million from the 1978 figure, and amounted to only Kcs 18 million.

In addition to preferential pricing, the creation of profit was also affected by costcutting, primarily at those participating VHJ's that as a consequence of less innovation were not authorised the greater number of preferentially priced items.

The ratio of total costs to adjusted output achieved was 0.33 of a point lower than the annual implementation plan figure and 1.47 points lower than the actual figure for 1978. At the same time, the proportion of material costs in adjusted output was also 0.10 of a point lower than the annual implementation plan and 1.000 points lower than the actual figure for 1978.

A total of nine participating VHJ's had better results in terms of costs than assumed by the annual implementation plan.

For individual VHJ's participating in the experiment, the level of return on production assets was also influenced, to a lesser degree, by the conditions of inventories and fixed assets.

For inventories the situation was not very favorable, since only at half the VHJ's was the inventory turnover time reduced by 1 to 4 days, while in the other half, inventory turnover was by 1 to 4 days slower.

The return on fixed assets developed more favorably, for at nine of the VHJ's the indicator was better than envisioned by the plan, at two it was the same as called for by the annual plan, and at only one of the VHJ's was it worse than the plan.

An important place in the new system of plan indicators being tested in the experiment is occupied by the value added indicator, which plays an important role not only in lowering the material intensiveness of production, but also is an important motivator in the area of wage incentives.

The annual implementation plan for (labor) value added was surpassed by 10 of the VHJ's, and the other 2 fulfilled the indicator by 99 percent. Overall, the VHJ's exceeded their plan with respect to (labor) value added for 1979 by 1.7 percent, and the fact that this indicator was met to a greater extent than that for gross output (100.4 percent) indicates that this indicator is fulfilling its role in lowering the material intensiveness of production.

Exceeding the plan in return on production assets and (labor) value added and other indicators for the marketing structure, which decisively motivate the formation of the wages payable, made it possible for the majority of VHJ's in the experiment to draw wages without affecting their relation to labor productivity.

The plan for the labor productivity with respect to value added was exceeded overall by 1.8 percent, while the plan for average wages was exceeded by only 0.7 percent. In comparison with 1978 the productivity of labor rose by 6.8 percent, and average wages by 3.5 percent.

The plan for the basic component of the wage bill was fulfilled by 99.9 percent and its norm of 25.5 percent was 0.47 point lower than the plan, since it was exceeded by only 1 VHJ.

The proportion of the incentive component in the total wages payable was, in accordance with the objectives of the experiment, increased 1 point from the 1978 figure. to 19.6 percent. To be sure, the plan for the absolute limit on the incentive component of the wage bill was exceeded by nine VHJ's, but of these, five VHJ's did this while exceeding the plan for all of the qualifying indicators.

A total of 11 of the participating VHJ's adhered to the mandatory limit on their wages payable, and with the savings amounting to Kcs 208 million, they created additional resources for implementing a longer-range wage policy.

The lower plan fulfillment in the creation of material resources primarily affected the area of utilization and was reflected in the results achieved by a lower fulfillment of the plan then in 1978, both in total final sales and in general trade trends, except for exports to nonsocialist countries at wholesale prices. Just as happened in 1978, throughout the industry, in the utilization trend of industrial production, the fulfillment of tasks set by the annual implementation plan also continues to be uneven, in the sense that the plan for deliveries of machinery and equipment for investments continues to be overfulfilled (by 15.2 percent), while deliveries for the domestic trade sector are fulfilled only by 100.6 percent, those for export to socialist countries by 101.8 percent and those for export to nonsocialist countries by 100.9 percent.

For the effectiveness of export as measured by comparative indicators, better overall results in 1979 were achieved for fulfilling the plan for export to nonsocialist countries (104.4 percent) than for exports to socialist countries (99.2 percent).

Fulfilling the plan for sales and especially for deliveries for export is ever more dependent on the rapid realization of the results of research in practice in the form of innovations while simultaneously improving the overall quality of products. Consequently, special attention is devoted to these areas, which shows up in the fulfillment of the plan for the basic indicators characterizing the area of innovation which indicate that the development of innovation effort in the majority of the VHJ's participating in the experiment shows a rising trend.

The planned share of new products in the production of goods was exceeded by all VHJ's in the experiment except for the VHJ Drevarsky a Nabytkarsky Priemysel in Zilina.

The planned share of new prime quality and technologically advanced products in the volume of new products was likewise exceeded by all the VHJ's for which it was prescribed in the experiment and all of them achieved a higher share than in 1978. In comparison with the figures for all of industry in 1978 (14.1 percent) and for the first 3 quarters of 1979 (15.5 percent), 9 of the VHJ's in the experiment achieved better results for this indicator.

Table 2. Plan Fulfillment and the Development of the Innovations Indicators (in percent)

VHJ	Podíl objemu nových výrobků z výroby zboží (13)			Podíl objemu nových výrobků I. stupně jakosti a technicky pokrokových z objemu nových výrobků (14)			Podíl objemu nových výrobků technicky na světové úrovni z objemu nových výrobků (15)		
	plán na rok 1979 (16)	skutečnost 1979 (17)	skutečnost 1978 (18)	plán na rok 1979 (16)	skutečnost 1979 (17)	skutečnost 1978 (18)	plán na rok 1979 (16)	skutečnost 1979 (17)	skutečnost 1978 (18)
Hutní druhovýroba, Praha (1)	3,0	3,3	2,9	8,0	20,5	8,2	50,0	53,6	47,4
SIGMA, Olomouc (2)	17,4	20,0	19,9	52,1	56,2	49,0	25,4	52,2	11,8
Továrny strojírenské techniky, Praha (3)	19,0	23,1	21,6	39,2	52,3	37,9	—	14,2	22,1
Závody všeobecného strojírenství, Brno (4)	16,0	20,8	20,3	44,5	53,3	45,1	45,0	53,7	45,5
ELITEX, Liberec (5)	16,5	16,8	14,2	4,3	9,2	5,7	4,3	9,2	5,7
Čs. závody gumárenské a plastikářské, Gottwaldov (6)	7,7	12,3	9,2	10,5	25,0	9,1	—	6,8	2,8
Pletařský průmysl, Písek (7)	12,0	19,7	13,2	17,0	24,6	19,5	23,0	27,2	19,3
Vlnařský průmysl, Brno (8)	21,0	25,1	24,4	24,0	28,1	27,4	24,0	28,1	27,4
Průmysl kožené galanterie, Hradec Králové (9)	23,7	26,9	21,9	4,7	6,1	3,6	1,0	1,5	0,7
Slovchémia, Bratislava (10)	4,2	11,1	8,6	—	21,0	17,5	—	17,7	9,2
OGAKO, Partizánské (11)	47,9	48,4	47,9	0,6	1,2	0,7	—	0,2	—
Drevársky a nábytkársky priemysel, Žilina (12)	12,9	14,6	16,5	8,1	30,3	8,8	—	—	—

Key:

(1) Hutni Druhovyroba, Prague
(2) SIGMA, Olomouc
(3) Tovarny Strojirenske Techniky, Prague
(4) Zavody Vseobecneho Strojirenstvi, Brno
(5) ELITEX, Liberec
(6) CS Zavody Gumarenske a Plastikarske, Gottwaldov
(7) Pletarsky Prumysl, Pisek
(8) Vlnarsky, Prumysl, Brno
(9) Prumysl Kozene Galanterie, Hradec Kralove
(10) Slovchemia, Bratislava
(11) OGAKO, Partizanske
(12) Drevarsky a Nabytkarsky Priemysel, Zilina
(13) Ratio of new products in the production of goods by volume
(14) Ratio of first quality and technologically advanced goods to the volume of new products by volume
(15) Ratio of new products at world standard of technology to the new products by volume
(16) Plan for 1979
(17) Actual, 1979
(18) Actual, 1978

The plan for the ratio of new products at the world standard of technology in the volume of new products was prescribed for seven of the VHJ's in the experiment, all of which exceeded it. In comparison with 1978, there was a decrease in this ratio only in the VHJ Tovarny Strojirenske Techniky in Prague.

Equally promising are the results achieved in plan fulfillment and in the development of other indicators of innovation, namely the "ratio of sales collection stock replacement" and the "share of products of a high quality standard and style level in total sales, at wholesale prices." These indicators characterize the specific innovating process in the branch of the consumer goods industry; they were prescribed for the experiment's three VHJ's under the CSSR Ministry of Industry.

Further improvement was also achieved in the area of quality for that part of the production of the experimenting VHJ's that is evaluated by state testing stations.

Table 3. Plan Fulfillment and Development of Quality Indicators

	Experimentující VHJ (3)			Průmysl celkem (6)	
	plán 1979 (4)	skutečnost (5) 1979	skutečnost (5) 1978	Skutečnost 1.–3. čtvrtletí (7) 1979	Rok 1978 (8)
Podíl výroby zboží 1. stupně jakosti z objemu výroby zboží hodnoceného státními zkušebnami v % (1)	21,0	27,6	22,9	23,2	21,9
Podíl výroby zboží zařazeného státními zkušebnami do I. stupně jakosti z celkového objemu vyrobeného zboží v % (2)	5,9	8,4	6,4	5,3	5,0

Key:
(1) Ratio of production of first quality goods from the output of goods evaluated by state testing stations, in percent by volume
(2) Ratio of the goods production assigned by the state testing stations to the first quality category to the total volume of goods produced, in percent
(3) The experimenting VHJ's
(4) Plan, 1979
(5) Actual
(6) Industry as a whole
(7) Actual, first 3 quarters of 1979
(8) Year, 1978

Despite the still limited capacity of the state testing stations, the number of products and thus the volume of the output of goods tested continued to rise, so that in 1979 it amounted to Kcs 29.9 billion, which is nearly 30 percent of the output of goods of all the VHJ's in the experiment.

Table 4 Plan Shortfalls in Selected Indicators by VHJ for 1978

Název ukazatele (23)	(24) VHJ číslo *)											
	1	2	3	4	5	6	7	8	9	10	11	12
1 Vlastní výkony					99,9							99,9
2 Hrubá výroba v cenách k 1. 1. 1977											99,6	98,7
3 Výroba zboží ve VC												
4 Podíl VZ zařazeného do 1. stupně jakosti VZ celkem											99,6	99,0
5 Podíl objemu nových výrobků a VZ celkem												
6 Podíl objemu nových výrobků I. stupně jakosti a technicky pokrokových z objemu nových výrobků												
7 Objem dodávek pro VC pro												
— investice 7a					96,4		99,2			94,8	98,8	
— vnitřní obchod 7b					96,4		99,2			94,8	98,8	
— vývoz do SZ 7c					98,1					98,5	96,9	
— vývoz do NSZ 7d					82,9						94,1	82,7
8 Rozdílový ukazatel objemu dodávek pro vývoz do SZ		94,8	97,5	96,5	98,5							98,2
9 Rozdílový ukazatel objemu dodávek pro vývoz do NSZ		99,7	98,9		88,7						98,5	
10 Limitní investiční celkem												
11 Objem prací a dodávek pro stavby nad 2 mil. Kčs	87,4		96,4		73,5		82,2	81,8		89,1	73,6	91,8
12 Průměrný evidenční počet pracovníků	99,8				99,7		99,8	99,8	99,9		99,0	
13 Produktivita práce z vlastních výkonů												99,8
14 Produktivita práce z hrubé výroby				99,9								98,7
15 Průměrná měsíční mzda pracovníků		99,5										
16 Rentabilita k výrobním fondům	99,4									98,6		
17 Rentabilita k nákladům	97,7									98,9		
18 Doba obratu zásob		96,7	98,2					96,1		98,0		97,1
19 Podíl celkových nákladů na upravených výkonech	100,0	100,0								100,3		
20 Podíl materiálových nákladů na upravených výkonech	100,2	100,6								101,3		
21 Výtěžnost nákladových prostředků										99,0		
22 Zisk	99,5									98,8		

*The numbers of the VHJ's correspond to the names of the VHJ's according to the order given in the key to Table 2.

Key:
(1) (Labor) value added
(2) Gross production at prices of 1 January 1977
(3) Production of goods at wholesale prices
(4) Ratio of tested goods qualifying as prime grade overall
(5) Ratio of new products in overall production
(6) Ratio of new goods of prime grade and of technologically advanced products in overall production
(7) Deliveries at wholesale prices for
(7a) Investments
(7b) Domestic trade
(7c) Exports to socialist countries
(7d) Exports to nonsocialist countries
(8) Comparative indicator of deliveries for exports to socialist countries
(9) Comparative indicator of deliveries for exports to nonsocialist countries

[key continued]

[continuation--Table 4 key]

(10) Fixed-limit investments as a whole
(11) Volume of work and deliveries for construction projects at over Kcs 2 million
(12) Average recorded number of workers
(13) Labor productivity based on value added
(14) Labor productivity based on gross output
(15) Average monthly wages
(16) Return production assets
(17) Profitability based on costs
(18) Inventory turnover
(19) Ratio of total costs to adjusted output
(20) Ratio of material costs to adjusted output
(21) Return on fixed assets
(22) Profit
(23) Type of indicator
(24) Number of the VHJ*

The volume of recognized claims, which reflect the overall level of quality, declined 13 percent from 1978.

While the overall results achieved by the experimenting VHJ's are positive in most of the areas checked, the fulfillment of the plan in individual VHJ's differed and reflected in more pronounced ways the specific conditions of the production and replacement processes.

All of the experimenting VHJ's fulfilled or surpassed their plans for selected indicators only in the areas of innovation and quality, and the newly introduced fixed-limit investment indicator, which was introduced in the experiment and which the VHJ's used primarily for modernizing their production bases. On the other hand, the largest number of VHJ's (eight) failed to fulfill their planned volume of work and deliveries for building projects budgeted at over Kcs 2 million due to insufficient construction capacity.

The best results in fulfilling the plans in 1979 were achieved by the VHJ's of the CSR Ministry of Industry. The engineering VHJ's under the Federal Ministry of Metallurgy and Heavy Engineering fell short of plans in the area of financial management, and the engineering VHJ's in the Federal Ministry of General Engineering did not attain the planned levels in exports to both socialist and nonsocialist countries. The VHJ Elitex additionally failed to fulfill export and domestic market deliveries.

2. Evaluation of the Results from the Beginning of the Experiment

The 2 years that have passed since the experiment was begun make it possible to test another element based on the cumulative evaluation of the results achieved in fulfilling the plan.

The basic tendencies in plan fulfillment by the experimenting VHJ's, which first appeared in 1978, continue essentially unchanged in the cumulative results. The aggregates also show the favorable plan fulfillment in financial indicators, cost reductions, and the differentiated fulfillment in the major sales areas. Because the cumulative monetary incentives are based, in a number of indicators, on actual results achieved not only in the implementation but in the original plan aggregates as well, the significance of the long-range nature and the stability of the plan are also improving. In this connection, it is noted that realizing the principle of long-range planning and the stability of plans in 1978 and 1979 was not without its problems, since a number of changes from the original plan were made in the implementation plans.

Table 5. Cumulative Plan Fulfillment in Selected Indicators for 1978 and 1979

Ukazatel (1)	Měrová jednotka (14)	Plán (15)	Skutečnost (16)	% plnění plánu (17)
Dodávky ve VC pro (2)				
– investice (3)	mil. Kčs	7 718	9 305	120,6
– vnitřní obchod (4)	mil. Kčs	22 052	22 239	100,8
– vývoz do SZ (5)	mil. Kčs	25 012	25 763	103,0
– vývoz do NSZ (6)	mil. Kčs	17 997	18 159	100,9
Rozdílový ukazatel vývozu do SZ (7)	%	130,2	129,7	99,6
Rozdílový ukazatel vývozu do NSZ (8)	%	102,8	103,7	100,9
Vlastní výkony (9)	mil. Kčs	80 111	81 675	102,0
Podíl celkových nákladů na upravených výkonech (10)	%	89,02	88,59	99,5
Podíl materiálových nákladů na upravených výkonech (11)	%	66,53	66,33	99,7
Rentabilita k výrobním fondům (12)	%	9,92	10,40	104,8
Zisk (13)	mil. Kčs	22 969	23 972	104,4

Key:
(1) Indicator
(2) Deliveries at wholesale prices
(3) Investment
(4) Domestic trade
(5) Exports to socialist countries
(6) Exports to nonsocialist countries
(7) Comparative indicator of exports to socialist countries
(8) Comparative indicator of exports to nonsocialist countries
(9) (Labor value added)
(10) Ratio of total costs to adjusted output
(11) Ratio of material costs to adjusted output
(12) Return based on production assets
(13) Profit
(14) Unit of measurement
(15) Plan
(16) Actual
(17) Fulfillment of plan (percent)

Table 6. Survey of Differences Between Original and Implementation Plans for Selected Indicators in the Experiment for 1978 and 1979

Název ukazatele (1)	VHJ číslo [1] (16)											
	1	2	3	4	5	6	7	8	9	10	11	12
Objem dodávek ve VC pro: (2)												
– investice (3)		+	+			–	+	+	+	+		
– vnitřní obchod (4)		–	+	–	–	+	+	+	+	+	–	–
– vývoz do SZ (5)		+	–	+		+		+	–	–	+	+
– vývoz do NSZ (6)		+	–	–	–	–	–	–	–	+	–	–
Rozdílový ukazatel dodávek pro vývoz do SZ (7)	+	+	–	+	+	–	+	+	+	+	+	+
Rozdílový ukazatel dodávek pro vývoz do NSZ (8)	–	+	+	–	–	–	+	+	+	+	+	+
Vlastní výkony (9)	+	–		+	+	+	+	+	+	+	+	–
Zisk (10)		–	+	+		+	+	+	–	+	+	–
Rentabilita k výrobním fondům (11)		+	+	+		+	+	+	–	+	+	+
Podíl celkových nákladů na výkonech bez vlivů zahraničního obchodu (12)		+	+	+		+	+	+	+	+	–	–
Podíl materiálních nákladů a služeb materiální povahy bez podpisů ZP a vlivu zahraničního obchodu na výkonech (13)		+	+	+	–	+	+	+	+	+	+	+
Výtěžnost ZP (14)		+		–				+				+
Doba obratu zásob (15)	–	+	+	–		–	+	+	–	+	+	

1) The numbers of the VHJ's correspond to the names of the VHJ's in the key to Table 2.

\+ increase in the implementation plan as against the original plan

\- decrease in the implementation plan as against the original plan

Key:

(1) Name of indicator
(2) Deliveries at wholesale prices for:
(3) Investment
(4) Domestic trade
(5) Exports to socialist countries
(6) Exports to nonsocialist countries
(7) Comparative indicator of deliveries for exports to socialist countries
(8) Comparative indicator of deliveries for exports to nonsocialist countries
(9) (Labor) value added
(10) Profit
(11) Return based on production assets
(12) Ratio of total costs to output less the effect of foreign trade
(13) Ratio of costs of materials and services of a material nature less fixed asset depreciation and effects of foreign trade on output
(14) Return on fixed assets
(15) Inventory turnover
(16) VHJ number[1]

Overall, the implementation plan of the VHJ's in the experiment differed in 128 instances, of which 90 represent an increase over the original 3-year plan [for the experiment], and 38 a reduction in it.

The greatest number of instances of tightening up plans resulted from the experimenting VHJ's taking advantage of the opportunity at as early a stage as the compilation of the plan, to raise the volume of their wages payable by accepting higher plan requirements for value added and return on production assets than had been set for them by the branch breakdown. Thus, the planned requirements for a return on assets were increased by nine VHJ's and for value added by eight VHJ's.

Since the system of plan indicators is an interrelated one, it necessitated modifications in the plan for other indicators, primarily the plan for costs and some areas of sales.

Reductions in implementation plans from the original 3-year plan were made most frequently in the area of sales, chiefly for export deliveries to nonsocialist countries.

3. The Results of VHJ's Participating and Not Participating in the Experiment

A comparison of the results achieved in plan fulfillment by the VHJ's participating in the experiment, and in the 1979 developments, with the results achieved by a group of VHJ's under the Federal Ministry of Metallurgy and Heavy Engineering, the Federal Ministry of General Engineering and the Ministries of Industry of the CSR and the SSR not in the experiment shows that for the most part better results were achieved by the VHJ's participating in the experiment.

The total sales plan even by economic standards was exceeded by experimenting VHJ's to a greater degree than by those not participating. Their export effectiveness, as measured by the comparative indicator, was higher for exports both to socialist and to nonsocialist countries.

The experimenting VHJ's also achieved a two-point higher plan fulfillment in return on production assets and profits than did the VHJ's not in the experiment. A cumulative comparison of the results for the 2 years of the experiment shows approximately the same tendencies.

Conclusions

The second year of the experiment in efficiency and quality management in 12 industrial VHJ's further confirmed, in the majority of cases, the beneficial effect of the new economic tools used to increase efficiency and quality and tested the effects of certain other new elements.

Table 7. Selected Indicators for VHJ's Participating and Not Participating in the Experiment Under the Federal Ministry of Metallurgy and Heavy Engineering, the Federal Ministry of General Engineering and the Ministries of Industry of the CSR and the SSR for 1979

Název ukazatele (1)	Měrová jednotka (17)	Experimentující VHJ celkem (19)			Neexperimentující VHJ celkem (20)		
		Skutečnost (21)	% plnění plánu (22)	index	Skutečnost (21)	% plnění plánu (22)	index
Objem dodávek ve VC pro: (2)							
— investice (3)	mil. Kčs	4 629	115,2	100,6	31,049	111,1	102,2
— vnitřní obchod (4)	mil. Kčs	11 362	100,6	104,2	31,451	98,5	103,0
— vývoz do SZ (5)	mil. Kčs	12 881	101,8	105,3	46 832	100,2	105,0
— vývoz do NSZ (6)	mil. Kčs	9 498	100,9	109,7	27 646	97,3	103,3
Rozdílový ukazatel dodávek pro vývoz do SZ (7)	%	131,8	99,2	103,2	121,4	100,1	104,0
Rozdílový ukazatel dodávek pro vývoz do NSZ (8)	%	110,8	104,4	115,8	110,2	[illegible]	[illegible]
Hrubá výroba (9)	mil. Kčs	98 448	100,4	104,8	327 924	100,2	104,4
Průměrný evidenční počet pracovníků (10)	fyz. osoby	430 782	100,0	100,9	1 576 030	100,4	100,7
Průměrná měsíční mzda pracovníka (11)	Kčs (18)	2 586	100,7	103,5	2 649	99,7	102,7
Produktivita práce na pracovníka (z hrubé výroby) (12)	Kčs	228 533	100,5	104,0	208 069	99,8	103,6
Zisk (13)	mil. Kčs	13 177	103,0	119,1	41 540	101,0	111,5
Rentabilita k výrobním fondům (14)	%	11,22	103,5		9,33	101,5	..
Podíl celkových nákladů na výkonech bez vlivu zahraničního obchodu (15)	%	87,66	99,6	98,4	88,79	99,9	99,0
Podíl materiálních nákladů a služeb nemateriální povahy bez odpisů ZP (16) a vlivu zahraničního obchodu na výkonech bez vlivu zahraničního obchodu	%	65,71	99,8	98,5	66,03	99,5	99,0

Key:
(1) Type of indicator
(2) Deliveries at wholesale prices for:
(3) Investments
(4) Domestic trade
(5) Exports to socialist countries
(6) Exports to nonsocialist countries
(7) Comparative indicator of exports to socialist countries
(8) Comparative indicator of export deliveries to nonsocialist countries
(9) Gross production
(10) Average recorded number of workers
(11) Average monthly wages
(12) Labor productivity per worker (from gross output)
(13) Profit

(14) Return based on production assets
(15) Ratio of total costs to output, less the effect of foreign trade
(16) Ratio of costs of materials and services of a nonmaterial nature, less fixed asset depreciation and the effect of foreign trade in output
(17) Unit of measurement
(18) Individuals
(19) VHJ's participating in the experiment, as a whole
(20) VHJ's not participating in the experiment, as a whole
(21) Actual
(22) Percentage of plan fulfillment

The basic trends in the management of the experimenting VHJ's which showed up as early as 1978, continued essentially unchanged in 1979. The rules of the experiment continued to exert a favorable influence primarily on the further improvements in efficiency in the area of financial management, and significantly bolstered efforts at innovation and increase in the quality of production.

The results of the experiment have not yet become clearly evident in the area of foreign relations.

The cumulative evaluation of plan fulfillment for the 2 years of the plan in essence confirms the conclusions of the annual evaluations. The improved results achieved in plan fulfillment in 1978 over 1979 bettered the cumulative plan fulfillment for the 2 years and thus created a higher basis for monetary incentives tied to the cumulative data than was the case in 1979.

On the whole, the results of the experiment in efficiency and quality management can be evaluated as positive for the second year as for the first, proof of which is that a number of its tested new elements were incorporated by the Set of Measures for Improving the System of Planned Management of the National Economy after 1980.

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SLOVAK DEPUTY MINISTER DEFINES AGRICULTURAL TARGETS

Prague HOSPODARSKE NOVINY in Czech 22 Aug 80 pp 1,4

[Article by Eng Julius Medved, CSc, first deputy minister of Agriculture of the SSR]

[Text] The rise of material expenditures per unit of production and the decrease of khozraschot profitability have been clearly evident for a considerable time now, even after the completion of the restructuring of our agriculture, undoubtedly as the result of lack of progress in raising productivity and of the relatively low technical and economic standard. Compared with the world standard achieved in science and technology, the material input into intensification and replacement in our agriculture is characterized by a number of elements slowing down the improvement of the technical and economic indicators of means of production. Elements or systems of a revolutionary nature which could mean the introduction of innovations of a higher order in biology, chemicalization, methodology and technology appear only exceptionally and, most importantly, the coordination of these mutually connected elements of scientific and technical progress, which is indispensable given the specific biological-technical nature of agricultural production, manifests serious shortcomings.

Practically only our cereal production, specifically the densely sown cereal cultures, have reached a standard comparable to that of countries with developed intensive agriculture. Our research and improvement stations have already produced wheat seedstock yielding 8 to 9 tons per hectare, and barley yielding 6 to 7 tons per hectare, and seedstock improved in other countries is also available to us. Overall, fertilization, weed control and also mechanization of our cereal cultures exhibit a high standard.

Also results of the hybridization program in pig raising which yielded breeds with potential weight gains of between 600 and 650 grams per day in animals raised for slaughter, and which exhibit a higher proportion of meat and good feed conversion, approach the standard of highly developed agricultural countries. Also the results achieved in poultry raising are comparable with the world standard. But in both these animal productions sectors nutrition, raising techniques and technological production systems are not equal to the biological potential of the animals.

The Call for New Criteria

Certain advanced elements of scientific and technical progress which must be evaluated in terms of the current world standard could be introduced also in the exploitation of the bioenergetic soil potential, feedstuffs, oil-bearing crops and a number of other crops, and in cattle and sheep raising. But all these sectors or production branches are characterized by lack of comprehensiveness of scientific and technical progress, and a lack of balance of biological, technical and technological elements over the entire production cycle. The process of industrialization in our agriculture and its material tools exhibit many elements characterizing extensive agriculture and low quality, while also the intensification and productivity-raising means, such as chemical fertilizers, mechanical means for technological field operations, animal husbandry, transportation and manipulation of bulk supplies and building materials are being produced (with a few exceptions) at high cost and with high material and power input. Frequently in agriculture the use of these means does not result in a commensurate saving of human labor. A contributory factor in the overall low technical and economic standard of means of production in this sector is also, for either technical or economic reasons, the inability of using rationally a number of machines and means of transport, and technological installations and materials under difficult natural conditions.

Such a critical assessment of the technical and economic standard of our agriculture is justified mainly because existing and prospective conditions governing overall economic growth in our country place qualitatively more exacting requirements on agriculture, the direction and ways of its development and its support base, which calls for the application of new criteria in assessing achievements and the setting of new objectives and tasks. We must respect more than we have until now the harsh reality that limiting factors such as the immutable acreage of the land area are being further complicated by the fuel and energy shortage, water supply and pollution problems which also affect agriculture, the problem of industrial emissions, the supply of raw materials and technological equipment for fertilizer production and the production of pesticides. In addition, chemicalization of agricultural production and large-scale animal production methods render protection of the environment more difficult and aggravate the shortage of labor.

Under these increasingly difficult conditions augmenting the degree of self-sufficiency in foodstuffs and some other agricultural crops used in industry is possible primarily only by intensifying and accelerating the implementation of scientific and technical progress.

Sometimes the question is being asked whether in fostering self-sufficiency priority should be given to the resulting intensification of agricultural production or to the greatest possible reduction in expenditures per unit of production which is usually stressed in connection with the endeavor to raise the economic efficiency of agricultural production. Naturally,

intensification of production, albeit differentiated according to soil, climate and overall production conditions prevailing in individual oblasts and enterprises, is the only available alternative.

Therefore, the rational answer in getting at the root of the above problem should not be continued intensification of production by increasing chemicalization, mechanization, etc. to raise soil fertility, but finding ways of reducing the material, power and labor requirements while maintaining the socially necessary production structure and intensity. From this it follows that in agriculture as well, the term objectively progressive in the economic sense is not just an scientific and technical means which will increase output and labor productivity, but also those means likely to save materials, power and labor. In this connection it is worth mentioning that the cost of many material elements of scientific and technical progress, especially of mechanical equipment and construction materials, is not commensurate with the production gain achieved, but that also in this way agricultural production can also only be rendered costlier.

Plant Production

A priority task in research, but also in the field of application of proven scientific findings, is mastering the problems connected with increasing crop production by raising soil productivity as the basic condition of all agricultural food production and of raw materials for many branches of the consumer goods industry.

Abiding by the necessary water supply regime and the correct supply of nutrients primarily by increasing the doses of chemical and natural fertilizers, choosing crop-growing localities with optimal production conditions, and applying scientifically proven planting procedures to exploit individual soils and ecological conditions to best effect, occupies a key position in this area. Calculations based on research and the results achieved by advanced methods applied in practice reveal that irrigation raises crop yields by 25 to 30 percent, and soil drainage by 15 to 20 percent on the average. Therefore, the SSR long-term improvement program includes a vast construction program of irrigation and soil drainage installations. In the coming 5 years the guidelines for the Seventh Five-Year Plan call for the preparation of a program to extend the area of land under irrigation by 120,000 hectares by 1985, and draining a land area 90,000 hectares in size.

Today, primarily the rational use of chemical fertilizers is in the forefront of efforts to raise soil fertility. Results acquired both in research and practice reveal that chemical ferilizers applied on the basis of exact analytical determination of supplemental requirements of crops can raise the production increase due to fertilizer application by 15 to 20 percent over localities where this practice is not followed. One of the most important tasks in the activity of agrochemical enterprises in applying scientific and technical findings in the use of chemical fertilizers, and progressively also of manure, is to exploit as soon as possible this large reserve production potential in accord with the resolutions of the 13th CPCZ Central Committee Plenum.

Also worthy of consideration is the finding that productivity of our land can be increased by approximately 25 percent by intensive exploitation of the bioenergetic potential of the soil by maximum improvement of its organic component through fertilization and the choice of crop production structure and crop rotation practices which most benefit the upkeep and fostering of soil fertility. Of course, raising soil fertility by cultivating the most suitable crops and application of the right methods conflicts in practice with other important considerations which have to do with the geographical distribution and structure of crop production.

Several crops are so important that they must be grown regardless of their "fertilizing effect," frequently also under less suitable soil and weather conditions. In the case of other crops the important factor which must be considered in deciding on their geographical location is the distance from the processing industry, the market etc. But ample opportunity exists for the application of scientific and technical findings to intensify and increase crop production efficiency.

At the same time increasing soil fertility is one of the key conditions in taking advantage of the results of strain and seedstock improvement work. In this field the 13th Central Committee Plenum has placed emphasis primarily on reducing the time needed to improve biological material and accelerate the introduction of new proven crop strains and hybrids into general use for which we possess objectively more favorable conditions than capitalist countries with predominantly small farms.

In connection with this task our seed improvement stations aim at achieving in 1985 a cereal production potential exhibiting indicators comparable with the world standard, specifically with wheat seedstock yielding 9 to 10 tons per hectare, barley yielding 7 to 8 tons per hectare, corn yielding 10 to 20 tons per hectare and legumes yielding 5 to 6 tons per hectare which, even if met only by 60 to 70 percent of potential under production conditions promises to result in a dynamic increase of cereal production. In this effort greater emphasis must be placed also on improvement and productions, as well as on the qualitative characteristics of the grains, which goal is also being pursued by license procurement of biological material.

In the case of sugar beet the use of high quality seedstock is vital for economic reasons which can be achieved mainly by seed improvement work, propagating our own seedstock under optimal conditions of climate in other countries such as the Socialist Federal Republic of Yugoslavia. The objective to be attained in strain improvement work is to increase the sugar content of beet by 18 to 20 percent and reach a standard in the agrotechnical cultivation system and in harvesting which will yield 6 tons of refined sugar from a hectare of sugar beet, or roughly 20 percent more than the yield which our best sugar beet growers are able to achieve today. This would at the same time enhance the profitability of the sugar beet industry by better utilization of capacity and the reduction of processing expenditures.

Overall soil and ecological conditions in the SSR are most suitable for intensive raising of potatoes. But achieving self-sufficiency in potatoes is one of the specific political and economic objectives. The task assigned to plant research and improvement facilities calls for developing potato strains yielding 3.5 to 4.5 tons per hectare, increasing their resistance to extreme weather conditions and diseases, raising the starch content of industrial potatoes to approximately 20 percent, or by about 25 percent above the current content and raising the quality of eating potatoes.

With respect to bulk feeds research workers are expected to develop biological material with higher protein content and stabilize the yields of feed crops at 12 to 14 tons of dry matter per hectare, in the case of grasses at 7 to 8 tons of dry matter per hectare. Scientific and technical research work aimed at finding a comprehensive solution to harvesting, improving the storage life of bulk feeds and finding new preservation methods should yield feed quality guaranteeing a 7 to 8 liter milk yield per basic feed ration, a yield exhibited today only in our best agricultural enterprises.

In horticulture, in view of the necessity to increase not only the consumption of fruits growing in the mild climatic zone but also to achieve a measure of self-sufficiency, improvement work aims at developing high yield strains with high frost and disease resistance. Much has been lost by the failure to conduct adequate high quality studies of ecological conditions suitable for the establishment of large-scale fruit orchards, an objective which is now being pursued with increased emphasis.

In view of the biological nature of agricultural products, scientific and technical research aiming at prolonging the storage life of products is especially important. In this respect very encouraging results were achieved for example in the USSR by the application of the so-called electroionization technology in the storage of some agricultural products like fruits, vegetables, potatoes and other crops which exposes them to the action of ozone. This practice extends storage life, saves energy which would otherwise be required for cooling and decreases quality and quantity losses during storage and long-distance transportation.

The outlook is very promising for the development and practical application of growth stimulants which make it possible to influence specific developmental physiological processes of plants. The preparations are being produced by microbiological methods or by chemical synthesis. Such preparations stimulate the ripening process, raise harvest yields and improve the quality for example of cereals, fruits and vegetables, sugar beet, grapes and other crops on condition that they receive a balanced supply of nutrients during growth.

Animal Production

Our country now expects to take advantage of the world genetic fund also in cattle improvement work to achieve greater differentiation between breeds and crossbreeds raised for milk production of slaughter. The objective

is to improve the productivity of the biological material, to achieve a milk yield of 6,000 to 7,000 liters per cow, in cattle for daily weight gain of 1,200 to 1,300 grams per animal, and in breeders a yield of 110 calves per 100 cows, all indicators which are considerably higher than those achieved by our best cattle raisers today. The prerequisite for the exploitation of such high biological potential is the availability of feed of high quality, and adequate quantity in physical, chemical and biological form guaranteeing balanced nutrition of the animals. A number of other factors, mainly of technical, technological and organizational nature, influence large-scale cattle raising where international cooperation is likewise necessary.

The lack of a comprehensive approach to the solution of these problems in practice, the inability to control the effects caused by interaction of the biological material, feed, raising methods and technology are among the reasons why most of our large-scale cow barns lag far behind their expected yields and profitability.

The problem of reconciling biological, nutritional and technological requirements in intensive and economically efficient production exists also in large-scale sheep raising enterprises and some poultry raising enterprises. Essentially this is a result of a lack of mastery of industrial production technology.

Considerable gaps and bottlenecks exist in technical and technological systems in both crop and animal production, especially in the lack of comprehensive handling ability and efficiency of mechanical means of complete technical and technological lines. Smooth functioning of technical operations in the entire production process is especially important in raising the intensity and economic efficiency of agricultural production and attaining a desirable quality of products. Of special importance, moreover, is the time factor, the need to carry out these operations within agrotechnically optimal time periods, maintaining optimal intervals between feedings, milkings, etc. Therefore, in this area efficiency and reliability are prime criteria of scientific and technical progress and the quality of mechanization in agriculture.

Much room still exists in agricultural production for mechanizing operations carried out now by manual labor, automating stationary and some mobile processes, especially in animal production but also in crop production. Great reserves in utilizing mechanical means to better effect exist in replacing tractors with automobiles as a generally more rational means of transportation, which according to documents from the 13th CPC Central Committee Plenum would yield great savings in fuel and labor. Mechanized means must be used much more rationally in agriculture, machinery must be considerably better cared for and a higher standard and better division of labor must be achieved in repair shops.

Scientific and technical progress penetrates into agriculture also by way of such components of the material and technical base as are facilities for

raising animals, the processing of harvest crops and their storage, the storage of fertilizers, etc. In this regard the 13th CPC Central Committee Plenum again emphasized the necessity of following consistently a construction policy aimed at technically advanced, but at the same time economically advantageous, solutions by reducing material costs, increasing the use of prefabricated parts, utilizing a single design repeatedly, and reducing capital expenditures per unit of capacity. These criteria are also being applied in evaluating some construction projects which are to be built as part of the plan for the development of science and technology. But it appears that while there is no lack of initiative in practice, there is unfortunately also more dissension. The problem of rational utilization of manure from large-scale animal-raising enterprises to eliminate its negative effect on the environment has not yet been resolved satisfactorily. Therefore, improvement aiming at raising the technical and economic standard of agricultural capital construction are being specified which are designed to achieve marked improvement in the course of the Seventh Five-Year Plan.

Economic Stimulation

One of the problems is to raise the interest of the suppliers of seeds and seedstock, chemical fertilizers, agrochemical services, machines and technical installations, repair services and designers and builders of agricultural facilities in the final results and technical indicators to achieve a high standard of agricultural production. Here serious deficiencies still exist. Therefore, proposals dealing also with this serious problem are being considered in connection with measures designed to improve the system of planned management in agriculture.

No less important is to offer materially more attractive incentives to users of advanced technologies, and to keep alive their interest in using also other than material incentives to raise the technical and economic standard of agricultural production. In accordance with resolutions of the 13th CPC Central Committee Plenum, beginning with 1 January 1980 several economic measures have already been implemented which are designed to shore up not only the khozraschot situation of JZD's and SM's [state farms] in all conditions of production, but also to raise the quality of products and exert pressure for better utilization of chemical fertilizers, feeds and economy in the use of labor.

Our scientific and research potential must be further strengthened, especially its quality. The scope of professional training of research workers must be broadened, especially in the field of genetics, physiology, biochemistry and microbiology. Larger and more comprehensive research and development facilities must be gradually established where advanced scientific research laboratories and equipment can be put to rational use.

Research, Practice

Great potential reserves for increasing the efficiency of scientific and research efforts, and applying scientific findings in practice exist in

closer cooperation of agricultural research with research and development work places of other economic branches manufacturing means of production needed in agriculture where new technical findings can be practically applied. This is so especially in the field of agricultural engineering, agrochemistry, the pharmaceutical industry, the building materials industry, etc. This calls for further consolidation of the function of a unified plan of scientific and technical development, the coordinated development and utilization of international scientific and technical cooperation also in these branches, more frequent use of international probelm-solving teams, increased purchase of production licenses, etc. It is especially important to insure that expenditures designed to intensify industrial production are economically justifiable.

The call for faster introduction of findings of applied research in practice is justified. To that end agricultural research, including its technical, developmental and application components, must be further expanded and built up as has already happened organizationally for example in the seed improvement and production sector.

The principal role in transforming findings of scientific and technical research into usable production tools (seeds, animal breeds, feed mixes, machinery, fertilizers, etc.) must be assumed by scientific research, developmental and production organizations. By the implementation of scientific and technical findings of a nonmaterial nature and the integration of elements aimed at implementation into comprehensive management systems the role of our transfer organization--the Institute for Scientific Systems Management and its territorial netwoork of branches--will be further strengthened.

The knowledge and experience gained in implementing scientific and technical findings in our agriculture demonstrate that great delays still exist in developing and producing tested and proven research results, and that little of what is available is also being widely used in practice. This phenomenon must be countered more effectively by a comprehensive approach and coordinated procedure by economic management organs by integrating the efforts and means of scientific, research, developmental, design and production organizations, especially when they are part of different ministries.

The efficiency of work of these organizations, collectives and individuals should also be evaluated and assessed on the basis of stricter criteria. In user organizations good results are usually achieved where management workers are in the forefront of the struggle for the implementation of scientific and technical findings in practice, where the application of new findings and experiences is carried out flexibly and where the organizational effort for carrying projects to fruition does not weaken even when difficulties arise.

8664
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BRIEFS

ROSTOCK PORT EXPANSION--The Johnson Concern has signed a contract for a 500 million deal with the German Democratic Republic. Svenska Vag Inc will continue the expansion of the port at Rostock. This is half the order, approximately 250 million kronor. In return, A. Johnson and Company will purchase industrial goods from the German Democratic Republic for approximately 250 million kronor. The contract was signed last Wednesday in Leipzig. The deal means that the international division of Svenska Vag, the Johnson Construction Company, will be continuing the expansion of the port at Rostock. This time, the expansion concerns a general cargo harbor with three quay berths, storage building, crane lines, land work, etc. The concern last year got its first order, to the value of 360 million kronor, which involves the construction of a grain harbor. That project will be completed in the fall of 1982. The construction of the general cargo harbor will be started immediately and is scheduled to be completed by the end of 1983. The project will provide employment for 30 Swedish staff members and 125 construction workers at the site. The contract was concluded between, on the one side, Svenska Vag Inc --through the Johnson Construction Company--and the trading company A. Johnson & Co , and, on the other side, the foreign trade organization of the German Democratic Republic, Industrie Anlagen Import. A. Johnson & Co HAB recently opened an office in Berlin. [Text] [Stockholm DAGENS NYHETER in Swedish 5 Sep 80 p 32] 7262

CSO: 3109

ECONOMIC RELATIONS WITH DEVELOPING COUNTRIES DESCRIBED

Budapest NEPSZABADSAG in Hungarian 13 Aug 80 p 10

[Article by Janos Tormasi, main deputy chief, Ministry of Foreign Trade: "Our Economic Relations with Developing Countries"]

[Text] Extreme viewpoints about the importance of the economic relations we are maintaining with developing countries, and in the evaluation of the hidden potentialities in developing these relations, are not unusual. Overestimation of the importance of the relations and of their outlook for further development, as well as intolerable disparagement of the cooperation, can be found also.

The share of developing countries in total Hungarian exports in recent years has been somewhat over 8 percent, on the average. Of nonruble accounting exports, however, (including nonruble accounting exports to socialist countries) nearly 17 percent was directed to developing countries. The volume of our exports to several developing countries is competitive with that of our exports to important capitalist markets. For example, in 1979, Iraq was in fifth place among out nonsocialist exports, surpassing Great Britain, France and the United States, among others. In 1979 Kuwait, Syria, Algeria and Libya purchased as much Hungarian export merchandise as did Greece, Belgium or Finland, for example. Lebanon, Iran, Nigeria, Tunisia, India and Brazil are no less important buying markets.

The proportion of our imports from developing countries is somewhat less than our exports. It comprises nearly 6 percent of our total, and nearly 11 percent of our nonruble account imports. According to 1979 data, among our more significant suppliers, Brazil was in sixth position among nonsocialist countries, surpassing, for example, France and Holland. We purchased more from Iraq than, for example, from the United States or Sweden.

The developing countries' share in the exports of several product groups and in the imports of certain rather important merchandise surpasses the previously mentioned proportions considerably. For example, nearly 40 percent of our machinery exports for nonruble accounts is to developing

countries, and 55 percent of our nonsocialist imports of agricultural and food industry products originate from these.

Last Year's Results

We consider the 1979 results as favorable from the standpoint of our economic relations. The value of our exports to developing countries exceeded $700 million, which is 26 percent higher than the year before. Our imports amounted to $655 million, which exceeded the previous year's amount by 4 percent.

The composition of the trade also turned out to be favorable. Machinery, assembled equipment, vehicles, instruments and components comprised 35 percent of our exports, while another 21 percent consisted of bulk metal items and industrial consumer goods. The proportion of metallurgical and chemical industry materials comprised nearly 21 percent. The remaining 23 percent was composed of shipments of food industry products, live animals and other agricultural products.

The major portion of our imports consists of energy sources, raw materials and agricultural products which may be acquired economically from developing countries. More than 10 percent of our purchases consist of industry products, industrial consumer goods, tools, bulk metal items and, to a lesser extent, machinery. The proportion of food industry, semifinished and finished products exceeded 30 percent.

Last year more than 800 Hungarian specialist worked in developing countries, assisting the development of the national economies of the host countries. This is important from the standpoint of developing our economic relations. Nearly 60 citizens of developing countries received specialized training in Hungary.

The dynamic growth of trade continued during the first half of 1980. Our exports are expected to reach $850 million, and our imports to approach $707 million.

Tasks of Development

The intent of the policy to develop the economic relations which we are maintaining with developing countries was set down by the twelfth congress of the Hungarian Socialist Workers Party as follows: "We are further strengthening the mutually advantageous economic relations with developing countries. Within the realm of our capabilities, we are aiding them in consolidating their economic independence. Foreign trade with developing countries is to increase at a rate greater than the average."

The tasks are complex. We must continue to dynamically develop the value of exports to developing countries. The merchandise structure of exports is to be made more modern and more profitable. Thus, our attention must be concentrated primarily on two branches of our exports.

The exports of machinery, complete installations, vehicles, instruments and generally competitive and profitably marketable products manufactured with modern technology and specialized skill are to be increased. In harmony with the planned development directions of the Hungarian machinery industry and the growing needs of the developing countries, our exports must place greater stress on the deliveries of various production and service systems (agricultural, educational, public health, water and transportation).

In addition, in our many important buyer's outlets (Iraq, Kuwait, Libya, Saudi Arabia, Iran, and Nigeria) and many other developing countries, we have not nearly exploited the full possibilities of expanding our agricultural and food industry product exports. The most important condition for so doing is the expansion of our exportable merchandise bases. There are significant needs especially for cattle and beef, frozen chicken, sheep and lamb, as well as for goats and edible oils.

Through Improving Market Efforts

In order to implement the planned dynamic development of our exports, more careful work appropriate to the rapidly increasing demands must be performed as much in trade, narrowly defined, as in production. We must improve our exploration of market requirements and must adapt better to the customs and peculiarities of developing countries. Our enterprises must significantly improve their performance in order to exactly satisfy their contractual obligations, especially in respect to quality and delivery schedule. Through failures here, the enterprises will be forced to learn, through not only large direct losses, but rather through the loss of possible future business, that the developing nations market is also becoming more and more exacting.

We must explore more thoroughly and better exploit the most favorable export potentialities to the developing nations. It may be possible to replace other unfavorable foreign import sources with the supply available from developing countries. Energy sources and certain raw materials (unrefined phosphates, iron ore, raw rubber, wool, cowhide, etc) will continue to comprise the largest factors in our imports in the future. In concert with the development of the delivery capabilities and the growing requirements of the developing countries, however, the imports of processing industry products (primarily textile and leather industry merchandise, tools, bulk metal and simpler machinery) will also increase. At the same time, it also appears that, because of gradual saturation of our domestic needs, our imports of several tropical products (coffee, cocoa) will grow at a slower rate.

Long-Term Cooperation

We must place great stress on broadening longer term cooperative relations with enterprises of developing countries. The expansion or even the

maintenance of our market position over the long range is unthinkable merely on the basis of traditional export-import traffic. Above all, in the cooperative manufacturing of certain transportation vehicles, in the agricultural machinery manufacturing industry and in the area of agricultural production, possibilities for further implementation of cooperation are apparent.

Often the successful implementation of production cooperations requires that Hungarian enterprises participate in joint economic undertakings in developing countries and establish either their own or joint ownership enterprises. There have been a number of such initiatives thus far, but the development is slower than is desirable. Naturally, we must continue to exercise caution so that the burden and risk of such undertakings remain within our means and within the framework of economic sense. A good many impeding factors (for example, the relatively large investment necessary for just such undertakings; perhaps unfavorable local circumstances or requirements, etc) should not be disregarded. However, considerably more dynamic development of this form of cooperation is necessary to expand our economic relations.

9093
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IMPROVEMENT, SHORTCOMINGS IN TRADE BALANCE VIEWED

Budapest NEPSZABADSAG in Hungarian 24 Aug 80 p 3

[Article by Istvan Foldes: "What Is Welcome and What Is Not"]

[Text] The data of the first half year attest to the welcome improvement of the country's foreign trade balance. The import surplus of the first 6 months is exactly one-half of the previous year's. This is due as much to the nearly 4.5 percent decrease in imports as to the 3.8 percent increase in exports. The balance improved especially in the nonruble trade account. In this relation, the imports decreased by 7.1 percent, compared to last year, and exports surpassed last year's amount by 13.2 percent. As a result of this, the passive balance of the nonruble trade account dropped by an even greater amount than planned, to one-fifth of what it was.

The Chief Goal Is Realized

It is common knowledge that, appropriate to the direction chosen by the 1978 December resolution of the Central Committee, this year's national economy plan selected as its chief goal the improvement of the national economy's balance status, and primarily the improvement of the nonruble account foreign trade balance. The rate and proportion of production and domestic consumption are to be subordinated to this goal. The accomplishments of the first half year indicate the successful implementation of this economic policy. They are proof that the party's economic policy goal was realistic, and that economic direction utilized fundamentally appropriate methods to accomplish this goal.

Economic planners realized that the rectification of the foreign trade balance could be accomplished only through a temporary slowing of production, and to a greater extent, through a reduction in domestic consumption. Appropriately, the increase in the national income slowed somewhat even last year, and investment activity and the population's real income stayed at the 1978 levels. This year's plan was also expecting a relatively small increase in production--although exceeding that of the previous year somewhat--and a decrease in domestic consumption.

The production data of the first half of this year indicate that while the balance improvement is more favorable than planned, the growth rate continued to decrease. However, while last year the national income's failure to reach the planned level was basically caused by the stagnation of agricultural production due to unfavorable weather, the industrial production decrease in the first half of this year is caused by falling behind schedule. The gross production of socialist industry was 1.8 percent less in the first 6 months of this year than in the first half of 1979. Within this, the performances of the electrical energy industry and the building materials industry exceeded those of the previous year, food industry stayed even, but the other industry branches produced less than in the first half of 1979. The building industry's production decrease was greater than planned. Thus, The improvement, exceeding the plan, in the balance situation is in no small measure the result of the lesser import needs of a declining industrial production.

The industrial production decrease is not large scale, and the fact that it happened coincidentally with the realization of our other objectives (since the foreign trade balance improved, and the stockpiles decreased, rather than increasing even contains a certain positive element within itself. Nevertheless, it still indicates--and this is primarilly what is not welcome--that our industry's adaptation to the altered conditions is still slower than is desirable.

The lower domestic demand had to induce enterprises to endeavor to put their released capacities to use primarily in export-directed production, that is, to replace imports, The half year's data reflect that endeavors to improve the structure of industrial production undoubtedly increased. This was definitely revealed by the dynamic growth of exports. However, it was not enough to compensate for the decrease in solvent domestic requirements. If this development in industrial production--although it did improve the foreign trade balance, and in our situation today this is primary--were to become permanent, it would cause a standstill in our total development. This is not desirable at all.

Too Much Caution

The change in the regulation system, and especially the enterprise uncertainty caused by the new price system, undoubtedly had a role in the development of industrial production in the first half year. Because of late publication of production prices and the production price halt in the first quarter, many enterprises postponed the finalization of contracts. Caution was especially noticeable in enterprise investments. It is understandable that enterprises needed to survey their probably income situations and to formulate appropriate strategies. However, passivity is still discernable in places, although it became apparent that the income situation of most enterprises under the new price system is more favorable than they expected. There are some enterprises, however, which are struggling with either temporary or prolonged difficulties. The resolution of the situations of several of these is requiring central intervention.

In any case, that there are very divergent performances hidden behind the industrial or branch averages may be considered a favorable sign. In the machine industry, for example, in the first 6 months the Automobile Electric Equipment Factory and the Hungarian Ship and Crane Works produced 20 and 5 percent more respectively, while the Communications Technology Enterprise and the Office Machine and Refined Technology Enterprise produced 16 and 23 percent less respectively than during the same period last year. In the cotton industry, during the same period, Rabatext produced 5.3 percent more, while the Kobanya Textile Works produced 10 percent less. Shoe industry production increased by 2 percent, but within this, the production of the Szabolcs Shoe Factory increased by 30 percent, while that of the Duna Shoe Factory decreased by 2 percent. The furniture industry produced 1 percent more, but, for example, the production of the Cardo Furniture Factory was 12 percent greater, and that of the Bacska Furniture Industry Enterprise was 15 percent less than a year earlier.

We are not to be misunderstood as saying that enterprises are to be evaluated solely on the basis of the dynamism of gross production, since, for example, production decrease can be a temprorary phenomenon due to structure changes, and large scale production increases can also be the result of seasonal boom factors. The differentiation, however, is definitely a good sign of the beginning of realignment and is thus welcomed.

More Rapid Changes in Structure

The improvement of the production structure, to which the 1977 October resolution of the Central Committee referred with special emphasis, is naturally a multiyear--actually a continuous--task. Today it is quite apparent that the noticeable results of government and enterprise measures directed toward this end appear only years later. Even such relatively rapid and successful actions as investments supported by bank export development credits are mostly producing their significant export merchandise bases only after 2 or 3 years. (In any case, last year an income of $870 million was realized from the production of the investments implemented within the framework of this credit construction.)

Nevertheless, the past months of this year call attention to the fact that enterprise activities directed toward alteration of the structure are not nearly sufficient. This is so all the more because the possibilities for external balance improvement through reductions in domestic consumption have, for the most part, been exhausted. Thus the basic problem of economic development has become: how capable are enterprises in modernizing their production, in improving efficiency and in reducing their manufacturing costs.

It remains invariably true that the country does not prosper from production quantity, but rather that production's income generation is primary. We shall continue not to make a fetish of gross production quantity or of its growth rate. The national economy plans, however, are expecting that the temporary necessary growth rate decrease be accompanied by the reorganization of the production structure, by the facilitation of a more rapid development

of production and national income, and, along with it, by an increase in domestic consumption and the more rapid creation of the conditions of economic and social progress. Within this concept, of course, temporary growth stagnation may perhaps be desirable. It can only be permitted, however, if very active, efficiency-increasing, production structure-improving, cost-reducing, balance-improving effort is inherent in it.

Soon three-quarters of the year will be behind us. The part that has passed, or rather, the data which is available from it indicate that the fundamental endeavor of our economic policy is being realized--the external equilibrium of our national economy is turning out to be even more favorable than expected. As far as industrial production is concerned--this is the only thing discussed in some detail in our article--indications are that a recovery can be expected during the second half of the year, and that on the annual level, industrial production will equal or perhaps slightly exceed last year's level.

On the Eve of the New Five-Year Plan

Even greater activity and more initiative are needed for the proper preparation for the coming five-year plan and even more for the subsequent plans. Above all, the nearly 2-year long improvement trend of the national economy balance must be strengthened. The improvement in industrial performance and agricultural production which are expected to be appropriate to the plan can provide the opportunity for us to bring the country's foreign trade balance into equilibrium sooner than expected. While undoubtedly the development of the capitalist economy is not making the work of our businessmen easy--to say the least--the good experiences of the first half year indicate that it is possible to sell at a favorable price even under unfavorable market conditions, as long as the quality and technical characteristics of the products satisfy the purchaser's requirements, and if those active in foreign trade felixibly exploit the opportunities presented by the market.

With the end of 1980 not only the year is being concluded, but also a five-year plan period. Thus, in the remaining months we must work not only to improve the year's performance, but also to lay the foundations and make proper the preparation for the next 5 years. The party's 12th congress outlined the chief features of the next plan period, and the enterprises are continually receiving more information to carefully prepare their plans from the National Planning Office and the ministries. There is a need for planning and recommendations reflecting a sensible enterprising spirit--thinking and recommendations with which it is possible to genuinely alter and solidify our economy, make our work more effective and create the conditions for improving living conditions and the standard of living.

This is the ultimate goal. We view the stagnation of the standard of living as an unavoidable period in our economy, a period which we would like to have behind us as soon as possible. We know that this depends neither on our determination, but that world market factors also have an effect on when we may have our difficulties behind us. However, our conscience will only be clear if we do all that we can to more rapidly improve the production structure and to improve its effectiveness.

9093
CSO: 2500

DEPUTY MINISTER INTERVIEWED ON FUTURE OF MINING INDUSTRY

Budapest MAGYAR HIRLAP in Hungarian 7 Sep 80 p 5

[Interview with Dr Laszlo Kapolyi, deputy minister of the heavy industries, by Ferenc Vicsek: "Mining Is Competitive"]

[Text] Dr Laszlo Kapolyi was born in Ujpest in 1932. Between 1950 and 1962 he earned PhD's in general engineering, mining engineering, then in industrial economics. After 1951 he worked in planning institutions. From 1953 to 1976 he worked at the Tatabanya Coal Mines, first in the production departments, later in various management assignments, and finally as chief development engineer. He has been deputy minister of heavy industry since 1976. In 1968 he became candidate of technical sciences, and received his PhD of technical sciences in 1975. Since 1978 he has been honorary university professor of the Eotvos Lorand University of Sciences [ELTE]. In 1979 the Hungarian Academy of Sciences [MTA] elected him to corresponding [associate] membership.

Mining's growth cannot be studied solely on the basis of the general increase in the value of raw materials. This branch of industry, with its definitely high demand for investments, is unable to follow directly the strong fluctuations in the system of values. That is, changes in the economic status of mineral raw materials can be followed from one day to the next only at the cost of great scarifices. However, falling far behind the global value changes also requires similarly great sacrifices. Expansion in opening up the natural resources depends to an especially large extent on the national economy's production structure and on its expected changes. Therefore, each and every idea for the expansion of mining also competes with the modernization programs of the other industrial branches, while at the same time it is also closely interrelated with those.

Therefore the outlook for mining--which is, after all, a promising one--can be described only by taking these viewpoints into consideration. Our reporter Ferenc Vicsek talked with Dr Laszlo Kapolyi, deputy minister of heavy industry, about this.

[Question] Generally the development of mining derives from the growth of the economy. However, this might even lead to the conclusion that the miners can count on only a modest rate of expansion in the near future, since in the final analysis the projected very moderate growth in demand and the energy sources under construction do not justify vigorous development in opening up mineral raw material resources. Is this true?

[Answer] To answer this, the situation of mining's individual branches have to be separately examined. On the one hand, full or partial fulfillment of the increased demands is not the only task the development of mining has. In some cases it also has to substitute for or replace imports; and on the other hand the general goal is to achieve as high a degree of processing of the mineral raw materials as possible, and to use them comprehensively in as broad an area as possible.

To start with the energy sources of special significance, it can be concluded that our basic opportunities for satisfying the demand are: increased domestic coal production, further exploitation of the domestic petroleum and natural gas resources, nuclear technology also based on the domestic production of uranium ore, and the import of energy sources. However, the possibilities of combinative economic manipulation with them are narrowed down by the fact that our hydrocarbon resources are limited. Over the long range we can expect to maintain the present production levels only if our geological research is successful, and if the mining technologies are modernized. The perspectives of uranium mining are unquestionally in order. In the final analysis, we have mineral resources offering significant production expansion only in coal types. The known and expected resources make twice today's production level possible until the end of the 21st century. Why is this a decisive fact? Because, due to the given circumstances of the mineral resources, decreasing the import of energy sources can be counterbalanced only by increasing domestic coal production, as a realistic alternative. And in energetics the resources and users form an interrelated system, which cannot be left out of consideration in reshaping the structure of the country's energetics system. And, in addition to the commonly known changes in the system of values, reshaping the energy structure is justified also by the fact that the imported hydrocarbons can be used to greater advantage in the chemical industry, in petrochemistry--and the natural gas in metallurgy and in use by public entities--than in generating energy. Thus it is not expeditious to maintain the present energy production structure in which each year we burn several million tons of petroleum and several billion cubic meters of natural gas in power plants.

The means of modernizing energy production are: decreasing the growth rates of demand and of specific consumption, increasing the degree of processing hydrocarbons, construction of nuclear power plants, and increasing coal mining, all taken together. By decreasing the use of hydrocarbons in energetics their use in the chemical industry can be increased, because this serves the production of new and more valuable products to a greater extent than in the present. Thus, coal will take over the role of hydrocarbons removed in this manner from the energy policy. In the next 30 to 40 years, coal and the nuclear power plants can together, in a 50-50 split, cover the increasing demand for electrical energy.

[Question] What will be the extent of change this will mean in the country's energy structure between now and the end of the century?

[Answer] According to our studies, 3 to 4 million tons of petroleum or petroleum-equivalent natural gas can be replaced by coal per year: this much petroleum can be used for products processed on higher levels. However, in order to do this it will be necessary also, in the coal-based energetics--which has again earned its right to existence--to use such higher technological standards that there will be no mean "retrogression" in comparison with the use of hydrocarbons. By means of the combinative energy policy we can thus succeed by the end of the century--by modernizing the production structure--in satisfying 50 to 60 percent of the expected energy needs with domestic resources.

[Question] What role will our other mineral resources play in this combinative raw material policy?

[Answer] Here we must talk about two significant domestic mineral resources: bauxite and copper. Processing industries can be economically built on both, so that production is not being forced to import raw materials. The bauxite-alumina-aluminum industrial branch has successfully accomplished the development ideas. We have achieved such high production and processing standards based on the quantity and quality of the bauxite finds, and we have developed such a production structure--more precisely, we have the possibilities to further develop the production structure in such a way--as to offer exportable products in every phase of production. That is, all expenses of production are recovered in aluminum's world market price, and the world market is glad to receive this characteristically energy-demanding product. In the meanwhile, the development of production built on aluminum has become an integral part of the Hungarian industry's structure, and has become one of its outstandingly well developed branches. We have resolved most of the smelting within the framework of the Hungarian-Soviet aluminum agreement, based on mutual advantages. However, in addition to maintaining this, we have also prepared to increase several-fold the capacity of our own aluminum smelting, the basis of which is a possible approximately 20 to 30 percent increase in bauxite mining production.

Speaking of the perspectives of mining, we must also mention the copper ore find at Recsk. In addition to copper this also contains lead, zinc and valuable rare metals. Thus, a vertical processing industrial complex may come into existence based on copper ore mining which, when coupled with the production development in Csepel, may also create the merchandise basis for significant exports, in addition to fulfilling the domestic needs. And the lead and zinc obtained from the cooper ore will increase the domestic supply of nonferrous metals, primarily to replace some imports. In addition to all these, the mining of a number of nonmetallic minerals (pearlite, zeolite, dolomite, etc.) can also be competitively developed.

[Question] In the final analysis, such broad reliance on the domestic resources means industrial development which produces raw materials. Due to its high demand for investment, the expansion of mining ties down a signficant share

of the national economy's development resources. Thus, of these resources already in short supply, even less will be available for modernizing the processing industries; that is, this will conserve its production levels and structure.

[Answer] The profitable extent of increasing the production of domestic mineral raw materials is necessary precisely because of the national economy's modest development opportunities. In the final analysis, decreasing the import burdens will also serve to improve and modernize the processing industries. The combinative raw materials strategy already mentioned above, refers to this entire area.

The question is not whether we should develop the processing industry or the mining industry, but whether we should obtain the mineral raw materials for the possible development of the processing industry from domestic mines, or from imports. For the first alternative, domestic mines have to be established and operated. And for the second alternative we must take care of counterbalancing the imports by developing the exporting branches. However, it is characteristic for the present system of values that for example in the case of energy sources, domestic coal mining can be developed for half or one-third of the investments which would be necessary to counterbalance [equivalent] petroleum imports by the products of some export-producing branch of the processing industry. By supplying our energy domestically, the production cost is also lower than in the case of import purchase prices. If we will develop the domestic mining industry in this spirit, we will not be decreasing the opportunities of the processing industry, but--in contrast with relying on the import of energy sources--more of the development resources will remain available for the processing branches.

[Question] Will the number of people employed in mining also have to be increased with the opening of new mines, or will the character of mining undergo fundamental changes?

[Answer] Making sure that we have the necessary manpower is almost as difficult a task as is creating the finances needed to cover the expansion of mining. It would not even be possible to undertake this task without improving the safety of mining and increasing its productivity. However, in order to increase productivity, the industrial background of mining must be expanded to such an extent that it would not hinder the technological level of production.

Using the planned new mining technologies, mining's productivity may increase 2 to 2.5 times the present level of productivity by the turn of the century, including the old operating mines. The amount of raw materials mined will double in terms of tonnage, while employment will decrease in the branch by 20 percent. In the meanwhile the miners will have to become experts in several trades, who feel equally at home operating and maintaining the mining machinery. This growth is part of that unbroken process within the framework of which the generations of miners have created the capacity to meet the economy's raw material needs.

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SIX-MONTH FULFILLMENT OF 1980 PLAN ASSESSED

Warsaw ZYCIE PARTII in Polish No 8, Aug 80 pp 1-2

[Article by Stanislaw Gebala, deputy member of the PZPR Central Committee and director of the Central Committee's Trade and Finance Division: "At the Halfway Mark in the Implementation of the 1980 Plan"]

[Text] In evaluating the socioeconomic results of the first half of the year, it should be remembered that we began the current year with very serious stresses on many segments of management. Last year ended with relatively poor results in agriculture, and we failed to meet the planned production targets for a variety of manufactured products, as well as raw and other materials. Taking this into account the National Socioeconomic Plan envisaged a relatively conservative growth rate while at the same time placing the principal emphasis first, on harmonizing economic processes; and second, on increasing management efficiency. The degree to which the social aims of the plan will be implemented was made conditional on reaching these two goals.

Favorable Trends

In analyzing economic growth it is therefore necessary to monitor with equal attention both the completion of actual production tasks and the progress in strengthening stability and forming efficiency trends. In the first half of the current year, and especially in its second quarter, several favorable trends appeared in the economy, among which should be emphasized the generally successful implementation of the plan for the production of nonagricultural materials as well as restraining the unfavorable balance from the second payments area [capitalist countries].

In the period from January to June, 50.4 percent of the annual production plan for goods to be sold by industry was met, and in comparison with the first half of the previous year, that production rose by 7.0 percent. The factor leading to the improvement in the production rate was a significant improvement in the power industry. Interruptions in electrical service to industrial users were incomparably less frequent than in previous years. There was also an easing of transportation problems, which in the

previous year had so seriously hindered both the delivery of raw and other materials and the transportation of finished products from businesses, causing disruptions in supplies. In the first half of the year the basic production of construction and installation businesses grew by 3.6 percent, or 4.6 points more than the plan target.

In the attempts to harmonize the economy, the main effort was directed toward improving the balance of payments to nations of the second payments area as well as toward strengthening the balance of trade. In the first half of the year exports to capitalist countries increased by 30.1 percent in comparison with the same period last year. This should be considered as positive, while nevertheless remembering that the first half of 1979 was characterized by a relatively low level of exports. At the same time, imports from capitalist nations grew at a slower rate, i.e., about 14.8 percent. In fact, for the first time in this decade we attained a favorable balance of trade turnover with the second payments area, i.e., over 600 million foreign-exchange zlotys in the first 6 months. Prices are continuing to increase rapidly on the international capitalist market, while in the first half-year our average export prices rose somewhat more slowly than the prices we paid for imports. This signifies an unfavorable trend for us in the terms-of-trade index.

What Should Be Improved

A rapid, higher-than-planned growth in the population's monetary income during the first half of the year had a negative effect on money-market stability. Its primary cause was the exceeding of the planned wage fund, which in the first half of the year reached 7 billion zlotys. These excesses were particularly sharp in the first months. However, thanks to an improvement in wage discipline in May and June this phenomenon was significantly checked, and this should be regarded as a positive trend.

Exceeding of the wage fund was due primarily to continuing higher-than-planned employment. This exceeding of the wage plan would not in itself have so seriously affected market stability if it had been justified by additional production. However, it is estimated that the 2.6 billion zlotys in wages was not offset by higher-than-planned production results.

Overfulfillment of the payment plan was somewhat compensated for by higher-than-planned deliveries of goods to the market during the first 6 months. Nevertheless, this did not have any influence on relieving the stresses on all segments of the market since the composition of goods delivered to the market was not entirely in keeping with the plan. It is estimated that with respect to goods on three lists, the delivery shortfall in the first 6 months amounted to 12 billion zlotys.

One of the most important segments in which there has been no improvement is the meat market. This is associated with the nonfulfillment of the plan for procurement of slaughter animals. In comparison with the first

half of 1979, the procurement of slaughter animals diminished by 2.7 percent, with a resultant decrease in delivery of meat and meat products.

Despite a certain improvement, there were still numerous stresses during the first half of the year on the economy's materials-equipment supplies. A factor which further worsened the supply situation was the continued efficient management of stocks. A recent review of material supplies revealed a significantly higher level of supply irregularities than was indicated by enterprises which were included in the Chief Central Statistical Office's report at the end of 1979. In the course of the inspection, irregularities in materials supplies worth 41.3 zlotys were exposed. This included 11.8 billion zlotys in unnecessary supplies, and 29.5 billion zlotys in excess supplies.

In the first half of the year, the process of putting the investment front in order proceeded at a rate close to what was planned. Compared with the first half of 1979, investment outlays were reduced by 1.2 percent. Nevertheless, the outlay trend was unfavorable. The growth of outlays for construction and assembly work was too slow, while at the same time purchases of machines and fixtures grew too rapidly. One of the results of this was the increase in uninstalled machines and fixtures. This phenomenon was arrested in June.

The economy's weak point remains considerable inefficiency in implementing investments, leading to serious delays in fulfilling the tasks. During this 5-year period, we are seeing an increase in this phenomenon. The current average cycle of realization of capital expenditures, which in 1975 was 30 months, increased to 36 months in 1978, and to almost 39 months in 1979, despite the fact that in accordance with the assumptions of the plan it should have been shorter in 1979 than in 1975. No improvement has yet occurred in this area in the current year.

Delays in realizing capital expenditures also occur in apartment construction, an area which is of particular social importance. The lowest rate of implementation of the annual construction plan occurred in large urban centers.

All in all, despite the arresting of unfavorable trends in some areas, the state of the economy is still characterized by a variety of shortages and stresses. The leadership of the party openly points to the serious problems with which we are struggling, but which we can and must overcome. In addressing a recent meeting of the active members of the central political-economic committee, the first secretary of the PZPR Central Committee, Edward Gierek, declared:

"...We are dealing with serious problems, but we have considerable means for overcoming them. This requires considered, consistent and disciplined action from all of us. We have a good program of action. It was drafted in resolutions of the eighth congress and is being systematically implemented in government policy."

Implementation of Tasks

The conservation program became an important factor in these activities, as did the Sejm's recent resolution concerning further implementation of the current year's plan. It is worth remembering that the motive for this action and for the subsequently decided-on changes regarding certain tasks and actions of the NPSG [National Socio-Economic Plan] is the fulfillment of production targets in industry and other areas of activity in the face of limited imported supplies while concurrently emphasizing the growth of production based on native resources. These objectives were received with real understanding by ministries, unions and individual businesses. The result is that instead of the initially-planned lowering of industry's production assignments by 60 billion zlotys, adjustments of only 30 billion zlotys were made in the original NPSG targets. And it appears possible that this figure will be reduced during implementation, as indicated by the many initial steps taken by industry.

Foreign trade and market stability will remain areas of key importance in the second half of the year. In both instances, improvement depends first of all, though not only, on fulfillment of plans for material production, especially in industry. It depends not so much on general production increases as on greater discipline in implementing the plan for the structure of manufactured goods. In the first half of the year a significant shortfall occurred in production of goods for export, while at the same time the production plan for so-called remaining purposes was surpassed. Among other things, the actual need by national investors for machines and fixtures was exceeded. Export priority demands that we not only attain the planned quantities, but that we aim to exceed them. Stimulation of exports with a concurrent rationalization of imports is the only way to strengthen our nation's payments position.

The principal direction for growth of Poland's economic cooperation with foreign nations is toward the socialist countries, especially the USSR. The 34th session of CEMA, which took place in June and at which results of cooperation to date were evaluated, indicated new elements for its further intensification. For the second half of the year, the principal task of industry and of the foreign trade apparatus is to take maximum advantage of the possibilities of increasing turnover, particularly of our imports from socialist countries.

In activities aimed at improving supplies for the domestic market we cannot limit ourselves only to fulfilling the planned value of deliveries. The task of strengthening the stability of individual segments has now come to the forefront. What is involved is uncompromising adherence to the plan for the volume of goods to be delivered, as well as assurance of continuity of sale of basic food products and consumer goods. There are potential sources of additional production of a variety of market articles. These are, for example, the furniture industry, light industry, all types of cooperatives and other enterprises which are capable of producing goods

for the market, but have not yet done so. Increased labor-intensiveness is often necessary to take full advantage of these capabilities, and with it there are additional costs. The department of domestic trade is working on balancing these needs. They will be covered by, among other allocations, 450 million zlotys from the wage funds of the Committee for Market Affairs. Judicious spending of this fund may yield 2 to 2.5 million zlotys. The departments and cooperatives concerned have worked out concrete plans for increasing production of market goods, including food.

Cheaper Means More

The basic condition for accomplishing the targeted tasks in the second half of the year, as in future years, remains increased management efficiency. We have not noticed significant progress in this area in the first half of the year. Comprehensive efficiency measures must lead to fuller use of all production resources. Raw and other materials are the relatively scarcest elements of production at present; their shortage in many instances limits the degree to which production capabilities may be taken advantage of. We must intensify efforts to lower material-intensiveness, whose level is still excessive. There are also considerable reserves of inadequately-exploited labor resources. In comparison with 1979 there was an increase in the first 6 months of the current year in absences due to illness, as well as unjustified absences, and almost 10 percent of the nominal work time is unworked. We must manage our wage funds more wisely.

The most important point is to assure that while businesses aim at fulfillment of actual production plans, they at the same time aim at lowering the costs of production. In the plan for the current year, thanks to the decrease in individual consumption and the resultant decrease in material costs, the combined savings in industry and construction amounted to approximately 25 billion zlotys. This is a sum which may have substantial influence on limiting production costs and, indirectly, prices.

While working on lowering costs, it is essential to pay closer attention to the extreme losses whose totals tend to be increasing, indirectly reflecting the scale of the various irregularities in the operation of businesses. We must make the public clearly aware that the national income must be increased through a reduction in costs, in effect providing greater resources for consumption and development.

The tasks facing the economy in the second half of the year are not easy. The solution to current social problems will depend on the degree to which these tasks are fulfilled, as will the starting point of the new five-year plan.

9461
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PROBLEMS IN IMPLEMENTING HOUSING CONSTRUCTION PROGRAM DESCRIBED

Warsaw INWESTYCJE I BUDOWNICTWO in Polish No 7-8, Jul-Aug 80 pp 13-16

[Article by Aleksander Kapustka]

[Text] Among many vital problems discussed both in the pre-Congress discussions and during the deliberations of the Eighth Party Congress, implementation of the long-range housing program, one of the most important goals of the socioeconomic policies of the 1970's and 1980's. occupied a prominent place.

The housing program, comprehensively prepared and formulated in a resolution of the Fifth Plenum of the PZPR Central Committee and in a Sejm resolution dated October 19, 1972, set housing requirements for the 1970-1990 period at 6.9-7.3 million dwellings. This program, according to Environmental Development Institute forecasts for the individual five-year plans, is shown in the following table.

Table 1. (In thousands of dwellings)

(1) Lata	(2) Ogółem	(3) Miasto	(4) Wieś
1971—1975	1140	850	290
1976—1980	1550	1300	250
1981—1985	2150	1700	450
1986—1990	2430	1850	580
1970—1990	7270	5700	1670

Source: A. Kapustka, "The Substance and Time Frame of the Investment Process," Zielona Gora, 1978, p 23.

Key:
1. Years
2. Total
3. City
4. Village

This shows that 2,690 thousand dwellings were envisaged for the first ten-year plan, while during the second ten-year plan, 1980-1990, 4,580 thousand dwellings are to be built. The State's efforts in implementing the housing program as shown above were concentrated on preparing the

indispensable construction potential of erection-assembly enterprises, building prefabricated-elements factories and modernizing and expanding many industrial plants closely connected with the housing industry.

During 1971-1975, investment outlays for municipal and housing construction amounted to 326 billion zlotys, 71 percent more than during 1966-1970.

During the past five-year plan, 1,125 thousand dwellings, with a total floor space of 63 million square meters, were built. The plan goals set for 1971-1975 were fulfilled 104.2 percent, thus implementing 15.4 percent of the long-range construction plan projected to 1990. In comparison to the prior five-year plan, housing increased by 183,000 dwellings. The average size of dwellings also rose, from 42.8 square meters in 1970 to 47.1 square meters in 1975.

For 1976-1980, construction of 1,575 thousand dwellings was planned, including 1,193 thousand dwellings for socialized construction and 382,000 for individual construction. In addition, construction of 1,307 thousand dwellings for the non-agricultural population and 268,000 dwelling for the agricultural population was projected.

In comparison to 1971-1975, the present five-year plan envisages an increase of 450,000 dwellings, including 390,000 for the non-agricultural population. This large increase in planned housing construction is possible because of the completion, during 1971-1975, of 87 factories producing large-panel elements, and the construction, by 1980, of 79 house-construction factories.[1] The total production capacity of the prefabricated-elements factories, up to 1979, was 13.2 million square meters of dwelling space annually.[2]

Despite such large outlays allocated for increasing construction potential during 1976-1979, the annual housing construction plans were not fulfilled, especially multi-family construction for the non-agricultural population. During these four years, 73.7 percent of the five-year plan was fulfilled, with completion of approximately 1,161 thousand dwellings. Thus, for the last year of the current five-year plan, 414,000 dwellings remain to be built, or 26.3 percent of the plan goals for the entire five-year plan. The situation here is worsened by the fact that the largest backlogs arose in the large urban centers, such as Gdansk, Katowice, Wroclaw and Warsaw, where housing requirements, due to development of industry and services, are most critical.

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[1] M. Wawrzeniuk, Eighth Plenum, PZPR Central Committee, "Assessment and Developmental Trends in Housing Construction," INWESTYCJA I BUDOWNICTWO, 1977, No 9.

[2] Eighth PZPR Party Congress, "Basic Documents and Materials," KiW [Ksiazka i Wiedza], Warsaw, 1980, p 27.

It should be noted that during this period average floor space in dwellings increased by five square meters since 1975 and now totals 52 square meters in socialized construction. As a result, density rate per room dropped from 1.21 people in 1975 to 1.06 in 1979.

Another problem revealed itself during the current ten-year plan: lack of the facilities that must accompany housing construction, the social service facilities. The backlog from the 1970's, which amounted to 1.3 million square meters of floor space, increased by 45,000 square meters during 1971-1975. The plan called for 1,313 thousand square meters of floor space, but only 1,268 thousand square meters were completed.

Outlays for technical infrastructure were greatly increased during 1971-1975. They amounted to 154.7 billion zlotys, compared to 86.2 million zlotys during the preceding five-year plan. Despite the high growth rate of investment outlays for municipal management and expansion of basic technical infrastructure, provisions were not made in advance for land development. As a result, the share of land development taking place concurrently with housing construction is growing. In 1975 this share averaged 11 percent nationally; in 1976 it rose to 31 percent; in 1978 it was 40 percent; and it now stands at approximately 53 percent.[3] The above situation has a dysfunctional effect on efficient implementation of housing construction, because enterprises that are working on technical infrastructure and buildings on the same construction site frequently get in each other's way.

In accordance with the Eighth Congress directive, 1,700 thousand dwellings will be completed during 1981-1985, including 150,000 by modernization of existing resources. Reduction of investment outlays in the next five-year plan does not mean that the general policy of ensuring each family its own dwelling in the 1990's is being abandoned.

During the 1970's, the share of outlays for the housing industry, construction materials, land development and heating-plant systems in the entire national investment increased from 19 percent in 1971 to 30 percent in 1980. During 1971-1979, 144 house factories were built, which means that outlays now allocated to the overall housing industry can be designated for production of indispensable materials and finishing products. However, better use must be made of existing production potential in the industries co-producing with the construction industry.

Thus there must be a decided improvement of management efficiency in every sector in the 1980's. This is imperative not only because party resolutions and administrative orders mandate it, but also because internal and external conditions related to economical management of materials, raw materials and energy demand it.

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[3] W. Dabrowski, "Current Tasks in Housing Construction," NOWE DROGI, 1979, No 7 362, p 48.

The Eighth Party Congress outlined the strategic courses of action for the next five-year plan. It also committed all party and administrative units to broader action aimed at full implementation of the program outlined.

To implement the investment process, the party's resolution require:

-- improvement in operation and efficiency of investment processes,
-- increase in work-shift rate in the building materials industry,
-- a higher level of operation and utilization of machinery, equipment and transport means,
-- reduction in unit standards of materials and raw materials consumption and improvement in materials management efficiency and inspection of on-site materials consumption,
-- reduction in implementation cycles,
-- improvement in construction quality,
-- reduction in prime costs,
-- increase in labor productivity by improvements in organization and elimination of manual labor,
-- wider application, in addition to large-panel technology, of other material-conserving and energy-conserving technologies that would permit better utilization of the production capacities of construction-materials plants and of local raw materials,
-- strengthening of the role of the investment plan, increased financial discipline and increased efficiency in the inspection system,
-- improvement in economo-financial instruments in order to more effectively enhance public management efficiency.

It appears from the above that to ensure implementation of the primary socio-economic goals, broadly conceived organizational and techno-economical incentives must be skillfully introduced into management practice.

As concerns improvements in organizational efficiency, in accordance with the Party Congress' decision, a broad assessment of the economo-financial system's present state of planning, management and functioning must be made. Past analyses have shown that the main source of inefficiency in the investment process is improper organization and management, excessive splitting-up and formalization of all decisions, inflation of organizational structure on all levels and lack of proper coordination.[4]

An important factor interfering with the efficient course of the investment process is the failure to observe scientific organizational procedures, especially underrating the preparation stage in the investment process, to which much more effective labor time should be allocated than has been done heretofore (the author's studies show that 37-42 percent of effective labor time should be allotted for this purpose).

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[4] A. Kapustka, "Investment Paradoxes," PRZEGLAD TECHNICZNY-INNOWACJE, 1978, No 3 and "Organizational Dysfunctions in Investment Processes," PROBLEMY ORGANIZACJI, 1979, No 2.

Only after mistakes in the investment process are completely diagnosed can specific efficiency-promoting suggestions be developed. It appears that the ultimate aim, particularly in relation to the smaller voivodships, which will be most appropriate to local needs and capabilities, will be an organization of voivodship general construction plants. Such an organization would be in accord with the text of the PZPR Central Committee report presented at the Eighth Party Congress and would comply with the main trends of the already-begun decentralization of certain powers to the voivodes.

A great deal of improvement in construction is possible by selecting the proper technology for construction of buildings, their location, number of stories, by economical and efficiency management of materials and energy and utilization of on-site equipment, etc. According to W. Bien's [5] studies, traditional (cheapest) technology's share has dropped from 12.7 percent in 1970 to 1-2 percent in 1980; large-block construction also dropped, from 60 percent to 11 percent. These technologies are being replaced by the large panel, which is also the most expensive. In 1980, 80 percent of all buildings will be built using large panels. Apart from the emergence of a so-called monoculture in Polish housing construction, the investment cost of large-panel technology in housing construction is too high. One solution would be the introduction, to a larger degree than in the past, of a monolithic technology, which is more economical from the standpoint of materials consumption. It provides, for example, a 50 percent savings in cement, 20 percent in steel, and also in transport and manpower.[6]

From among many technical factors we will indicate still one more, namely the share of multi-family buildings over five stories high, which increased from 31 percent in 1970 to 44.4 percent of total construction in 1978. Aside from higher construction costs (an average of 20 percent), maintenance costs of multi-story buildings are also higher: 30 percent more for 6-10 stories, 25 percent more for 11-13 stories, and by as much as 60 percent more for buildings over 14 stories.[7]

It is not possible to discuss in one article the effect of other technical factors in promoting better utilization of materials and raw materials, better utilization of construction equipment, elimination of stoppages at many construction sites for various reasons. There is much room for improvement here.

Serious losses in construction occur as a result of poor quality of construction and the necessity for corrective work. Such losses are estimated at

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[5] W. Bien, "Some Conditions for Implementing the Housing Program," NOWE DROGI, 1979, No 3, p 74.

[6] B. Regulski, W. Skwarko, "Steps to a Dwelling." PRZEGLAD TECHNICZY-INNOWACJE, 1980, No 11, p 12 et seq.

[7] W. Bien, "Some Conditions for Implementing the Housing Program." NOWE DROGI, No 3, 1979.

1 to 5 percent of total costs, which indicates the seriousness of the problem. The problem of quality in all construction, so strongly emphasized during deliberations of the Eighth PZPR Congress, requires more searching analysis. The quality of construction-assembly work, finishing work, etc., is affected not only by the work of the builders themselves, but also by the work of many enterprises supplying poor-quality raw materials, other materials and technical equipment. This situation will not improve merely by publishing more rules,[8] which are not being observed.

In the author's opinion, improvement in quality of housing construction requires basic changes in inspection and control.[9]

Improvement in quality of construction-assembly work and materials requires a number of actions, starting with planning, which also includes comprehensive indexes on quality, durability and reliability of materials and equipment and a system of rewards and vocational training.

The housing construction program is, in accordance with an Eighth Congress resolution, a political program aimed at solving an acute social problem, There is no place in this program for any kind of waste or lack of efficient management.

In implementing the socioeconomic strategy outlined by the Eighth Party Congress, the human factor, its attitude and commitment, and receptivity to innovations, will have a deciding influence.

Motivation, in the broadest meaning of the word, is a very important problem in developing a creative attitude, both in the managerial staff as well as in all enterprise personnel. The task of the motivation system should principally be the integration of all enterprise personnel towards implementing the assigned main goal by coordinating and directing the individual goals of its members. The broadly drawn motivation system should allow for initiative, ingenuity and commitment of the personnel. It should encourage the managerial staff to introduce innovations, apply modern management methods, take risks in management operations, etc. Very often the motivation problem, both in practice and in literature, is confined to the economic sphere, particularly to wage incentives. Without minimizing the value of economic instruments, such opinions should surely be regarded as improper for they simplify the problem. J. Pajestka's statement appears

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[8] In addition to the construction code, Government Presidium decision No 42/77 dated April 15, 1977 was recently issued on improving housing construction quality, and also a law dated February 8, 1979 on quality of construction produces, services, works and buildings (Law Journal, 1979, No 2, item 7).

[9] This subject has been discussed in another article: A. Kapustka, "Quality Control in Housing Construction," INWESTYCJA I BUDOWNICTWO, No 4, 1980.

to be correct when he writes: "Reducing motivation factors simply to narrowly conceived material incentives is a damaging simplification and even distortion, undermining not only the meaning of socialism, but also the meaning of those human values that shaped the modern civilization."[10]

The motivational driving force under socialistic conditions is the striving for humanization of labor and for society's ever-fuller participation in the process of efficient management and creation of the future. The basic condition for success in implementing the investment process should be skillful cooperation with personnel, creating a climate of joint responsibility of the entire working collective for implementation of investment, replacing rigid orders and prohibitions with positive incentives, both moral and material. A positive role can be played here by consistent management and direction of working teams using a method described in the literature as "management by objectives." Implementation of investment as an all-social objective is announced to individual working teams, allocating them means and powers. Partial objectives should be accurately formulated also from the quantitative standpoint, and then a responsible accounting of their performance should be made according to the same rules.

Humanization of labor, about which so much has been written lately, is also the adjusting of working hours to actual conditions, good organization in transporting workers to the job site, creating proper living conditions for them, ensuring complete work safety, etc.

To motivate working teams by using economic instruments, it is necessary first of all to clearly define the bases for calculating rewards for performing a task. Any complications or inconsistencies in this area cause needless bitterness and alienation of workers. By way of example, the rewards for workers paid by the flat piece-rate system should not be changed, regardless of the amount of money earned by the work gang if it is doing its job properly. The measure here should be that the assigned job is done on time, of good quality, and with materials savings.

Responsible introduction of a motivation system should include all participants in the investment process, and particularly the contractors, suppliers of machines and equipment, the design offices, and investors. Such a broadly conceived investment process systems motivation will help reduce the red tape between these units, eliminate needless documentation, cost estimates and copious correspondence, and create "psychical bonds" which will have a positive effect on harmony in investment implementation.[11]

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[10] J. Pajestka, "Factors and Interdependence in the Country's Socioeconomic Development," Warsaw, 1975.

[11] M. Kostrzebski cited some advantages of introducing an actual and not just a formal motivation program. "Controlling Investment Processes," in "Decyzja -- Analiza Systemowa Organizacji." Collected works, A. K. Kozminski, Editor, Warsaw, 1979, pp 172-191.

9295
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AGRICULTURAL DEVELOPMENT IN 1950-80 PERIOD REVIEWED

Bucharest REVISTA ECONOMICA in Romania No 31, 1 Aug 80 pp 5-7

[Article by Oprea Parpala: "23 August 1944--23 August 1980--A Period of Profound Transformations and Superior Results in Romanian Agriculture"]

[Text] Thirty-six years ago the Romanian people set out on a fundamentally new path of socioeconomic and political construction--the path of socialist revolution in all domains of activity. In those years radical changes have taken place in the whole socioeconomic configuration of the country, essential mutations have occurred which have propelled the economy and the Romanian society to hitherto unknown levels of progress and civilization.

The historical event of 23 August 1944 opened radically new perspectives for the modernization and accelerated progress of agriculture, thus laying the cornerstones for its socialist transformation. At the same time it should be stressed that the basically new elaboration of the Romanian concept of socialist agrarian policy took place at the Ninth RCP Congress on the bases of the reconsideration of the role and the functions of agriculture in relation to the whole economy, the objective of transforming agricultural labor into a form of industrial labor and the content, the necessary stages and the ways of carrying out a profound agrarian revolution in Romania, which would contribute substantially to the economic and social progress of the country, to the prosperity and happiness of the people.

From Quantitative Accumulations to Qualitative Transformations

The Ninth RCP Congress took place at a moment in which--as early as 1962--the socialist relations of production had been generalized in Romanian ag agriculture. In this context the concept appeared according to which the full and final victory of socialist production relations in the villages was considered to be the conclusion of the socialist agrarian revolution with the result that the new, socialist relations, by their nature alone, would automatically prove their superiority, generating ever greater yields

and superior economic efficiency. Applied in practice, such an understanding of the content of the socialist agrarian revolution would have doomed Romanian agriculture to technical backwardness, to development at a snail's pace, which, consequently, would have deepened the differences (contradictions) between industry and agriculture, village and city, between workers and peasants. As a matter of fact, during the 15 years before the ninth congress, agriculture received limited investment funds and certain phenomena of distrust in the peasant's capacity to use modern technology, based on chemicalization, irrigation and mechanization, also manifested themselves.

It is the historical merit of the RCP secretary general Comrade Nicolae Ceausescu, that, beginning with the elaboration of the documents for the Ninth RCP Congress, he militated with vigor and creative thinking for the implanting of a new concept of agrarian development in socialism, a concept according to which the socialist agrarian revolution does not end with the victory of the new production relations, but has to be continued and supplemented naturally by revolutionizing the technical and material base of agriculture, the methods and forms of organizing labor and directing production, according to the stage attained in the development of the factors of production, by perfecting the relations of production on a continuing basis. Such a concept of the ways to carry out a profound agrarian revolution also corresponds to the direction of the evolution of the population agricultural land ratio. But, under the conditions prevalent in Romania, demographic growth surpasses by far the possibilities for expanding the agricultural area (with trends toward reducing the land supply per capita). At the same time, the sharp decrease in the population involved with agriculture increases the portion of agricultural land per person working in this branch. The combined influence of the two factors can lead to only one logical and necessary effect: an increase in investments per unit of land in order to increase continuously both the yield per hectare and the technical equipping of agricultural labor, to raise labor productivity at least in accordance with the increase in land per person working in agriculture.

This is why the 1965-1980 period is, first of all, a period of significant quantitative accumulations in expanding and modernizing the technical-material base of agriculture. This new reorientation was based upon a consistent investment policy (mainly of state funds but also of the funds of the agricultural units) which insured the technical progress required by this branch: mechanization, chemicalization, irrigation, development of animal breeding, production of high-quality seeds, planting material and reproduction animals.

We believe that, in order to appreciate the dimensions of this increase, the figures in Table 1 do not require any comments. They reflect, without any doubt, the progress in developing the technical-material base of our agriculture. A number of other considerations support this idea.

Table 1. Evolution of the Technical-Material Base of Agriculture During the 1950-1978 Period

Indicators	Unit of Measure	Years 1950	1965	1978	1978 Compared to 1950 (in percent)
Total agricultural area	thousand hectare	14,324	14,791	14,965	104
per person working in agriculture	"	2.3	2.7	4.5	196
per inhabitant	"	0.9	0.8	0.7	78
Investments-total	mil. lei	668	7,666	26,540	40 times
per agricultural hectare	"	47	519	1,773	38 times
per person working in agriculture	"	108	1,398	7,940	74 times
Fixed funds-total	bil. lei	41.0	65.2	175.5	428
per agricultural hectare	"	2,867	4,408	11,727	409
per person working in agriculture		6,600	11,905	92,468	795
Traction power-total	ths. HP	--	4,171	8,427*	202
per agricultural hectare	"	--	0.3	0.6	200
per person working in agriculture	"	--	0.8	2.1	263
Physical tractors-total	Pcs.	13,713	81,356	138,840	10 times
arable hectare per tractor	"	684	121	71	10
Consumption of chemical fertilizer	ths. tons	5.9	266.4	1,111.1	188 times
per arable hectare	(active subs.)	0.6	27	113	188 times
Irrigated arable area	ths. hec.	--	213	1,736	815
percent of total	percent	--	2.2	17.8	--
No of cattle-total	ths. head	4,502	4,935	6,511	145
per 100 hectare	"	32.4	34.9	45.9	142
per capita	"	0.3	0.3	0.3	100
No of swine-total	"	2,197	5,365	10,337	471
per 100 arable hectare	"	23.4	54.7	105.7	452
per capita	"	0.1	0.3	0.5	500
No of sheep-total	"	10,222	13,125	15,612	153
per 100 agricul hectare	"	71.4	88.7	104.3	146
per capita		0.6	0.7	0.7	117
No of poultry-total	"	17,610	40,085	99,725	566
per 100 hectare with grain	"	254	592	1,580	622
per capita	"	1.1	2.1	4.6	418

* 1975 Source: Statistical Yearbook of the Socialist Republic of Romania, 1979, Central Directorate for Statistics

During the 1965-1978 period the investments allocated to agriculture were over 200 billion lei, which is about 3.5 times the investments during the whole 1951-1965 period. On that basis, a strong increase was registered in the technical equipping of labor (no matter which element we are referring to--fixed funds, traction power, consumption of chemical fertilizers, irrigated area or numbers of production animals. If, as far as the consumption of chemical fertilizers per hectare of arable land is concerned, Romania has gone half-way toward reaching the level of the developed countries; according to the size of the irrigated area and its proportion to the total arable land, Romania holds one of the first places in Europe.

But, it would, to say the least, be erroneous to measure this period only by the quantitative achievements since, at the same time, significant qualitative transformations have taken place too. As a matter of fact, the very objective of our future development--to achieve a new quality in all domains, including agriculture--does not exclude, but requires, the existence of qualitative changes which have already been made in the course of the development of agriculture to date. We will mention only a few of them.

Thus, the slight expansion of the agricultural land was mainly achieved through the most intensive categories of use (such as vineyards and orchards), marking a qualitative improvement in the use of soil. The same tendency, toward new quality, was also indicated by the structure of the cultivated areas. The reduction in the areas planted with grains was accompanied by the expansion of those cultivated with technical- and leguminous plants. The modifications registered within various crop groups confirm the same qualitative orientation. Within the grain crops, while maintaining the priority given to growing seed corn, barley has started to expand. There was a considerable expansion in the category of the leguminous seed crops, soybeans and in the technical crops group, sugarbeets and sunflowers. Significant changes took place in the fodder crops, with an increased share of the perennial leguminous crops (lucerne and clover). The expansion of fruit-tree and vine plantings was made under the circumstances of clearing large surfaces from the old plantings and reestablishing intensive plantings.

Generally speaking, the quantitative increase per unit of land of all elements of the technical-material base of agriculture brought about important steps toward qualitative transformations, since it gave agricultural production an increasingly intensive character. The qualitative element manifested its presence in the whole process of quantitative accumulations in our agriculture. For example, the structure of investments shows a tendency to increase the share of those investments intended for the active part of the fixed funds (equipment and machines) and to decrease the share of investments for constructions. In the structure of the traction power, the machine traction has become

predominant and, within it, an increase in the share of the means of transport and stationary engines intended for zootechny and irrigations, has been registered. Important sectorial changes also took place in the structure of fertilizer consumption, in the favor of the cooperative sector of the agriculture, with a view to standardizing the conditions of production on a given territory. The liquidation of the big discrepancies in distributing the consumption of chemical fertilizers, territorially and for crops was also started, and a more balanced ratio among nitrogen, phosphorus and potassium was assured at the same time. Setting up land for irrigations both the obtaining of a rational proportion between the big systems and the local systems and the use of more economical methods of irrigation are considered. In the field of animal raising an increase on a priority basis of the meat-producing species and categories is noted. At the same time, research and production were oriented toward the creation and use of new varieties and hybrids of plants and toward the improvement of animal breeds, in order to increase their production potential.

Professionalization of the Labor Force

Under the impulse of the development of the whole national economy and of the increase of the technical-material base of agriculture, the agricultural labor force has registered a double process: a (absolute and relative) reduction and an increase in professional training.

The significances of the accelerated decrease in the population involved in agriculture are multiple, but the transformation of simple work into complex work is of special interest. The decrease in the population involved in agriculture (see Table 2) is not a simple quantitative transfer, but implies important quantitative transformations for the population left to work in agriculture because its decrease in number takes place in the framework of an increase in the technical endowment of the agricultural work--which, in its turn, requires an increase in the technical training of all agricultural workers especially since the new technology is also generating new trades. We have in mind not only such "top" professions in the villages like those of tractor driver or agricultural mechanics, but also those which concern the large mass of cooperative members: animal tenders, vegetable growers, fruit-tree growers, horticulturalists, etc. This is the reason why the problem of developing and improving agrozootechnical mass education has become a component (approved by law) of agrarian policy in our country, permitting a qualitative leap from the former individual peasant to the new peasant, a specialized agricultural worker, who cooperates in the work process with the other agricultural workers.

At the same time, agricultural specialists (with intermediate and higher studies) have a decisive role in rationally organizing production, in using modern technologies with a view to increasing production and efficiency. This also explains the special attention paid to the equipping

Table 2. The Agricultural Labor Force During the 1950-1978 Period

Indicators	Unit of Measure	Years 1950	1965	1978	1978 Compared to 1950 (in percent
Population employed in agriculture-total	thousands persons	6,209	5,477	3,345	54
Share of agricultural population in the total employed population "		74.1	56.5	32.5	X
Agricultural specialists total, with:		11,152*	24,148	41,667	374
intermediate education		5,825	12,712	17,923	308
higher education		5,327	11,436	23,744	446
of which:					
agronomists		3,880	7,270	11,663	301
zootechnical engineers		612	1,625	3,107	508
veterinarians		401	811	3,196	797
mechanical engineers		434	785	2,632	606

*Data refer to year 1960

of agriculture with an ever larger number of specialists, so that, today compared to 1965, an agricultural specialist with higher studies is responsible for an area half the size. Among these, a special place is occupied by the research cadres, creators of new varieties and hybrids of plants and improvers of native animal breeds, as well as the teaching staff whose links with production contribute to the raising of the level of development of the whole agriculture.

The Constant Perfecting of Production Relations

The scientifically based agrarian policy starts with the idea that the development of production forces also necessitates the perfecting of production relations, permitting a more efficient use of the production forces. In this context, our agrarian policy, established in a superior way at the ninth congress of the party, on the basis of the idea that the agricultural enterprises (state-owned and cooperative) remain the basic units of the agriculture, encouraged and supported the expansion and development of various forms of cooperation and association in work and production, up to the superior forms currently established by statute in the form of the intercooperative economic association or of the

association (cooperation) between the agricultural production cooperatives and the state units or the consumers cooperative units. Apart from the positive economic effects, thanks to increased possibilities for developing production forces, these new forms of association make their contribution to the appearance of new, more comprehensive, forms of ownership in agriculture: intercooperative ownership, in the case of the intercooperative economic associations; joint state and cooperative ownership, in the case of an association (cooperation) between the CAP (agricultural production cooperatives) and state units. Such new elements of the agricultural patrimony represent important steps towards bringing closer and transforming the two forms of ownership in our agriculture-state and cooperative into the property of the whole people.

The same priority objective under the circumstances of bringing closer, in advance, production conditions in the CAP and the IAS (state agricultural enterprises) is pursued by the constant perfecting of the leadership bodies of agriculture. The united state and cooperative agroindustrial councils (which have their roots in the specialized territorial councils and, then, in the intercooperative councils) are the specific form, according to Romanian conditions, of economic and social integration in agriculture.

The Consequences of the Policy for Modernizing Agriculture

The revolutionizing of the technical-material base of agriculture, under the circumstances of the raising of the professional training of all agricultural workers and of providing an ever larger number of agricultural specialists, had a positive influence on the increase of labor productivity and, of production, and on increasing the contribution of agriculture to the increase in the national revenue, to the improvement of the living conditions of the whole people etc.

The quantitative increases (see Table 3) were, in this respect also, accompanied by qualitative changes. In this way, labor productivity has become the main factor for increasing agricultural production, giving our agriculture the essential features of a modern agriculture: Moreover, in its average annual rate of increase of overall agricultural production (6.0 percent during the 1966-1978 period) Romania holds one of the first places in the world. At the same time, the more rapid growth of zootechnical production as against the vegetable production expresses the qualitative changes occurring in the structure of overall agricultural production, by increasing the share of animal production (from 36.3 percent in 1965 to 44.3 percent in 1978), which is becoming and should become the priority branch of Romanian agriculture.

[illegible] most obvious proofs of the qualitative transformations occurring in the evolution of the Romanian agriculture is its increased contribution to the growth of the national revenue.

Table 3. Results of the Process of Intensifying and Modernizing Agriculture During the 1950-1978 Period

Indicators	Unit of Measure	Years 1950	1965	1978	1978 Compared to 1950 (in percent)
Gross agricultural production-total	bil. lei	37.0	71.4	127.9	346
of which:					
vegetable	"	22.1	45.4	71.2	322
animal	"	14.9	26.0	56.7	378
Net agricultural production		22.9	38.6	62.2	272
Labor productivity expressed by:					
gross output	lei per person	5,960	13,036	38,236	642
net output	"	3,688	7,048	18,595	504
no. of persons fed by an agri-worker	by person	2.6	3.5	6.8	262
Physical production of the main agricultural products:[1]					
Grains-total	thousand	8,232	10,887	19,126	232
wheat	tons	3,338	4,416	6,529	196
corn	"	3,965	5,853	10,635	270
Sunflower	"	266	504	806	303
Sugarbeet	"	1,293	2,637	6,334	490
Vegetables	"	1,590	1,657	3,500	220
Fruits	"	590	919	1,374	233
Grapes	"	793	908	1,439	181
Meat (on hoof)	"	695	982	2,250	324
Milk	thous. hl	23,476	31,636	31,625	135
Eggs[2]	million	1,100	2,630	6,650	605
Yield of the main agricultural products, per capita:					
Grains	kgs	316	682	368	275
Sunflower	"	13	30	37	285
Sugarbeet	"	36	158	267	742
Potato	"	98	115	204	208
Meat	"	40	59	111	277
Milk	liters	141	171	176	277
Eggs	per egg	67	138	304	454
Exports of agrofood products:					
Raw materials for food production	thous lei currency	148	510	1,703	12 times
Food commodities	"	181	919	3,581	20 times
Average net compensation (lei/mo)		243	939	1,994	821
of agricultural working cadres					
All pensioners	thousand	--	1,281.0[3]	1,265.4	99
CAP pension fund	million lei	--	941.6[3]	2,415.6	256

1) Average for 1951-55; 1961-65; and 1976-78; 2) 1950, 1965, 1978; 3) 1970

The development of the production forces, under the circumstances of perfecting production relations has allowed a steady and balanced increase of the production in all the specific branches and sectors of Romanian agriculture, with a view to assuring the complete self-supplying of the population's consumption, on the basis of scientifically substantiated norms. Thus, grain production (mainly, corn and wheat) has continued to receive special attention, as being the pivot around which all the other agricultural sectors are developing (especially animal-breeding). The need to improve the structure of food consumption by developing intensive branches, specifically for Romanian agriculture has led to a significant increase in the production of vegetables, grapes and fruits. Within animal production, a significant increase has been recorded by meat production, as a basis for improving the structure of the population's food consumption.

The qualitative changes registered in the structure of agricultural production were, naturally, reflected also in the structure and evolution of the production and of the consumption of the main agricultural products per capita. While potato consumption remained almost the same, and grain consumption decreased, the consumption of vegetables and fruits, especially meat and eggs (suppliers of protein of animal origin) have registered the largest increase. If, in its per capita production of various agricultural products (first of all, grains) Romania is close to the level attained by the developed countries, the evolution of the food available each day per capita (in calories and grams of protein) situates our population among the peoples of the world best provided with food resources, this being a guarantee for developing a vigorous people, with a work capacity (physical and intellectual) up to the level of the demands made by the present technical and scientific revolution.

The increase of the production capacity of Romanian agriculture is also attested to by the increase in goods available for export, especially as processed food commodities, with a higher export efficiency.

In conclusion, the 1950-1980 period is the period of a special dynamism in the development of Romanian agriculture, the period in which the significant quantitative accumulations in developing the technical-material base and training specialists gave rise to qualitative changes, a premise for the transition--in the 1981-1985 five-year plan--to a new quality, which took concrete form in a substantial increase in harvests and agrotechnical yields, in the elevation to a superior level of the economic activity carried on in this basic branch of the Romanian economy.

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ROMANIA

PROVISIONS OF FOREST CONSERVATION, DEVELOPMENT PROGRAM

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/Article by Viorel Hampu and Petre Cioclu: "A Resource That Must Be Exploited and Used as Efficiently as Possible: Wood"/

/Text/ On the basis of the decisions of the 11th party congress, on the initiative and instructions of the secretary general of the party, Comrade Nicolae Ceausescu, there was drawn up the National Program for the Conservation and Development of Forest Resources in the 1976-2010 Period, which, after being subjected to public discussion, was adopted by means of Law No 2/1976. The program contains, in a unitary view, the measures that are required in order to rationally manage the forest holdings, to introduce a normal rate of cutting and regeneration of the forests, to raise their productivity, to improve the protective functions of the forest. The implementation of the measures in the program will provide for the practicing of intensive silviculture, the raising of its contribution to the development of the national economy, to the conservation of the environment.

We present below an analysis of the way in which the main tasks contained in the program with regard to forest management are being fulfilled and the results obtained in the years that have passed since its adoption.

A First Component: the Area and the Structure of the Forests According to Species

One of the most important provisions of the program refers to maintaining in the future the forest resources at least at the current area. This provision has been and is being fulfilled, so that at the start of 1980 the area of the forest resources was 6,334,000 hectares, 14,000 hectares more than the program's provisions for this year. The respective situation is due to the greater exigencies of the forestry units with regard to requests for removal of land from the forest resources for the needs of other sectors of the national economy (investment objectives, overhead powerlines, drilling and so on), as well as to the entry of land from the agricultural resources--unfit for farm crops, vinegrowing and fruitgrowing--into the composition of the forest holdings, which has counterbalanced the removals.

The task concerning the afforestation of land denuded by means of current cutting, of degraded land taken over from agriculture and of land earmarked for the planting of forest vegetation is also being fulfilled. These good results have also occurred due to the fact that both the areas that were to be afforested and the material resources needed for achieving them have been provided by means of the sole national plans for economic and social development. According to kinds of land, one finds an overfulfillment of the afforestation in the forest resources by 11,900 hectares (including 9,500 hectares by the units of the Department of Silviculture) and a total underfulfillment of 5,900 hectares in the unproductive (degraded) land outside the forest resources (including 6,600 hectares in the land held by the CAPs /agricultural productive cooperatives/ and others in zones without cooperatives) (see the table). It is necessary that the present holders of degraded land proceed at once to utilize it, especially for agriculture, and that, when this is not possible, it be afforested--with the help of the forestry bodies--so that no square meter of the homeland's territory remains unutilized.

The orientation contained in the program with regard to improving the structure of the country's forests according to species has also been followed in the sense that the afforestation with coniferous trees has been preponderant (73 percent in the forest resources administered by the Department of Silviculture, as compared with the 70 percent stipulated as a target), which will provide for an increase in the proportion of coniferous forests to 40 percent in the next 30-35 years, as compared with the 28 percent that it was in 1975. In this way, it will be possible to satisfy more and more fully the national economy's need for coniferous wood, especially for the production of cellulose.

Within the afforestation done, the restoration of poorly productive forests (700,000 hectares on the date of preparation of the program) has been continued by means of their replacement with new, vigorous, high-yield plantings. The results obtained between 1976-1980 (120,700 hectares) surpass the average annual rate of 22,000 hectares stipulated in the program. The restoration of this area has been achieved mainly through afforestation with fast-growing species, which will lead to the obtaining of an output 2-3 times higher on that area and to a rise in lumber production from 30-40 percent, as it is at present, to 75-80 percent.

In order to be able to satisfy the growing need for pulpwood as quickly as possible, the program provides for the continuation of the creation of special crops for this assortment, so that by 2000 a total area of 450,000 hectares will be reached. The target that applies to the 1976-1980 period (74,000 hectares) has been fulfilled and even overfulfilled by 4,200 hectares. The advantage of the specialized crops for pulpwood--for which selected seedlings are utilized--resides in the fact that they will be able to be harvested at an age of 30-50 years for coniferous trees and 15-20 years for soft deciduous trees, as compared with 100-120 years and 20-25 years, respectively, in ordinary forests, thus resulting in a rise in

production of 6-8 cubic meters per year per hectare for coniferous crops and 8-10 cubic meters per year per hectare for deciduous crops.

Table: The Degree of Achievement of Afforestation in the 1976-1980 Period

	Unit of measure	Stipulated	Expected	%
1. All afforestation--total	thousands of hectares	278.0	284.4	102.3
Of the total, according to kinds of land:				
In the forest resources--total, including by:	thousands of hectares	234.0	245.9	105.1
The units of the Department of Silviculture	thousands of hectares	208.0	217.5	104.6
The Danube Delta Central	thousands of hectares	2.7	2.7	100.0
P People's councils	thousands of hectares	23.0	25.7	111.7
In unproductive (degraded) land outside the forest resources--total, including by:	thousands of hectares	37.0	31.1	84.1
The units of the Department of Silviculture	thousands of hectares	17.0	17.7	104.1
The present holders (CAPs and others in zones without cooperatives)	thousands of hectares	20.0	13.4	67.0
Along roads and watercourses--total	thousands of hectares	7.0	7.4	105.7
2. The structure of the afforestation according to groups of species in the forest resources administered by the units of the Department of Silviculture--total, including:	thousands of hectares	208.0	217.5	104.6
Coniferous trees	thousands of hectares	149.4	158.8	106.3
Percentage of the total	%	71.8	73.0	
Deciduous trees	thousands of hectares	58.6	58.7	100.2
Percentage of the total	%	28.2	27.0	
Of the total, fast-growing species (coniferous and deciduous trees)	thousands of hectares	133.5	134.5	100.7
Percentage of the total	%	64.2	61.8	

It should be mentioned that in afforestation the valuable indigenous species, adapted best to the soil and climatic conditions in our country and having a high industrial value, (spruce, fir, oak, durmast, ash, sycamore maple and so on) and other species that are suited to the natural conditions in our country (larch, pine, Douglas fir and so on) have been

promoted for cultivation. The genetic certification of all afforesting material was introduced in 1978 in order to provide for the growing of stands with increased viability, greater resistance to harmful factors, and higher productivity.

A Second Component: the Tending of the Forests as a Factor in Increasing Their Efficiency

The forest takes a long time from its creation to maturity. If in this interval the process of development of the forest is left only under the influence of the laws of nature, there arises the situation that low-quality trees with a low economic value grow in the forests. In order to prevent such a situation, forestry science and practice have established a complex of activities for tending the plantings and stands--clearing, pruning and thinning--which have the role of eliminating the unsuitable specimens during the forest's development, of favoring the growth of vigorous trees, in optimum densities, with high-quality wood, so that at logging time the productivity and the value of the output per hectare are maximum. For the 1976-1980 period, the program provides that annually an area of 280,000 hectares of forest is to be covered with tending work, a target that was fulfilled by 1979 with an average annual overfulfillment of 4,000 hectares, an overfulfillment that is expected to be maintained in 1980 too.

In order to provide a suitable state of plant health in the forests, sanitary cutting--fallen, broken, dead, insect-ridden and wind-toppled trees--has been done on an average annual area of 1.2 million hectares, as compared with the 1 million hectares stipulated in the program. In this way, large quantities of timber utilized in industry or as fuel in rural areas have been extracted and brought into the economic circuit.

Although the program's provisions concerning improvement and sanitary cutting have been fulfilled, one still finds forests in which the tending operations have not been performed at the necessary level, due to the fact that at present the density of forest roads per hectare of forest is still below the optimum level. The problem will find its solution in proportion to the construction of forest roads, the growth of the accessibility of the country's forests, which would permit the application of tending and sanitary measures over the whole area of the forest resources under as economical conditions as possible. The combating of pests (defoliating caterpillars, bark and wood beetles and so on) has constituted a constant concern within the action of systematically tending the forests. To this end, in accordance with the provisions of the program, action has been taken to identify and combat them in due time, to apply projects for preventing their appearance en masse. It should be noted that the modern methods of combating them have been expanded: the biological method with biopreparations (2,800 hectares at the level of 1979), the methods with pesticides having selective properties and a low degee of pollution (4,200 hectares) and chemical treatments with small doses per hectare of forest (90,400 hectares).

Special attention within this work has been devoted to preventing the multiplication of bark and wood insects in the zones with wind- and snow-toppled trees in the coniferous forests in which such natural disasters have been registered in past years. By this means of acting, the proper development of young stands and a good state of plant health in all forests in the country's forest resources have been provided.

A Third Component: the Rate of Cutting

In order to increase the volume of logging in the future, the program provided for the limitation of the annual cutting to 20 million cubic meters of raw timber "on its feet" in the 1976-1985 decade, including 16 million cubic meters of main products and 4 million cubic meters of byproducts from thinning. The actual cutting in 1976-1979 and the preliminary cutting in 1980 are situated, as an annual average for the 1976-1980 period, 500,000 cubic meters below the stipulated level.

Concomitant with keeping within the planned annual quota of the volume of cutting, the aim has been, in the as near future as possible, to correlate the logging operations with the forest's possibility not only on the scale of all the forest resources but also on the level of each of the 2,200 production units--a basic technical unit in organizing the production of wood in silviculture--into which the forests administered by the Department of Silviculture in the MEFMC [Ministry of Forestry Economy and Construction Materials] are divided. The results obtained thus far, although they have improved the situation, are still far from being satisfactory. Thus, while in 1975 the volume of local excesses (at the level of the production units) totaled 5.5 million cubic meters of timber and turned up at 866 production units, in 1979 this volume had fallen only to 2.8 million cubic meters, affecting 777 production units. This situation is due to the low accessibility of some forests--a consequence of the still insufficient rate of equipping the forest resources with roads that would also provide for the penetration of the logging operations to the hard-to-reach forests earmarked "one after another" for cutting. It should be mentioned that, within the volume of cutting achieved, the timber coming from wind- and snow-toppled trees has been gathered with priority, there being reduced accordingly the cutting of timber "on its feet," in order to observe the planned annual quota of cutting and the good management of forests.

The successive, progressive, selection and combined cutting, verified in our forestry practice, which permits the obtaining of forests with valuable indigenous species, perfectly adapted to the soil and climatic conditions of the respective zone and, even more, to the local ones, has been expanded in order to provide for the natural regeneration of the forests from seed--a more efficient method than afforestation from a technical and economic viewpoint. Concomitant with this action, in accordance with the provisions of the program, the clear cutting for the exploitation of timber has been restricted, it being limited only to pure spruce forests, to Canadian poplars and to the poorly productive forests that need to be reforested with

more productive species. In all these cases, the maximum cutting area in which clear cutting is applied has been limited to 5 hectares (in forests with special protective functions and in spruce forests) and at most 10 hectares in other forests.

In order to increase the volume of wood for industry and raise the labor productivity under the conditions of avoiding harm to the natural seedlings and the trees still standing, the technologies for exploiting the trees with a crown, long trunks, and boles have been expanded, so that in 1980, out of the total of 20 million cubic meters of timber approved for cutting, 13 million cubic meters will be obtained by utilizing the above-mentioned technologies. It should be mentioned that these new technologies demonstrate their superiority only to the extent to which they are applied properly. The failure to comply with the directions for application can inflict significant harm on the trees remaining after cutting and the natural seedlings, harm that, in time, is reflected in a decline in the quality of wood production, leading to the situation in which the eventual losses exceed the immediate economic advantages. This finding requires greater exigency on the part of the forestry enterprises for exploitation and transportation (IFET) in the differentiated application of the new technologies, depending on the land and stand conditions, so that harm caused to the forest is avoided or it is minimal. At the same time, it is necessary to seek to improve the technologies of exploitation, an action in which an important role goes to scientific research on silviculture and on wood exploitation and industrialization.

The achievements obtained in the 1976-1980 five-year period in the action of managing the forests, of continually increasing their economic and social value, constitute a basis, a premise for fulfilling in the 1981-1985 five-year period too the provisions that result from the Program for the Conservation and Development of Forest Resources.

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10 October 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2052

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10 October 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2052

CONTENTS

INTERNATIONAL AFFAIRS

Progress Cited in Formulation of CEMA Standards
(Horst Echter; HORIZONT, No 36, 1980) 1

GERMAN DEMOCRATIC REPUBLIC

Energy Saving Methods Required in Building Materials Industry
(PRESSE-INFORMATIONEN, 5 Sep 80) 6

Reduction of Energy Consumption, by Guenter Oehlert
More Efficient Energy Use

HUNGARY

Importance of Farm Ancillary Activities Stressed
(Peter Bonyhadi; FIGYELO, 3 Sep 80) 10

YUGOSLAVIA

Role of Trade Unions in Political System Discussed
(Z. Bosnic-Vojadinovic; RAD, 12 Sep 80) 17

Capacity, Operation of Merchant Marine, 1979
(TRANSPORT, Jul 80) 20

Data on Seaport Operations, 1972-1979
(Atanasije Spasic; TRANSPORT, Jul 80) 26

Railroad Track System, Equipment, 1975-1979
(TRANSPORT, Jul 80) 34

Bus, Trucking Capacities, 1978-1979
(Milan Obradovic; TRANSPORT, Jul 80) 37

Urban Transportation Data, 1979
(TRANSPORT, Jul 80) 43

PROGRESS CITED IN FORMULATION OF CEMA STANDARDS

East Berlin HORIZONT in German Vol 13 No 36, 1980 signed to press 1 Sep 80 p 22

[Article by Dr Horst Echter: "Unification of Standards in CEMA"]

[Text] The idea of formulating and applying certain technical solutions in a uniform manner is not at all as new as may be assumed. Almost 3,000 years ago, Mesopotamia--which was famous for its ceramic technology--was already building impressive water mains that were put together from clay pipes of equal dimensions. In this manner it was possible to use the advantages of division of labor and simultaneously produce in several workshops the necessary building parts in such a way that they would fit together. Over the centuries, production methods, which at any given time reflected the more or less rapid increase in knowledge, finally led to the manufacturing methods used in modern times.

Historically, however, optimal prerequisites for division of labor in international relations have existed only for a short time in the CEMA area, because here socialist production conditions in operation are characterized by concurring basic interests. One of the most highly developed forms of international economic cooperation is the rapidly progressing specialization and cooperation of production in the CEMA area. Accordingly, each country--as a rule--specializes in supplying those products and also scientific-technical accomplishments for the production of which it possesses particularly good prerequisites (traditional experiences, research and production capacities, raw materials). This country ships to all other interested partner countries, and they, in turn, send other specialized goods from their own production.

Naturally, such a procedure of increasing labor productivity extraordinarily, is only possible when centrally manufactured products can readily be used in all participating economies. Consequently, connecting measurements, guages and essential technical specifications of power aggregates (such as electric motors), for instance, must be manufactured in such a manner that they can be installed in products which are operated differently.

Since this ideal situation generally does not exist at the very beginning, all participants are forced to agree on a common denominator. The result is formulated in the form of uniform parameters, in standards. In short, they are special regulations for the best possible unification of many different quality specifications (standards of procedure) as well as terminology and symbols (communications standards). In other words, the same solutions will be applied to recurring problems. Although it may be expedient to establish standards for the lowest and highest conformity, standards must principally be approached with the goal of establishing the best solutions.

'RS'--Recommended Specifications

In the interest of eliminating problems in the use of exchanged products within the framework of foreign trade, in 1956 the first steps were already taken to unify the most important technical specifications. The instrument that was used for this purpose consisted of recommendations for standardizations, the so-called RS [CEMA recommended standards], that were prepared jointly by those CEMA countries that showed an interest at that time. In most cases, the agreed-upon specifications offered opportunities to the users to choose from a limited number of similar parameters those which were best suited for their economic requirements. In this manner, differently developed technical specifications which existed for historical reasons were limited to a small selection. It signified an enormous progress for joint economic relations. At any rate, between 1956 and 1978, approximately 4,500 "RS" were prepared and recommended by CEMA to be applied to international relations.

The "complex program for the continuing expansion and perfection of cooperation and development of socialist economic integration of CEMA member countries," which was adopted during the 25th CEMA Council meeting in July 1971, also led to the introduction of a period of development which resulted in a higher level of multilateral standardization.

CEMA Standard

In accordance with the resolutions that were adopted during the 28th CEMA Council meeting in June 1974, member nations began to prepare and use CEMA standards for their economic relations. Whereas in the past, individual countries chose a varying number of the "RS" (for instance, from the steps of specifications)--according to prevailing circumstances--and sometimes even deviated from the contents of "RS," they now pledged to use the jointly created CEMA standards in their original form, i.e. without any changes in the substance, in their international economic relations. Beyond that the same standards are also applied to the intrastate system of standards, in which case, however, slight variations from the original standard are possible.

While the 28th CEMA meeting was still in progress, the "Convention on the Application of CEMA Standards for Mutual Economic Aid" was signed by

government representatives from the People's Republic of Bulgaria, the Hungarian People's Republic, the GDR, the Republic of Cuba, the Mongolian People's Republic, the Polish People's Republic, the USSR and the CSSR. According to a specified modus, it went into effect on 27 March 1975, the 90th day following the deposition of the fifth ratification document. The convention is obligating participating countries to use the CEMA standards which were confirmed by them in the Council and to apply them unchanged to contractual relations of their economic organizations. According to generally accepted legal principles, international legal contracts are only binding for the states and not their legal subjects, the governments issued special directives obligating those plants that are charged with foreign trade projects to base their export and import contracts on the authorized CEMA standards.

Irregardless of the fact that not every member nation will establish and use all the standards prepared by CEMA but only those which are meaningful to its own internationally existing economic relations, there is an increasing acceptance of these atandards, contributing to closer relations between cooperating economies.

Among those areas which are to be included in the standardization are the so-called cross-section areas. They do not only affect individual lines of business and therefore, as a rule, require the cooperation of all CEMA countries. Among them are environmental protection, health, work and fire protection, material handling, energy conservation, measurement systems and systems for the exchange of information, to name only the most important ones. Furthermore, to be included are uniform rules on the classification and labeling of products and construction documentations as well as generally effective regulations for producing drawings which are reflected in the "Uniform System of Projection and Construction Documentation" (ESKD).

The majority of specific projects for preparing CEMA standards affecting certain product groups are based on international plans for specialization and cooperation which, most of the time, are realized within the framework of bilateral interstate agreements.

As we have seen, the areas in which solutions to standardization problems have to be found, are extraordinarily spread apart. Consequently, it is even more understandable that the individual questions which are part of the specialization project require long-term planning. CEMA member nations do justice to this requirement by establishing the focal points of their cooperative projects according to agreed-upon plans and long-term targeted programs of cooperation. The projects, which at the beginning are only sketched in outlines, will later be formulated in accordance with agreed-upon bilateral interstate programs effective until 1990 and the main thrusts of cooperation that will result.

The "initial spark" for the actual standardization activity in CEMA are, for the time being, those international agreements that are almost

exclusively bilateral (multilateral settlements are providing the framework for bilateral agreements), of which the biggest number deals with specialization and cooperation in production, which form the basis for approximately four-fifth of all standardization topics.

Pursuing Trend of Development

The preparation of standards is scientific-technical work. A prerequisite is that all participants constantly are in reciprocal contact with one another during all the phases--beginning with the first draft until the completed CEMA standard. The best possible procedure for this cooperation was recorded by CEMA countries in a document. They are using this so-called standardized work method for the preparation of their standards. Measured by world standards--the time period for accomplishing this is relatively short: It takes only about 2 years. A few months must be added, since they will be needed to establish technological prerequisites in production necessary for compliance with the new standards.

Naturally, researchers all over the world will not be idle during this time. It is therefore important to recognize the trend of this development during the same month when the work for standardization begins, to keep a constant eye on it and incorporate into the standards those technical specifications which will do justice to future worldwide parameters or even outperform them. "Progressive standards," as we call them, that are created in such a manner, frequently contain variations of solutions, which step by step provide more sophisticated features that later on, during the course of application, permit a gradual adaptation to growing demands. In other words, all partner countries are uniformly using that step of specifications which at any given time reflects the most advanced stage of technical development. In contrast to the "RS," which gave partners a choice of several similar parameters, CEMA standards provide complete equality in substance and congruence and thus guarantee a complication-free use of products which are manufactured and reciprocally exchanged according to these standards.

Complicated problems of this nature can only be solved if we strive to keep up with the level that is developing worldwide which, in turn, is influenced immeasurably by CEMA member nations, due to their highly developed technologies. Among other things, socialist countries are therefore participating in the work of those international groups which are dealing with standardization, such as the International Standardization Organization (ISO) and the International Electrotechnical Commission (IEC).

Until the beginning of this year, approximately 2,400 CEMA standards were created or already existing "RS" were completely revised and changed to meet CEMA standards. All of them represent the highest level of the most recent scientific accomplishments.

In view of particularly close economic relations between the GDR and the USSR, in 1973--before the work on CEMA standards had even begun--both states concluded a governmental agreement on cooperation in the area of standardization. It was later on supplemented, among other things, by adding an ordinance for the implementation of the work on the unification of state standards in both countries.

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ENERGY SAVING METHODS REQUIRED IN BUILDING MATERIALS INDUSTRY

East Berlin PRESSE-INFORMATIONEN in German No 106, 5 Sep 80 p 2

Reduction of Energy Consumption

[Article by Guenter Oehlert, deputy minister for construction: "Building Materials Industry Collectives Reduce Energy Consumption"]

[Text] In the building materials industry, high temperature processes play an important part in the technologies. This is why this industry is one of the most energy intensive fields of the economy. Its specific energy consumption, with reference to the indices of industrial goods production, amounts to approximately four times the average value of other industrial sectors. Those employed in this sector are striving to make an effective contribution in support of the resolutions of the party of the working class and the Council of Ministers concerning rational energy utilization.

The calculation of the amount of energy used during the first half of 1980 shows that results have been achieved. Compared to the same period during the previous year, industrial goods production increased by 6.4 percent, while the consumption of energy sources increased by only 1.7 percent. This corresponds to an energy saving roughly equivalent to 230,000 tons of brown coal. It was achieved by reducing the specific energy consumption. Based on the average consumption for 1979, the Ruedersdorf and Karsdorf VEB Cement Works have made an especially large contribution toward reducing energy consumption per ton of cement clinker produced: 5 kilograms of hard coal, and--in the wet process--3.5 kilograms of powdered brown coal fuel, respectively. City gas consumption for the production of one ton of ceramic bathroom fixtures was reduced by 70 cubic meters. In addition, the building industry has been able to save roughly 70,000 tons of cement during the first half of this year. Also, fuel oil consumption was reduced, through substitutions, by 79,000 tons, i.e. 28 percent of the total volume.

More General Utilization of the Experience of the Best

These results were fostered through a wide exchange of information organized in September 1979 by the Ministry for Construction, with the cooperation of

scientists, energy specialists and directors of enterprises and combines of the building materials industry. This consultation was based on a critical analysis of the energy consumption in the production processes used in this field. The participants set for themselves the objective of gradually attaining, on a broader basis, the figures characteristics of the best enterprises. In their opinion, the way to achieve this is to purposefully reduce the losses occurring during combustive processes and, through a more thrifty use of energy-intensive building materials, to create conditions such that the specific energy use is reduced by 5 percent each year. In addition, they set themselves the task of investigating technologies and facilities with respect to their requirements concerning the type of fuel used, to achieve a larger use of domestic energy sources than until now.

The Institute for Building Materials of the GDR School of Architecture, and scientific and technical organizations of the combines undertook comparisons both between enterprises of this industrial branch and with international optimum values. Based on this and on on-site engineering studies, they determined concrete starting points for the rationalization. Their findings have been incorporated into the scientific and rationalization conception of the Ministry for Construction. It outlines its strategy for the continued development of energy management in enterprises over a rather long period of time.

Emphasis on Reducing Fuel Oil Consumption

Efforts have also been made to find effective short-term measures. For instance, at the Karsdorf VEB Cement Works, Branch 3, progressive conversion of the rotary kilns to natural gas in order to save fuel oil had been undertaken already in 1979. Together with machine manufacturers, they are investigating whether and how powdered brown coal fuel could be used for the dry-process roasting of cement clinker. This could yield important knowledge concerning a more rational use of the energy fund which is available to the cement industry.

With initiatives of this and other types, the workers of this industrial branch also compete in the field of a more rational energy utilization to fulfill the tasks set in the plan for this year. Other projects have been undertaken to achieve energy savings and the substitution of energy sources, and they are under realization these months. The main points are to complete the shift away from fuel oil in the Bernburg and Karsdorf cement works, and to convert the Hainichen, Narsdorf and Wefensleben tile factories to gas firing. The objective of these measures is to achieve a further 7,200 ton reduction in the monthly fuel oil consumption.

A detailed balance of the energy used shows that, in certain areas, the objectives have not yet been fully achieved. Thus, the present specific briquette utilization for the dry cement clinker roasting process is still too high to enable the consumption norm prescribed for this plan-year to

be complied with. This is why the pace must be stepped up during the coming months, and why the initiatives undertaken in many enterprises to accelerate progress in the rational utilization of energy must be placed on a broader base.

More Efficient Energy Use

East Berlin PRESSE-INFORMATIONEN in German No 106, 5 Sep 80 p 6

['Facts and Figures' report by Press Office, Chairman, GDR Council of Ministers: "For More Efficient Energy Utilization in the Building Materials Industry"]

[Text] The Seventh Building Conference of the Central Committee of the SED and the Council of Ministers of the GDR called the reduction of specific energy consumption in the overall investment and building area a task of considerable economic importance. The building materials industry must make an important contribution in this respect because it is a large consumer of energy. In 1979, 5 kilograms of fuel oil and 6 kWh of power were necessary to produce a sack of cement, 350 grams of brown coal briquettes to produce one tile, and 15 cubic meters of town gas to produce a washbasin. All together, enterprises in this industrial sector consumed 104,750 terajoules of energy last year--an amount equivalent to 11.5 million tons of raw brown coal.

If we consider the total consumption of our centrally managed economy, the building materials industry accounted for 26 percent of the hard coal, 14 percent of the blast-furnace coke, and 10 percent of the fuel oil used. Energy consumption is especially high in cement works and in enterprises producing building and fine ceramics, because their production requires high temperature processing. For 1980, the building materials industry was given the task of saving 5 percent on commodity energy and 3 percent on electric power.

In compliance with the resolutions of the Eighth and Ninth SED Party Congresses, workers of the building materials industry have made considerable efforts, already in past years, to achieve a more rational use of energy. Thus, specific energy consumption could be reduced by 9.4 percent compared to the 1975 level. All together, as a result of the rationalization of energy utilization and energy transformation processes, roughly 6,285 terajoules were saved from 1977 to 1979, i.e. approximately 8 percent of the annual energy consumption of the centrally managed building materials industry.

To ensure, in the future, a more rational use of energy in the building materials industry, energetic optimizations of the production processes will be undertaken and solid fuels will be used as sources of energy instead of fuel oil. In the cement industry and in the ceramic bathroom fixtures and heavy clay industries, related tasks provide for the eventual conversion of entire technologies. Enterprises in the cement industry, for instance, are progressively converting to the dry process, more favorable from the point of view of energy economy.

For many years, the Magdeburg VEB special construction combine has been developing and building kilns for the firing of fine and coarse ceramic products. These are highly appreciated both at home and abroad. The first tunnel kiln for the firing of porcelain in the GDR was placed into service 24 years ago at the Colditz VEB Porcelain Manufacture. Since then, thanks to purposeful development work, these installations have become always more efficient, more economical of materials and, above all, more economical with respect to energy.

The Magdeburg oven constructors have developed a short tunnel kiln specially intended for the reconstruction of tile factories. Contrary to the traditional kiln which requires a construction time of three to four months, it takes only three days to erect the body of this kiln. Further development in this field is determined by high economic objectives with respect to energy. Among others, tunnel kilns for building and coarse ceramics are planned, which would use solid sources of energy.

With the creation of a thermal interlocking system between tunnel kiln and dryer, the Koenigsaue VEB Tile Factory has been able to make better use of waste heat. Each year, 4,400 tons of brown coal briquettes and 350 tons of fuel oil can be saved that way. At the Unterloquitz VEB United Thuringian Slate Quarries, an enterprise carrying the title of "model enterprise with respect to energy management," the kiln facilities for the expansion of slates has been reconstructed. As a result, the annual throughput was increased by 100,000 cubic meters of porosity sinter, and the use of brown coal dust was reduced by 9 kilograms per cubic meter of product.

At the Zeithain branch of the Riesa VEB Building Materials Factory, in cooperation with the Markkleeberg Engineering School for Energy Management, a process analysis for the optimization of the vaporization process in hollow building blocks has been developed. As a result, the gates of the vaporization chamber were rebuilt and heat losses decisively reduced. The use of louvers instead of folding gates provides a tighter sealing of the chamber and results in an annual savings of 280 tons of brown coal briquettes; this represents 4.5 percent of the total consumption. All together, the gravel and beton works of the Zeithain branch of the Riesa VEB Building Materials Factory have reduced their energy consumption over a 3 years' period by 2,500 MWh of power, 3,300 liters of diesel fuel, and 1,350 tons of brown coal briquettes, while at the same time increasing their production. This is why, two years ago, this branch--the first bezirk-managed building materials producer of the Dresden Bezirk--was distinguished as a "model enterprise with respect to energy management."

The building materials industry is assuming an important part in the comprehensive implementation of energetically and economically profitable building projects. At present, approximately 35 percent of the commodity energy in the GDR is used for heating purposes. Through improved heat insulation of newly build and reconstructed buildings, and through the perfecting of technical building equipment, this quantity will be reduced by 30 percent in the next five years of the plan. This is equivalent to a saving of 5.5 million tons of raw brown coal. Thus, an above-average increase in the production of high-quality insulating materials and thermally insulated wall elements is expected.

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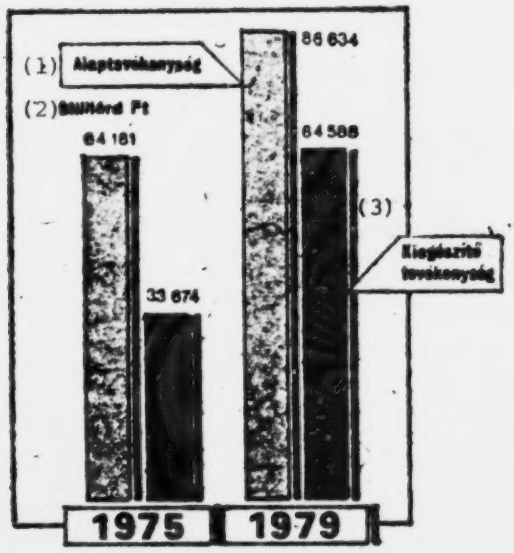

Figure 1. Breakdown of the net sales of agricultural TSZs.

Key: 1. Basic activity
2. Billion forints
3. Ancillary activity

Licensing--21 Approvals

Government regulations specified that from 1971 on the TSZs could undertake engineering-industry, chemical-industry or light-industry activity only on the basis of contracts concluded with a state enterprise or state institution. In the vicinity of Budapest and of the five largest provincial centers, moreover, TSZs could not undertaken engineering-industry, chemical-industry or light-industry activity. A list was compiled of explicitly prohibited industrial activities, and of industrial activities subject to special licensing. The latter category includes metallurgy, engineering, technological installation, construction and installation work, large-panel construction, storage and distribution of petroleum products, production of poisons, explosives, paints, varnishes and rust-proofing coatings, preparation of rum and spirits without distillation, wholesale trade, book publishing, printing, and inland forwarding. In some instances this list hampered the development of ancillary industrial activities and services by TSZs.

Five statutes regulate ancillary activity at present. To undertake an ancillary activity that is subject to special licensing, and to include such an activity in its by-laws, a TSZ must obtain approval from 21 different agencies. Moreover, each ministry set up its own procedures for licensing ancillary activities under its supervision.

IMPORTANCE OF FARM ANCILLARY ACTIVITIES STRESSED

Budapest FIGYELO in Hungarian No 36, 3 Sep 80 pp 1, 2

[Article by Peter Bonyhadi: "Ancillary Activity Is Important"]

[Text] There are relatively few restrictions on the ancillary activity of agricultural producer cooperatives [TSZs]. The pertinent government decree lists 23 activities that the TSZs may not pursue as ancillary activities, but these restrictions do not hamper at all the economical operation of TSZs. The "remaining" ancillary activities cover a wide range and accounted for 40 percent of the TSZs' proceeds from sales last year.

In plain language, ancillary or other-than-basic activity is any activity other than livestock production and soil cultivation. Law No III of 1967 enabled the TSZs to pursue ancillary activities. Availing themselves of the opportunities provided by the Law on TSZs, 57 percent of the TSZs conducted some sort of ancillary activity in 1967, and 87 percent in 1968. Between 1967 and 1970, sales from ancillary activity multiplied, and their proportion within total sales exceeded 30 percent.

In addition to food processing, the TSZs set themselves up also for various industrial activities and services, by purchasing at scrap value the still usable machinery that large-scale industrial plants discarded, and by utilizing their own cheap labor.

The TSZs with ancillary activities undertook first of all whatever was uneconomical for the large-scale industrial enterprises, and what these enterprises therefore did not undertake or undertook only out of necessity.

There certainly are many cases of abuse in conjunction with ancillary activity, but no one has ever contended that the abuses should be equated with ancillary activity. However, some people did fear--and not always without some justification--that the shops of the TSZs might idle in industry modern factories equipped with machinery worth millions, might lure manpower away from industry, and that in agriculture the favorable entrepreneurial opportunities might relegate into the background the agricultural cooperatives' farming activity. As a rule, however, these "fears" were unfounded, and in most cases the TSZs' industrial activity remained within suitable limits.

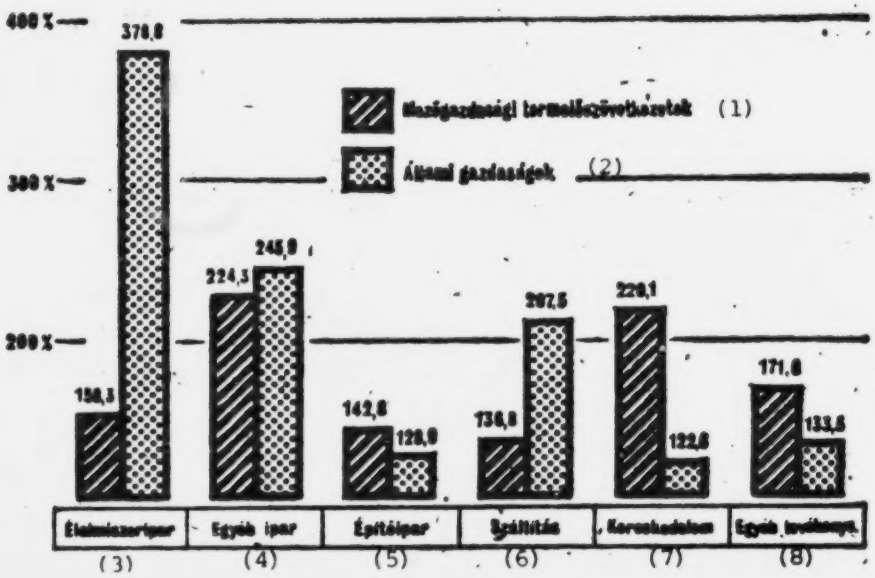

Figure 2. Net sales from ancillary activities of TSZs and state farms in 1979, in percent of 1975.

Key:
1. TSZs
2. State farms
3. Food industry
4. Other industry
5. Construction industry
6. Transport
7. Trade
8. Other activities

In many places the local managing organs went beyond the central measures. A magic phrase was coined: "Structure-alien activity." If an activity was branded "structure-alien," it had to be discontinued. It was to no avail that the undertaking satisfied an actual social need, that the profit from it was used to develop farming, or that it perhaps solved the problem of seasonal unemployment.

The invention and application of the ancillary activities' classification into "developable," "maintainable," and "curtailable" led to the review, based mostly on administratice considerations, of ancillary activities that the agricultural TSZs had undertaken to satisfy warranted social needs.

No one wishes to dispute on this occasion that the TSZs' anciallary activity, just as any economic activity, must be regulated in some way or other. But it is not always fortunate if such regulation consists of administrative restrictions. A much better method of regulation, for example, is to influence the conditions of self-interest. Of course, this method also was employed to regulate TSZ ancillary activity. A TSZ was assigned to different tax brackets, depending on the extent of its ancillary industrial activity.

Kitten in Tiger's Cage

A TSZ whose proceeds from industrial activity amounted to between 30 and 50 percent of its total sales was assigned to the agricultural-industrial category, and one whose proceeds from industrial activity exceeded 50 percent of total sales was placed in the industrial-agricultural category. This, of course, is not merely a question of designation. The so-called agricultural-industrial TSZs paid only production tax, while the industrial-agricultural TSZs paid also a capital use charge, salary tax and development tax. As of 1976 the production tax was increased by 5 percentage points for the agricultural-industrial TSZs, and by 10 percentage points for the industrial-agricultural TSZs. Furthermore, the production tax of the agricultural-industrial and industrial-agricultural TSZs in the vicinity of Budapest was increased by 10 percentage points more. (On the other hand, TSZs operating under unfavorable economic conditions enjoy a 70-percent tax exemption.)

Indirect regulation that operates with self-interest but is coupled with administrative restrictions reminds us of a cage designed for a tiger but used to house merely a kitten. According to the data of the KSH [Central Bureau of Statistics], in 1978 the ancillary activities of agricultural and forestry enterprises provided merely 3 percent of socialist industry's output in value terms.

The breakdown of this 3-percent share by industries was as follows: mining, 2.2 percent; metallurgy, 0.7 percent; engineering, 11.6 percent; construction materials industry, 1.3 percent; chemical industry, 4.7 percent; woodworking, 19.1 percent; light industry, 3.8 percent, and food industry, 56.6 percent. Within the TSZs' total net sales of 191 billion forints during this period (i.e., in 1978), ancillary activity accounted for 74 billion forints, including about 1[illegible] billion from actual industrial activity.

Although ancillary activity reduces the risk of agriculture that even today depends on the weather, not every farm has been able, and not everywhere is it feasible, to engage in ancillary industrial activity or services. For example, homework or coproduction of parts is influenced by distance from the factories and the transportation conditions. As a rule, the regional political and governmental leaderships also adopt a standpoint on anciallary activity.

Loss Bearer?

The intensity of ancillary activity in Hungary varies practically be megyes or groups of megyes. For example, ancillary activity provides 70 percent of the TSZs' sales in Pest Megye, and 50 percent in Komarom Megye. Pest, Komarom and Veszprem megyes account for 12 percent of the TSZs, and ancillary activity provides 33 percent of their sales. (On a national average, 20 percent of a TSZ's sales stems from ancillary activity. Only in the TSZs of Baranya, Gyor, Szolnok and Tolna megyes is this proportion below the national average.)

This proportion provides food for thought also because computations show that the unprofitability of farming is practically excluded on these farms where ancillary industrial activity or services account for more than 30 percent of sales. On the basis of the known relationship--that much of the income from ancillary activity is used to develop agriculture--it can be said that the higher the proportion of sales from ancillary activity, the greater the increase of sales per hectare from farming.

It is not indifferent, of course, what the specific ancillary activity is. Profit in relation to sales was high in metallurgy, engineering, light industry, heavy industry, and transportation. It was average in construction and the food industry, and low in trade. We place special emphasis on the past tense because new pricing regulations apply as of 1980 to TSZ ancillary activity, and these new regulations will probably rearrange the conditions of self-interest.

It has been necessary to adapt to the rules of the price reform in industry, because as of 1980 the regulations governing pricing apply to individual products and groups of products, independently of sectoral affiliation.

In general the price reform demanded a significant reduction of the profit on industrial products and services, and the application of profit rates commensurate with capital + wages actually realizes this profit reduction in the starting prices. State industry's low rates of profit commensurate with capital + wages would have resulted in even lower profits for cooperatives, because of their smaller capital.

New System of Pricing

The TSZs succeeded in persuading the competent price authorities to recognize this fact. Thus the profit on the industrial activities of large-scale farms was made commensurate not with capital + wages, but with sales, and in the cost calculation necessary to form the starting prices as of 1 January 1980 it was possible to include sales-commensurate profit rates of 6 percent on products, and 8 percent on services.

Acceptance of this principle has alleviated the situation considerably, but even so a sharp decline of profits can be expected. To avoid this, the circle of products has been expanded that the large-scale farms do not price on the basis of their production costs and low profit rates, using instead the officially fixed or limited prices, and the free prices set by state enterprises and industrial cooperatives and issued in price lists.

Under this method the price level that develops on the basis of the state enterprises' costs enables the TSZs--assuming that their costs are lower--to realize more profit, without violating the statute that bans unfair profit.

According to another solution, the cooperatives set their prices on the basis of the standard profit rates and their production costs, but they depart from these prices within the limits allowed by the price mechanism, or perhaps through a broader interpretation of the price mechanism. With due consideration for the conditions of supply and demand, however, it is possible to depart from the calculated price also by mutual agreement with the buyer.

The new system of pricing, of course, affects the previous contractual relations of the TSZs. The circle of contractual relations is fairly broad, because even in the capital the largest enterprises belong among the customers of the TSZs' anciallary activities.

In spite of all this, ancillary activity will gain final recognition only if some economic necessity demands it. It now appears that such an economic necessity is emerging. The economic necessity that is about to gain acceptance for ancillary activity is the need to develop basic industry.

Basic Industry

The export of finished products is hampered, and often rendered uneconomical, by the lag in the production of parts, subassemblies and semifinished products, or in other words by the lag of basic industry, and by the forced importation of parts in the absence of domestic production. On this occasion we will dispense with a detailed analysis of the various organizational problems in conjunction with the development of basic industry. However, the possible solutions include also ancillary production by TSZs. The TSZ shops are small or intermediate in size, and even at their present technical level they are or can be made suitable for the production of low-technology products of basic industry that require relatively little manpower. In view of their size and short production cycle, the TSZ shops could respond quickly and flexibly to the demand at any given time. Their production costs, too, are competitive as a result of their relatively lower capital costs.

"Discovery" of these attributes of the TSZ ancillary shops was followed by immediate action, or at least effort. Central mapping of the demands and possibilities was begun. It was necessary to seek answers to such questions as, for example, the following:

How much engineering capacity do the TSZs have?

Are they engaged in the production of parts or subassemblies?

How are they supplied with skilled labor?

What is the territorial distribution of the engineering capacities?

To create the conditions of economic activity it was necessary to review what effect the 1980 price system and system of regulation have on the

developmental objectives of basic industry; or more specifically, what preferences could be provided to develop the production of parts and subassemblies in ancillary shops of TSZs. What could be done to facilitate the transfer or sale of surplus capital equipment from large-scale industry to the ancillary shops of TSZs? How would it be possible to provide modern technology, licensing and know-how for the parts-producing ancillary shops of TSZs?

With or Without Preferences

Inclusion of the TSZ ancillary shops in the output of basic industry is much more complicated, however, than merely offering them the opportunity. For example, the branches of industry concerned would have to compile and publish lists of products, so that the ancillary shops of TSZs would know what to produce. Primarily the industrial enterprises should organize the coordination of industry's demand with the possibilities of the TSZ shops, the procurement of technology and basic materials, and the marketing of finished products.

In general, the ancillary activities of TSZs for basic industry can be developed only where available unused buildings could be converted at low cost to make them suitable for modern technology. But even so, TSZ entrepreneurship cannot be expanded without money!

Only on TSZs operating under unfavorable economic conditions is ancillary activity supported by subsidies repayable from the production tax. However, full-scale development of such activity would require abolition of the privilege born of necessity. In other words, the conduct of ancillary activity should not be the "privilege" of TSZs operating under unfavorable economic conditions. The conditions for the preferential development of such activity could be created by having the ancillary shops of TSZs switch to the "ancillary" production of mostly products that up to now could be procured only through import. In this way it would be possible to provide credit for increasing the output of products that can be exported for convertible foreign exchange. Furthermore, the amount of own resources needed to qualify for such credit could be reduced, and in exceptional cases this requirement could be waived altogether.

It certainly will be necessary to review also some of the tax regulations. For example, wages for the production of parts and subassemblies deemed especially important could qualify for the same type of tax exemption as in the case of growing vegetables and berries, or of planting vineyards and orchards.

However, a prerequisite for all this is the review and simplification of the maze of regulations governing industrial activity by TSZs. According to one bitter comment, the licensing procedure still takes longer than the production of the licensed products.

1014
CSO: 2500

ROLE OF TRADE UNIONS IN POLITICAL SYSTEM DISCUSSED

Belgrade RAD in Serbo-Croatian No 38, 12 Sep 80 p 6

[Article by Z. Bosnic-Vojadinovic: "On an Equal Footing and in the Interest of the Working Class"]

[Text] The Presidium of the Council of the Federation of Yugoslav Trade Unions held a session last Friday in Belgrade--chaired by Miran Potrc, chairman--at which it debated performance of the role of the Council of the Federation of Yugoslav Trade Unions in the institutions of the political system of the Federation and in the political system in general, as well as certain issues related to housing policy.

The League of Trade Unions, it was said at the meeting, has so far been concerned with performance of its role in the political system on several occasions and it came to the conclusion that there are difficulties in performance of that role, but also shortcomings and vacillation in the method of operation. That is, since the Eighth Congress of the Federation of Yugoslav Trade Unions, it has been an obligation of the Federation of Trade Unions to make the viewpoints of the working class as present as possible in the sociopolitical life of society, and thus the principal task of the Council of the SSJ [Federation of Yugoslav Trade Unions] is to give those viewpoints equal status in a dialog with others, especially in the places where decisions are made. It has not always been successful in this, of course, since there were situations where the trade union was "bypassed," or when its viewpoints were not given equal treatment with other viewpoints. There were also cases when the trade union was tardy in becoming involved in debates on important issues and legal solutions, when it did not submit its observations and proposals on time, and thus even its qualitatively new status did not always yield the desired results.

Affirmation of the Dinar for Housing

In the opinion of Djordje Lazic, the trade union has been given new tasks and also new instruments for performing them, but it has not been ready enough to fight for its stands, nor has it found the right solutions in its efforts. Kolj Siroka, however, is of the opinion that even in the Socialist Alliance there have not always been common viewpoints of sociopolitical

organizations, which has also tended to make them less than equal to others in a dialog. But it is also true that the representatives of the League of Trade Unions seldom come to parliamentary bodies where decisions are made on very important issues and where it is not enough to merely send in conclusions. In that arena, Dusan Bogdanov said, one has to fight with the force of arguments, and therefore the presence of members of the council is indispensable.

In spite of these shortcomings, a radical change has been accomplished in the method of operation, according to the opinion of Rade Galeb, and objectively all conditions exist in it for active involvement in the decision-making process. But the trade union organization is not altogether equipped for this, since this is a rather lengthy process. When it achieves that, when the demands of the workers discover themselves to be equal where decisions are being made, then the trade union will be performing its role.

Obviously the trade union has managed to examine the problems and difficulties after 2 years of work, which is why this topic was put on the agenda. The delegate system, that is, better work of delegates and delegations in all federal bodies, is being mentioned more and more as a possible solution. If the right method of operation is found in good time, the delegate system within the trade union organization will certainly overcome these difficulties, and the trade union will have a much greater influence than up to now on the taking of many important decisions and laws embodying the system, which is very important to associated labor.

Good Use of the Housing Dinar

The second topic debated by the Presidium of the Council of the SSJ was also extremely important. This was housing policy and possibilities for its future financing.

Experience shows that in spite of all the efforts and the results achieved in socioeconomic relations, there are still problems in the housing field, and so fewer housing units were built than was planned. In this medium-term period the shortfall will be 100,000 dwelling units lower than what was planned, and the reason lies in slow formation of self-managed associations of all participants in construction of housing, in utilities and municipal services, and in the price of the dwelling units, which over the last 4 years has risen 43 percent, as well as in shortages of building materials and slowness in site preparation. All of this, it was stated at the meeting, is mainly dealt with in opstinas, and therefore it requires particular activity on the part of opstina and basic trade union organizations.

In his introductory remarks Sefcet Jasari, however, emphasized that in the coming medium-term period the investment of private funds of individuals in housing construction and also solidarity funds will have an important role in housing policy, since the financing of housing construction in work

organizations is to come from net income. There were, of course, many questions left open in the meeting, such as the following: the economic crisis of rents, or the burden of taxes and contributions on funds set aside for housing construction, for which the right solutions also have to be found, and so on.

It is certain that the trade union will be debating the financing of housing construction, solidarity, involvement of the personal funds of citizens in this field, but it will demand that in this case utilities and social services be financed from certain other sources, so that the dinar set aside for housing construction is indeed spent for that purpose. Of course, there must be much greater clarity in both credit policy and also the attitude toward cooperatives, which is beginning to come out more and more in favor, but in practice it is nevertheless slowing things down.

At the end of the session the presidium adopted the proposal to push clocks back 1 hour, while at the same time taking note that better arguments must be given concerning the benefits of this action.

7045
CSO: 2800

CAPACITY, OPERATION OF MERCHANT MARINE, 1979

Belgrade TRANSPORT in Serbo-Croatian No 7, Jul 80 pp 28-30

[Excerpt] As of 31 December 1979 the Yugoslav Merchant Marine had a total of 339 vessels, whose average age was 11.2 years and which totaled 2,389,233 gross registered tons and 3,701,842 deadweight tons and a passenger capacity of 17,323.

The table below surveys the fleet's capacity over the last 3 years:

Table 1

Description	Condition of Fleet 1977	1978	1979	Index 79/78
Number of vessels	332	337	339	100.6
Gross registered tons	2,226,901	2,336,745	2,389,233	102.2
Deadweight tons	3,433,957	3,618,568	3,701,842	102.3
Passenger capacity	17,114	17,832	17,323	97.1
Horsepower	1,797,925	1,867,555	1,927,455	103.2

It follows from this survey that since last year the fleet has grown only 0.6 percent in terms of the number of vessels and 2.3 percent in deadweight tonnage. In 1975 it had 318 vessels whose average age was 10.3 years; they totaled 1,901,728 gross registered tons and 2,886,261 deadweight tons and had a passenger capacity of 16,371. The growth between 1975 and 1979, then, has been as follows:

In number of vessels only	6.6%
In gross registered tons	25.6%
In deadweight tonnage	28.2%
In passenger capacity	5.8%

This is a very modest increase, and it was achieved mainly by purchasing vessels abroad.

Then if we compare the age-specific composition of the fleet with the world fleet, we come to the following conclusions.

According to the figures of Lloyd's statistical service, the age-specific composition of the world fleet as of 1 July 1979 was as follows:

Under 9 years	257.3 million gross registered tons, or 62.2%
Between 10 and 14 years	74.5 million gross registered tons, or 18.0%
Over 15 years	81.2 million gross registered tons, or 19.7%

At the same time the age-specific composition of the Yugoslav fleet was as follows:

Under 9 years	894,300 gross registered tons, or 37.1%
Between 10 and 14 years	762,300 gross registered tons, or 31.7%
Over 15 years	750,600 gross registered tons, or 31.2%

These figures show that the merchant fleet is older than the world average, and there is good reason to say that the Yugoslav fleet is very old and is in urgent need of replacement.

Moreover, we would like to point out that the process of simple reproduction is not being accomplished in the merchant marine, as can be seen from the following:

The deadweight tonnage of merchant vessels less than 10 years old was 39.1 percent of total deadweight tonnage at the end of 1979, while in previous years this proportion was as follows:

In 1978	43.1%
In 1977	50.5%
In 1976	54.1%
In 1975	55.6%
In 1974	58.6%

So, again from these figures one sees that the process of aging of our fleet is continuing at a drastic pace, since the share of vessels under 10 years of age has dropped all of 19.5 percent since 1974, which indicates the seriousness of the problem, especially since we see that even simple reproduction is not being accomplished in the merchant marine. This lag in development of the fleet, in modernization and in application of new technology in shipping which meets the requirements of the present-day market also has the consequence of a weakening of competitive capability on the world maritime market.

Business Indicators and Economic Results

a) Cargo and Passenger Traffic

The table below shows the total volume of traffic and the share of various types of cargo carried by our vessels.

Table 2

In thousands of tons

Type of Cargo	1978	1979	Structure 1978	Structure 1979	Index 79/78
Exports	1,463	1,175	6.6	4.9	80
Imports	4,308	4,974	19.3	20.9	115
Exports + imports	5,771	6,149	25.9	25.8	106
Transit	468	469	2.1	2.0	100
Total traffic through Yugoslav seaports	6,239	6,618	28.0	27.8	106
Between foreign ports	13,910	14,479	62.3	60.9	104
Total international traffic	20,149	21,097	90.3	88.7	105
Coasting	2,159	2,670	9.7	11.3	124
Total cargo carried	22,308	23,767	100.0	100.0	106

It is evident from the survey in the table that the total volume of cargo carried by our vessels increased 6 percent over the previous year.

Total international traffic increased 5 percent, while coasting between domestic ports increased all of 24 percent. The traffic of export cargo dropped appreciably, all of 40 percent, while import cargo showed an increase of 15 percent, and the share of our vessels in carrying Yugoslav exports and imports as a whole increased only 6 percent. The volume of transit cargo through Yugoslav seaports carried by our vessels remained at the level of last year. Taking all elements into account, the volume of cargo taken from or delivered to Yugoslav seaports increased 6 percent, while the volume between foreign ports rose 4 percent over the previous year.

Yugoslav imports and exports had a share of 25.8 percent in the total cargo carried by our vessels (25.9 percent in the previous year), and the share of transit cargo was 2.0 percent (2.1 percent the previous year), i.e., total cargo our vessels took from or delivered to our seaports represented 27.8 percent (28 percent the previous year) of the cargo they carried in international trade. Total cargo carried between foreign ports represented 60.9 percent (62.3 percent the previous year). On the basis of these volumes for various categories of cargo, it turns out that international traffic represented 88.7 percent of the total cargo carried (90.3 percent the previous year), and coasting 11.3 percent (9.7 percent the previous year).

Of the total 21,097 tons carried (not including coasting), export cargo had a share of 4.9 percent, import cargo 20.9 percent, transit 2 percent and cargo between foreign ports 60.9 percent.

The share of Yugoslav and foreign vessels in carrying Yugoslav exports and imports is shown in the table below.

Table 3

Share of total = 100

	1975	1976	1977	1978	1979
Exports					
Total	100.0	100.0	100.0	100.0	100.0
Yugoslav vessels	30.9	36.4	33.6	39.2	32.9
Foreign vessels	69.1	63.6	66.4	60.8	67.1
Imports					
Total	100.0	100.0	100.0	100.0	100.0
Yugoslav vessels	44.7	25.6	25.7	28.2	26.6
Foreign vessels	55.3	74.4	74.3	71.8	73.4
Total					
Total	100.0	100.0	100.0	100.0	100.0
Yugoslav vessels	42.0	27.8	27.4	30.4	27.6
Foreign vessels	58.0	72.2	72.6	69.6	72.4

If we analyze the relative shares of exports and imports over the last 5 years, we conclude that our fleet's share in carrying exports and imports that travel by sea is modest. The year 1975 was an exception, when there was an increase in the share of our vessels carrying Yugoslav imports, and their share of Yugoslav exports declined minimally; that is, our vessels carried 30.9 percent of Yugoslav exports (31.1 percent in 1974), 44.7 percent of Yugoslav imports (17.6 percent in 1974) and 42 percent of total Yugoslav exports and imports (20.7 percent in 1974). By contrast the share of foreign flags in carrying Yugoslav exports and imports dropped in 1975, as follows: foreign flags had a share of 69.1 percent of Yugoslav exports (68.9 percent in 1974), 55.3 percent of Yugoslav imports (79.3 percent in 1974). Though we can still say that this share in 1975 is a high share for the foreign flags. However, it was thought that 1975 marked the turning point and that the growth trend to the advantage of the domestic flag could be still more favorable in subsequent operation. However, in spite of all expectations we have the opposite in 1976, 1977 and 1978 (a somewhat milder decline), i.e., a sharp drop in our fleet's share of carrying Yugoslav exports and imports. In 1979 the export cargo carried by Yugoslav vessels was down 16.7 percent over the previous year, while import cargo showed an increase of 13.7 percent; in 1979 the total of export and import cargo carried by our vessels increased 6.1 percent over 1978; or, in relative terms (there is a decline) our fleet had a share of 32.9 percent of Yugoslav exports in 1979 (last year 39.2 percent), 26.6 percent of Yugoslav imports

(last year 28.2 percent) and 27.6 percent of total exports and imports (30.4 percent last year). In conclusion, then, we can state that the share of the foreign flags in carrying Yugoslav exports and imports has remained very high.

Total passenger volume (according to figures of the Federal Bureau of Statistics) has been as shown in the table below.

Table 4

In thousands

Type of Traffic	1978	1979	Structure 1978	Structure 1979	Index 79/78
International	190	152	2.8	1.9	80
Domestic	6,523	7,904	97.2	98.1	121
Total	6,713	8,056	100.0	100.0	120

Total passenger volume increased 20 percent, the domestic passenger volume increasing 21 percent and the international passenger volume dropping 20 percent.

b) Foreign Exchange Transactions

The operating statement of maritime shipping with respect to foreign exchange in 1979 is shown in Table 5.

Table 5

In millions of dollars

Description	1977	1978	1979	Index 1978 = 100 1977	Index 1978 = 100 1979
Foreign exchange inflow*	484.1	540.1	658.3	90	122
Foreign exchange outflow*	285.6	327.3	378.0	87	115
Net foreign exchange inflow	198.5	212.8	280.3	93	132
Level of foreign exchange costs, in percentage	59.0	60.6	57.4	97	95
Rate of net foreign exchange inflow, in percentage	41.0	39.4	42.6	104	108

* Not including a foreign exchange inflow of $10.3 million and a foreign exchange outflow of $10.1 million of Beogradplov.

It is evident from what is shown above that total foreign exchange inflow increased 22 percent in 1979, while the foreign exchange outflow showed a

slightly slower growth of 15 percent. It follows that economic efficiency in foreign exchange operations was somewhat better than in the previous year, since foreign exchange costs increased more slowly than foreign exchange revenues, so that the net foreign exchange inflow increased all of 32 percent over the previous year. It is evident that because of the more favorable trend of foreign exchange costs, the rate of net foreign exchange inflow increased 8 percent over the previous year.

Foreign exchange transactions in 1979, then, occurred under still more complicated conditions than in 1978. In spite of the fact that rates increased during that period, there was a further increase in operating costs, which detracted from the otherwise more favorable operating results of work organizations in the shipping industry.

Yet if we analyze the favorable effect of maritime shipping on the country's balance of payments in terms of the net foreign exchange result (net foreign exchange inflow minus payments to repay foreign credits), then we can conclude that in 1979 it amounted to $208.5 million, as against $134.9 million in 1978, marking an appreciable increase of 54.5 percent. Up through the end of 1979 the foreign exchange which the shipping industry brings in had not been appreciated for anything like its true value by comparison with what is achieved by the export of commodities. This is manifested above all in the appreciably smaller tax deductions and foreign exchange incentives afforded to exporters of services and in the fact that they cannot dispose freely of their foreign exchange.

We should mention that maritime shipping is bringing in more than 20 percent of the inflow of foreign exchange from total exports of all services and more than half of exports of transportation services, or about 10 percent of total exports of all goods.

7045
CSO: 2800

DATA ON SEAPORT OPERATIONS, 1972-1979

Belgrade TRANSPORT in Serbo-Croatian No 7, Jul 80 pp 32-36

[Article by Atanasije Spasic]

[Text] 1. Total Volume of Cargo

A cargo volume of 31.1 million tons was handled in all Yugoslav seaports in 1979, which is a 12-percent increase over the previous year. By contrast with the rate of annual growth of the total volume of cargo over the previous 3 years, which was about 1 million tons per year, in 1979 this increase was nearly 3.5 million over the previous year. This resulted primarily from the rather high growth of imports of commodities through Yugoslav seaports. The volume of port traffic in 1979 was a record for any year since the war and over the entire period of our seaports' existence.

The rate of growth of total port cargo traffic through all Yugoslav seaports has been as follows over the last 8 years:

1972	19.5 million tons
1973	20.9 million tons
1974	23.8 million tons
1975	22.4 million tons
1976	25.1 million tons
1977	26.1 million tons
1978	27.1 million tons
1979	31.1 million tons

In spite of the relatively satisfactory growth trend of port traffic (if we exclude 1975, when that traffic dropped), we still cannot be satisfied with the volume of traffic achieved, since by comparison with the advanced European and other world seaports, our port traffic is at a very low level.

All our seaports taken together have an annual cargo traffic that is approximately equal to the traffic of a single medium-sized European seaport.

2. Distribution of Port Traffic by Cargo Categories

The table below shows distribution of the volume of traffic by the principal categories of cargo in 1979.

Table 1

In thousands of tons

Description	1978	1979	Index 79/78
Total seaport traffic	27,703	31,097	112
Breakdown:			
Coasting	5,001	5,907	118
Exports	3,277	3,262	100
Imports	13,593	16,409	121
Transit	5,832	5,519	95

It is evident from these figures that a rather high growth has been recorded for coasting and imports, while export cargo was at the level of the previous year (1978), and transit cargo dropped 5 percent. More than 50 percent of total seaport traffic consists of imports through our seaports; exports and transit are relatively small, which cannot be looked on favorably, since the imports consist mostly of bulk and liquid cargoes (crude petroleum), to which low rates apply. Exports through seaports consist largely of general cargo and timber and lumber, i.e., high-rate cargo, and transit brings in foreign exchange revenues.

In terms of percentage, the distribution of total port traffic by categories of cargo was as shown in the table below.

Table 2

In percentage

Description	1978	1979
Total seaport traffic	100.00	100.00
Breakdown:		
Coasting	18.05	18.99
Exports	11.83	10.49
Imports	49.07	52.77
Transit	21.05	17.75

3. Total Cargo Traffic in the Principal Ports

A rather high growth of total cargo traffic was achieved in 1979 at all the principal ports except Sibenik, and the increase was especially large at Dubrovnik and Bar, as can be seen from the comparison given in Table 3.

Table 3

In thousands of tons

Seaports	Total Traffic 1978	Total Traffic 1979	Index 79/78
Koper	2,115	2,367	112
Rijeka	14,733	16,419	111
Sibenik	845	791	94
Split	2,624	3,087	118
Ploce	3,247	3,760	116
Dubrovnik	244	382	157
Bar	1,280	1,634	128

We can frame the following conclusions from this comparison:

a) that in 1979 the port of Rijeka appreciably increased the volume of its traffic (by 1.7 million tons) and that it is continuing to consolidate its leading position ahead of all other Yugoslav seaports;

b) that the port of Koper is approaching an annual volume of 2.5 million tons, which is a great success when we take into account that this seaport has a very favorable composition of traffic with respect to types of cargo, since general cargo is predominant in its traffic;

c) that the port of Split, in spite of its difficulties related to its transportation connections with the hinterland, achieved a large growth of nearly half a million tons in its traffic;

d) that the port of Ploce, which had a traffic of 3.8 million tons in 1979, established itself still more firmly in second place after Rijeka in the volume of cargo traffic;

e) that the port of Dubrovnik showed the largest relative increase in the volume of its traffic of all the seaports (57 percent), which is an exceptional success since this port has no rail connection with the hinterland;

f) that the port of Bar, in spite of the extensive damage it suffered from the catastrophic earthquake on 15 April 1979, achieved a high growth of traffic in 1979, which actually represents the first solid effect of the new Belgrade-Bar railroad, which is now beginning to operate smoothly.

Table 4 shows the share of the various principal seaports in total cargo traffic through all Yugoslav seaports.

This distribution shows that the ranking of our principal ports with respect to volume of cargo traffic in 1979 was as follows:

1. Rijeka
2. Ploce
3. Split
4. Koper
5. Bar
6. Sibenik
7. Dubrovnik

Table 4

In percentage

	1978	1979
Total cargo traffic	100.00	100.00
Breakdown:		
Rijeka	53.18	52.80
Koper	7.63	7.61
Sibenik	3.05	2.54
Split	9.47	9.93
Ploce	11.72	12.09
Dubrovnik	0.88	1.23
Bar	4.62	8.55
Other seaports	9.45	8.55

A fuller and clearer picture of the share of the principal seaports in Yugoslavia's total seaport traffic can also be obtained from Table 5, which shows their traffic over the last 8 years.

Table 5

Total traffic, in thousands of tons

Principal Ports	1972	1973	1974	1975	1976	1977	1978	1979
Koper	1,944	1,861	1,981	1,867	2,102	1,903	2,115	2,367
Rijeka	9,941	10,483	12,663	12,029	13,997	14,135	14,733	16,419
Sibenik	700	935	931	899	815	824	845	791
Split	1,632	2,040	2,516	2,181	2,335	2,464	2,624	3,087
Ploce	2,025	2,452	2,476	2,210	2,926	2,971	3,247	3,760
Dubrovnik	332	246	314	216	250	276	244	382
Bar	837	902	921	950	1,068	1,945	1,280	1,634

The following observations are justified by an examination and comparison of the figures on the various seaports in the table:

a) that the port of Koper had an annual traffic of about 2 million tons over the entire 8-year period and that in 1979 it showed a quite appreciable increase to 2.4 million tons;

b) that in all these years the port of Rijeka has been far above all the other seaports in its traffic and that its annual cargo traffic, which has

ranged between 10 and 16.4 million tons, has been greater than the sum total of the traffic of all other principal ports (however, we should mention at this point that petroleum represents more than 50 percent of Rijeka's total traffic);

c) that the traffic of the port of Sibenik in recent years has stayed at a level of about 800,000 tons a year and that an increase should be expected upon completion of construction of the modern terminal for phosphates which is now under way;

d) that the traffic of the port of Split has risen steadily over the last 5 years and that in 1979 it achieved a record of over 3 million tons, which is mostly the result of increased petroleum traffic;

e) that the annual traffic of the port of Ploce has almost doubled over the last 8 years and that particularly large jumps were achieved in 1976 and 1979, and that this port is becoming ever more firmly established in second place after Rijeka;

f) that the traffic of the port of Dubrovnik, which is appreciably smaller than for the other seaports, has fluctuated between 200,000 and 400,000 tons a year over these 8 years and that in 1979 it achieved a record volume, though the railroad line connecting it to the hinterland was discontinued several years ago;

g) that the traffic of the port of Bar in 1979 was twice as great as in 1972 and that its record of 1.6 million tons in 1979 is a rather pleasant surprise because this seaport was seriously damaged by the earthquake.

4. Container Traffic in Yugoslav Seaports

As we know, over the last 10 years Yugoslav seaports have lagged quite a bit behind the European and advanced world ports with respect to use of modern cargo-handling technology and especially technology for handling general cargo. This above all applies to the technology of integrated transport, in which shipment in containers is one of the principal forms for transport and handling of general cargo. This lag also had an impact on the stagnation in the volume of general cargo passing through our ports, since this cargo is being carried more and more in containers.

Striving as far as possible to keep up with the technological revolution in transportation and cargo handling and to meet the competition from foreign ports, the work organizations operating our seaports (Koper, Rijeka and Ploce) have organized the reception and handling of containers by opening temporary container terminals in which containers are handled with conventional machinery (floating and portal cranes). Thus the traffic of containers through our seaports, only in negligible quantities, of course, did begin a few years ago.

In the meantime accelerated investment was undertaken to build container terminals with appropriate machinery (container bridges), and in 1978 and 1979 modern terminals were opened in the ports of Bar, Koper and Rijeka, where the most up-to-date technology can be used for receiving and shipping container shipments.

Container traffic in our seaports, for the reasons given, is in the initial stage of its development. In 1978 and 1979 the volume of cargo in containers through our seaports was as shown in Table 6.

Table 6

	Seaports				
	Grouping as a Whole	Breakdown			
		Koper	Rijeka	Ploce	Bar
1978					
Number of containers (converted to the 20 standard container)	30,832	19,574	10,895	79	194
Amount of cargo in tons	226,834	142,119	81,905	410	2,400
1979					
Number of containers (converted to the 20 standard container)	45,453	31,023	13,975	143	313
Amount of cargo in tons	363,001	239,948	119,995	758	2,300

The figures in Table 6 pertain only to dockside handling of containers (i.e., loading and unloading of containers on and off vessels).

These figures show the following:

a) that the traffic of containers in our seaports is relatively small, but is growing fast;

b) that the port of Koper is far ahead of other ports in container traffic;

c) that 360,000 tons of general cargo were transshipped in containers in 1979, which is a 60-percent increase over the previous year;

d) that the traffic of containers through the ports of Ploce and Bar is still very small.

We should particularly emphasize that our seaports, Koper above all, are already involved in international competition in attracting containers. In 1979 15,097 containers containing 119,458 tons of transit cargo were received from and shipped to our ports; the port of Koper alone accounted for 12,798 containers containing 99,006 tons of cargo.

The results achieved in container traffic in 1979 are encouraging if we take into account that the up-to-date container terminals at Koper and Rijeka went into operation only in the second half of 1979.

5. Concise Assessment of the Principal Operating Results and Development of Work Organizations Operating Seaports

Transshipment of cargo performed in 1979 by work organizations operating seaports reached the volume of 18.7 million tons, which is a 13-percent increase over the previous year. The assortment of port services has improved to a certain extent, though bulk cargoes to which low rates apply are still predominant in the composition of cargo.

Port capacities were augmented and modernized in 1979. There was a 3-percent increase in the length of docks over the previous year, a 2-percent increase in closed warehouses, a 9-percent increase in open storage areas, a 26-percent increase for refrigerated space and a 10-percent increase for dockside and mobile port machinery. The ports of Rijeka and Koper opened modern container terminals with the necessary equipment in 1979, so that at the end of the year three container terminals were operating in our seaports: Koper, Rijeka and Bar.

This assessment of the status of capacity in seaports has not taken into account the consequences of the catastrophic earthquake on the Montenegrin coast on 15 April 1979, which in the port of Bar seriously damaged some of the docks and port equipment. These port facilities are temporarily out of use, but they will be put back into service.

The trend of a continuous growth of investments in seaports, which has lasted several years now, was slowed down considerably in 1979, when the total volume of investments was only 2 percent greater than in the previous year. If we take into account that this is the growth in current prices, then it follows that there was an increase of investments only in nominal terms, while in real terms there was an appreciable drop in view of the effect of inflation.

The largest investments were made in the ports of Koper and Bar, which account for 70 percent of all investments in this grouping.

Investments in seaports were financed in 1979 mostly with bank credit (42 percent), and work organizations operating ports invested 18 percent from internal sources. In the previous year internal sources had a share of only 11 percent, and this result for 1979 can be given a favorable assessment.

The labor force in seaport work organizations totaled 12,603 at the end of 1979, which is 158 workers more than at the end of the previous year. This means that the size of the labor force increased only negligibly, and the 13-percent growth of the volume of transshipment was achieved primarily by

raising labor productivity and through better use of available port facilities. The structure of the labor force with respect to skills was not improved in 1979 in spite of the efforts of seaport work organizations to improve this distribution as capacities were modernized. The rather high personnel turnover in seaports made it difficult to achieve better results in this domain.

The gross income of seaport work organizations rose 27 percent in 1979 over the previous year, which is considerably greater than the growth of the physical volume of transshipment (13 percent). This is primarily the result of higher prices of port services and to some extent of the improved assortment of port services and the higher labor productivity.

However, costs of materials and services rose all of 40 percent, since prices in other industries rose faster than the prices of port services. This had the result that in 1979 the income of seaports rose 24 percent, i.e., 3 percent less than the growth of gross income.

An analysis of the distribution of gross income by sources showed that seaport work organizations earned most of their income again in 1979 from the services of transshipment and storage of cargo, and the share of other sources of income was very small. This demonstrates that again in 1979 our seaports were oriented primarily toward their transshipment function and that the commercial and industrial functions continued to be underdeveloped. One of the principal reasons for these adverse relations in sources of income is certainly the unresolved question of the status and conditions of operation of foreign trade zones in the seaports, which have been put off for years.

The level of the reproductive capability of seaport work organizations (total for the grouping) was 3.7 percent in 1979, which represents a growth of 12 percent over the previous year. However, almost the entire business fund achieved in 1979 had to be committed in the form of repayable and nonrepayable funds for self-managed special-interest communities at the republic level and for the underdeveloped regions, so that the seaports were left only depreciation as a source for new investments and for repayment of credit. This indicates that the reproductive capability of seaport activity is very low and it is becoming ever more urgent to solve the problem of sources from which investments in the seaport infrastructure. Seaport work organizations expect this issue to be favorably resolved during 1980.

Seaport work organizatins had a net foreign exchange inflow of $51 million in 1979, which is 21 percent more than in the previous year. Seaport activity represents one of the most favorable forms of foreign exchange inflow from invisibles, since the foreign exchange outflow is very small for this activity. If better advantage is to be taken of this favorable circumstance, the seaports ought to be afforded the possibility of developing their commercial function to a greater extent, which can be achieved most rapidly through the activity of foreign trade zones.

7045
CSO: 2800

RAILROAD TRACK SYSTEM, EQUIPMENT, 1975-1979

Belgrade TRANSPORT in Serbo-Croatian No 7, Jul 80 pp 41-42

[Excerpt] The length of standard-gauge track was 9,419 km in 1975 and 9,762 km in 1979. There were 790 km of double-track line in 1975 and 833 km in 1979; electrified track constituted 28 percent of total track length in 1975, and in 1979 it constituted 30 percent of the total network of our railroads.

The density of the network of lines of the Yugoslav Railroads varies greatly and comes out to 38 km of line per 1,000 square kilometers of the area of Yugoslavia. This varies quite widely from one republic or province to the other: from 24 km (Montenegro) to 80 km (Vojvodina). In a comparison with the European railroads, only six countries have a line density lower than the Yugoslav Railroads, while all the others have a considerably higher density, ranging from 39 to 131 km of line per 1,000 square kilometers of area. The condition of our lines is also very bad with 50 percent of the roadbed having been depreciated and the depreciation of track even 58 percent. This condition of track depreciation also results in limits on speeds, which range as follows on the standard-gauge network (which is 9,762 km long):

i. we have 1,153 km, or 12 percent of the track, on which speeds exceeding 100 km/hr are allowed,

ii. we have 3,220 km, or 34 percent, for speeds between 80 and 100 km/hr,

iii. we have 5,389 km, or 54 percent, for a speed under 80 km/hr.

As we see, the condition of the track is such that the maximum permissible speeds are less than 80 km/hr on more than 50 percent of the entire track network of the Yugoslav Railroads.

As for traction, equipment is as follows on the basis of the share in traffic:

i. electric locomotives had a share of 10 percent in 1975 and 28 percent in 1979;

ii. diesel locomotives had a share of 33 percent in 1975, and their share then fell to 20 percent in 1979.

The share of the particular types of traction in total traffic seems to be still more favorable: for example, though electric locomotives have a 28-percent share in the total number of locomotives, their share in traffic is 54 percent; diesel locomotives had a share of 33 percent of the traffic in 1975 and 38 percent in 1979 [sic]; steam locomotives had a 14-percent share of traffic in 1975 and a share of only 7 percent in 1979.

One can clearly see from the above that the orientation has been toward electric traction in carrying out the modernization of the Yugoslav Railroads, that is, in implementing the agreement on their development.

As for progress in carrying out the social compact on development of the railroads with respect to passenger cars, in 1975 we had a fleet of 3,396 cars, and in 1979 that number had dropped to 3,162. Though the total number of passenger cars and also seats has dropped, the composition of the fleet has altered considerably in the period 1976-1979 thanks to the purchase of cars of more up-to-date design, rail buses and rail diesel and electric cars, which has made it possible to offer passengers better quality and more comfortable transportation service. Thus today there is an obvious improvement in the quality of passenger cars and the composition of the fleet, as can be seen from the following figures on the allowed speeds of the passenger cars:

Under 80 km/hr	1.64 percent of the fleet
Under 100 km/hr	45.00 percent of the fleet
Under 120 km/hr	12.00 percent of the fleet
Under 140 km/hr	19.00 percent of the fleet
Under 160 km/hr	about 22.00 percent of the fleet

Though a sizable purchase of cars has been made in this period, on the basis of the composition of the fleet and the comfort of the cars themselves, in 1979 our railroads had only 10 seats per 1,000 inhabitants, while in most of the European countries this index ranges from 14 to 40 seats.

As for the carrying capacity of the fleet of freight cars, today the Yugoslav Railroads have a carrying capacity of 1,823,062 tons. The growth rate of carrying capacity rose slightly between 1975 and 1979, while the number of cars was all of about 10 percent lower in 1979 than in 1975. The reason is that a sizable number of cars have been scrapped, and new and more modern cars with higher carrying capacity have been purchased. Thus today the fleet of freight cars shows the following pattern by year of construction:

i. 1944--19 percent,

ii. between 1945 and 1970--39 percent,

iii. between 1970 and 1975--30 percent, and

iv. between 1976 and 1979--about 11 percent of the fleet.

Though considerable efforts have been made in this area, it is evident that about 19 percent of our freight car fleet is still about 40 years old or more, which is causing considerable difficulties in operation and to a great extent is jeopardizing the safety of traffic because they are technically worn out and in bad condition.

As for the volume of freight compared to the growth rate envisaged by the Social Compact on Development of the Yugoslav Railroads in the Period From 1976 to 1980, we can say that there is a lag in the volume of traffic in terms of net ton-kilometers, since the growth rate forecast in the period 1976 to 1979 was 6 percent, and the actual growth rate was 4.6 percent. Though the well-known social compacts have been adopted on transportation policy and on conditions of economic activity and development, their realization has not had a sufficient impact on progress in modernization or on participation of the Yugoslav Railroads and the country's transportation market.

Beginning with the base year 1975 the share of the various branches of transportation in passenger and freight traffic in the 1976-1979 period shows a further declining trend of the share of the railroads on our country's transportation market. That is, in 1979 the railroads carried only about 10 percent of the passengers and accounted for about 23 percent of the passenger-kilometers, and in freight operations the railroad carried 28 percent of the tonnage and accounted for 53 percent of the ton-kilometers of all the freight carried by common carriers in the socialized sector.

It therefore follows that in 1979 the railroads carried about 108 million passengers and about 88 million tons of freight, which is one-tenth of the passenger volume and slightly less than one-third of the freight volume of our country's land transportation.

7045
CSO: 2800

BUS, TRUCKING CAPACITIES, 1978-1979

Belgrade TRANSPORT in Serbo-Croatian No 7, Jul 80 pp 45-47

[Article by Milan Obradovic]

[Excerpt] Organizations of associated labor operating as common carriers in highway transportation successfully perform the function of rendering transportation services to the economy and to society. According to figures for 1978, the industry had 655 organizations (100 bus firms, 412 truck firms, and 143 offering both passenger and freight services) and a labor force of 112,288.*

In 1979 all branches of transportation taken together carried a total of 1 billion passengers (precisely 1,068,126,000), which is 1 percent more than the previous year, 1978. As shown in Table 1 and as has been the case up to now, rail and highway transportation carried most of the traffic--together 1,054,643,000 passengers, which is 98 percent of the total volume. The 4-percent decline of the rail passenger volume and the 1-percent increase in the passenger volume in highway transportation brought about a further redistribution of the traffic to the advantage of highway transportation, so that the share of the railroad in the total volume dropped from 10.6 to 10.1 percent, and the share of highway transportation increased from 88.3 to 88.7 percent.

The situation is similar when the length of the trip is taken into account; the number of passenger-kilometers was up 1 percent for total traffic and also for highway passenger traffic and down 3 percent for rail passenger traffic.

It is evident from Table 2 that 332,026,000 tons of freight were carried, which is 8 percent more than in 1978. Both rail and highway transportation showed the same 9-percent increase, so that their relative proportions

* Data of the Federal Bureau of Statistics and of organizations which belong to the Highway Transportation Trade Community and complex organizations of associated labor were used in preparing this analysis of common carriers in highway transportation.

changed hardly at all as compared to 1978. The share in the volume of freight was 26.4 percent for rail transportation (26.2 percent in 1978) and 58.6 percent for the trucking industry (58 percent in 1978).

Table 1. Passenger Volume and Traffic

Elements	1978	1979	Index	Structure, % 1978	Structure, % 1979
Total volume of passengers, in thousands	1,060,001	1,068,126	101	100.0	100.0
Rail	112,780	108,049	96	10.6	10.1
River and lake	119	150	126	--	--
Maritime	6,713	8,056	120	0.6	0.7
Air	4,950	5,277	107	0.5	0.5
Bus	935,439	946,594	101	88.3	88.7
Passenger-kilometers, in millions	44,145	44,628	101	100.0	100.0
Rail	10,445	10,134	97	23.6	22.7
River and lake	19	26	137	0.1	0.1
Maritime	211	210	99	0.5	0.5
Air	4,730	5,236	111	10.7	11.7
Bus	28,740	29,022	101	65.2	65.0

Note: Figures of the monthly survey INDEKS [INDEX], No 3, 1980.

However, when the length of the haul is taken into account, the picture is somewhat different. Total traffic in ton-kilometers dropped 2 index points. The traffic in ton-kilometers showed a larger increase in rail transportation (index number 111) than in the trucking industry (4-percent increase), so that the share of the railroads in total traffic increased considerably (from 10.2 to 11.5 percent), which, since the two branches had the same increase in the volume of freight, indicates an increase in the average freight haul in rail transportation as compared to the average length of the freight haul in the trucking industry. This is also in line with the intentions of the Social Compact on the Transportation Policy of Yugoslavia, under which freight is to move to rail transportation over the longer distances to achieve optimality in the transportation system.

Table 2. Freight Volume and Traffic

Elements	1978	1979	Index	Structure, % 1978	Structure, % 1979
Total volume of freight, in thousands of tons	308,383	332,026	108	100.0	100.0
Rail	80,763	87,778	109	26.2	26.4
River and lake	26,492	26,230	99	8.6	7.9
Maritime	22,189	23,348	105	7.1	7.0

Table 2 (continued)

Elements	1978	1979	Index	Structure, % 1978	Structure, % 1979
Air	30	35	117	0.1	0.1
Truck	178,909	194,635	109	58.0	58.6
Freight traffic, in millions of ton-kilometers	228,717	223,997	98	100.0	100.0
Rail	23,378	25,925	111	10.2	11.5
River and lake	5,907	5,651	96	2.5	2.5
Maritime	182,505	174,763	96	79.7	78.0
Air	54	84	156	0.2	0.2
Truck	16,873	17,574	104	7.4	7.8

Note: Figures of the monthly survey INDEKS, No 3, 1980.

Capacity and Physical Volume of Passenger Transportation

Common carriers in the public sector of the bus industry, which had 11,253 buses with a passenger capacity of 594,656, carried, as shown in Table 3, more than a billion passengers (1,004,912,000), traveled 864,529 km, and had a traffic of 30,047,881,000 passenger-kilometers. These figures are all higher than in 1978: 5 percent higher for the number of buses and kilometers traveled, 6 percent for the passenger capacity and 4 percent for the number of passengers carried. However, the other elements are staying at the same level (kilometers traveled per vehicle) or are dropping--passengers carried per bus and passenger-kilometers per vehicle dropped 14 percent, and passengers carried per unit capacity and passenger-kilometers per unit capacity dropped 2 percent.

The average distance traveled per passenger remained unchanged at 30 km.

Table 3. Passenger Transportation Capacity and Traffic

Elements	1978	1979	Index
1. Number of buses	10,726	11,253	105
2. Passenger capacity	562,712	594,656	106
3. Kilometers traveled, in thousands	822,674	864,529	105
4. Passengers carried, in thousands	965,808	1,004,912	104
5. Passenger-kilometers, in thousands	29,019,986	30,047,881	103
6. Kilometers traveled per vehicle	76,699	76,826	100
7. Passengers carried per bus	90,043	89,302	99
8. Passengers carried per unit capacity	1,716	1,690	98
9. Passenger-kilometers per vehicle, in thousands	2,705	2,670	99
10. Passenger-kilometers per unit capacity	51,572	50,530	98

Table 3 (continued)

Elements	1978	1979	Index
11. Average distance traveled per passenger, passenger-kilometers/ number of passengers	30	30	100

Capacity and Volume of Freight in the Trucking Industry

Common carriers in the public sector of the trucking industry, which had 24,874 vehicles and 7,725 trailers and a capacity of 405,920 registered tons carried 133,864,000 tons of freight in 1979, handled traffic of 15 billion ton-kilometers (15,198,698,000) and covered 1.5 billion kilometers (precisely 1,464,453,000).

These elements all increased, the increases ranging from 4 to 12 percent: the average number of trailers 4 percent, the volume of freight and freight traffic in ton-kilometers 7 percent, the number of vehicles 8 percent, vehicle capacity 11 percent and kilometers traveled 12 percent. Even the kilometers traveled per vehicle increased 3 percent.

The other elements in Table 4 showed decreases ranging from 1 to 4 percent: tons carried per vehicle and distance traveled per ton of freight (which was 113 km) dropped 1 percent, ton-kilometers per vehicle dropped 2 percent, tons carried per unit capacity dropped 3 percent and ton-kilometers per unit capacity dropped 4 percent.

Table 4. Capacity and Traffic in the Trucking Industry

Elements	1978	1979	Index
1. Average number of vehicles	22,967	24,874	108
2. Average number of trailers	7,418	7,725	104
3. Vehicle capacity	367,044	405,920	111
4. Kilometers traveled, in thousands	1,308,436	1,464,453	112
5. Tons of freight carried, in thousands	124,893	133,864	107
6. Freight traffic, in thousands of ton-kilometers	14,242,636	15,198,698	107
7. Kilometers traveled per vehicle	56,970	58,875	103
8. Tons carried per vehicle	5,438	5,382	99
9. Tons carried per unit capacity	340	330	97
10. Ton-kilometers per vehicle	620,135	611,027	98
11. Ton-kilometers per unit capacity	38,804	37,443	96
12. Average distance traveled per ton of freight	114	113	99

Capacity and Physical Volume of Transportation by Republics and Provinces

In Yugoslavia's passenger transportation organizations of associated labor had 11,253 buses distributed as follows among the republics and provinces: 1--Serbia with 4,430, 2--Serbia proper with 2,713, 3--Croatia with 2,174, 4--Slovenia with 1,790, 5--Bosnia-Hercegovina with 1,784, 6--Vojvodina with 1,137, 7--Macedonia with 794, 8--Kosovo with 580 and 9--Montenegro with 281. Whereas the number of buses dropped 3 percent in Montenegro, there were increases ranging from 1 to 10 percent in the other republics and provinces (Macedonia 1 percent, Croatia, Serbia proper and Vojvodina 3 percent, Serbia 4 percent, Slovenia 6 percent, Kosovo 9 percent and Bosnia-Hercegovina 10 percent).

The republics and provinces can be classed in three groups on the basis of the passenger volume carried with this fleet of buses.

In the first group are Montenegro and Serbia proper, where the volume was down 9 and 1 percent, respectively. In the second group is Croatia, where the passenger volume stayed the same at an index number of 100. The third group is the most numerous, in this group there was an increase in the volume ranging from 3 to 16 percent (Slovenia and Serbia 3 percent, Vojvodina 5 percent, Bosnia-Hercegovina 11 percent, Macedonia 13 percent and Kosovo 16 percent).

In Serbia proper there was a decline in the volume of passengers carried (1 percent) in spite of the 3-percent increase in the number of buses.

The 3-percent increase in the number of buses in Croatia did not increase the number of passengers carried. The 4-percent increase in the number of buses in Serbia and the 6-percent increase in Slovenia were not accompanied by a proportionate increase in the passenger volume, which increased 3 percent in both republics. However, the other republics and provinces showed a faster increase for the passenger volume than for the number of buses: 1 percent faster in Bosnia-Hercegovina, 2 percent faster in Vojvodina, 7 percent faster in Kosovo and 12 percent faster in Macedonia.

This shows at the same time the level of utilization of buses, which was as follows: a) lower in Montenegro, Serbia proper, Croatia, Slovenia and Serbia and b) higher in Macedonia, Kosovo, Vojvodina and Bosnia-Hercegovina.

Average distance traveled per passenger ranged from 21 to 46 km (21 in Slovenia and Vojvodina, 28 in Bosnia-Hercegovina, 29 in Serbia, 32 in Serbia proper, 35 in Kosovo, 42 in Croatia, 44 in Macedonia and 46 in Montenegro). Comparisons of 1979 with 1978 were as follows: a) decreases of 1 percent in Vojvodina, 2 percent in Croatia, 3 percent in Serbia and Serbia proper, and 8 percent in Kosovo, b) the same level in Bosnia-Hercegovina and Macedonia, and c) increases of 5 percent in Slovenia and 53 percent in Montenegro.

In Yugoslavia's trucking industry [common carriers in the public sector] the fleet numbered 24,784 vehicles, as follows: 1) Serbia 8,912, 2) Serbia proper 6,946, 3) Croatia 4,609, 4) Bosnia-Hercegovina 3,949, 5) Slovenia 3,597, 6) Macedonia 3,214, 7) Vojvodina 1,918, 8) Montenegro 593 and 9) Kosovo 48. Their increases over 1978 ranged from 2 to 26 percent: 2 percent in Kosovo, 3 percent in Serbia proper, 5 percent in Slovenia, 7 percent in Montenegro and Serbia, 8 percent in Bosnia-Hercegovina, 9 percent in Croatia, 14 percent in Macedonia and 26 percent in Vojvodina.

The number of trailers was 7,725: 1) Serbia 2,648, 2) Bosnia-Hercegovina 1,842, 3) Serbia proper 1,670, 4) Croatia 1,320, 5) Slovenia 1,001, 6) Vojvodina 972, 7) Macedonia 505, 8) Montenegro 409 and 9) Kosovo 6.

These vehicles increased their freight volume between 3 and 64 percent between 1978 and 1979: 3 percent in Montenegro, Croatia and Serbia, 8 percent in Slovenia, 10 percent in Bosnia-Hercegovina, 23 percent in Macedonia, 30 percent in Vojvodina, and 64 percent in Kosovo. The exception was Serbia proper, where the volume dropped 2 percent.

The volume of freight increased faster than the number of vehicles in the following republics and provinces: 2 percent in Bosnia-Hercegovina, 3 percent in Slovenia, 7 percent in Macedonia, 34 percent in Vojvodina and 62 percent in Kosovo. However, in the following republics and provinces the rate of increase of the volume of freight was slower than the rate of increase of the number of vehicles: 4 percent in Montenegro and Serbia, 5 percent in Serbia proper and 6 percent in Croatia.

In other words, the level of utilization of vehicles to carry freight rose in Bosnia-Hercegovina, Slovenia, Macedonia, Vojvodina and Kosovo and dropped in Montenegro, Serbia, Serbia proper and Croatia.

Freight traffic in ton-kilometers dropped in Serbia (3 percent) and Serbia proper (114), while it rose between 6 and 66 percent in the other republics and provinces (6 percent in Bosnia-Hercegovina, 7 percent in Slovenia, 9 percent in Croatia, 18 percent in Macedonia, 33 percent in Montenegro, 37 percent in Vojvodina and 66 percent in Kosovo).

7045
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URBAN TRANSPORTATION DATA, 1979

Belgrade TRANSPORT in Serbo-Croatian No 7, Jul 80 pp 49-50

[Excerpt] I. Volume of Services and Capacity

Passenger Volume

The 23 organizations of associated labor surveyed in municipal public passenger transportation carried 1,476.6 million passengers in 1979, which is an increase of 84.8 million passengers, or 6.8 percent, over 1978. The increase in the passenger volume is above all the result of restricted use of passenger cars (odd-even), the rising price of fuel, population growth in the cities, expansion of the network of public urban transportation routes and the cheaper system of fares. Among the major cities the largest increase in the passenger volume was recorded in Belgrade (10 percent), and a drop in the volume of passengers was recorded only in Titograd (4.0) and Zadar (10.3 percent).

An increase in the passenger volume of 4.7 percent was recorded over last year in streetcar transportation, the increase for bus transportation was 6.4 percent, while for trolley bus transportation it was 11.0 percent.

Table 1 shows the pattern of distribution of the passenger volume in a comparison with 1978.

Table 1

In millions

Type of Transportation	1978	1979	Index
Streetcar	288.6	302.3	104.7
Bus	1,092.1	1,162.0	106.4
Trolley bus	11.1	12.3	111.0

At the end of 1979 the number of vehicles totaled 4,724, which is 5.7 percent, or 258 vehicles, more than in 1978.

Though there was an increase in the total number of vehicles, we should emphasize that it is still not adequate to meet the needs of serving the public and to keep up with the rapid development of our cities. However, we should point out that the situation for purchasing vehicles is very unsatisfactory both with respect to the number of vehicles and also with respect to the price and delivery dates, which make it impossible for organizations of associated labor in urban public transportation to increase the volume and quality of their services and under the conditions of the energy crisis carry an ever larger volume of passengers turning to municipal transportation. In 1979 there was a constructive tendency toward a further increase in the use of tandem arrangements in streetcar and bus transportation. The number of tandem streetcars increased 34.8 percent over 1978, or 19 vehicles, while the number of tandem buses increased 55 vehicles, or 13 percent.

This helped organizations of associated labor in urban public transportation to improve their business operation over 1978, and it helped to achieve a relative reduction of operating costs (fuel consumption and the like) and more efficient business operation (reduced number of operators per vehicle, as shown in Table 2).

Table 2. Kilometers Traveled (in millions)

Type of Vehicle	1978	1979	Index
Streetcar	33.4	33.9	101.4
Bus	1.3	1.2	94.0
Trolley bus	395.4	402.4	101.7
Total	430.1	437.5	101.7

The vehicles of urban public transportation in the 23 cities surveyed traveled 437.5 million kilometers with passengers in 1979, which is 1.7 percent more than in 1978.

In 1978 there was a tendency in almost all organizations of associated labor for the number of kilometers traveled to increase more slowly than the passenger volume because of the greater employment in transportation of tandem vehicles with a higher passenger capacity.

7045
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END

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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2053

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EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2053

CONTENTS

ALBANIA

Problems in Increasing Exports, Reducing Imports
(Hysen Kucani, et al.; PROBLEME EKONOMIKE, Apr-Jun 80) 1

Need for Increasing Labor Productivity Stressed
(Qimo Kocani, Dhimo Beleri; PROBLEME EKONOMIKE, Apr-Jun 80) 8

BULGARIA

Minister Dwells on Progress in Energy Development
(Nikola Todoriev; ENERGETIKA, No 7, 1980) 14

Deputy Minister Describes Atomic Power Station
(Oved Tadzher; ENERGETIKA, No 7, 1980) 29

CZECHOSLOVAKIA

More Efficient Utilization of Industrial Base Urged
(Zdenek Haba; TRIBUNA, No 35, 1980) 42

GERMAN DEMOCRATIC REPUBLIC

New Statutes Outline Foreign Trade Enterprise Responsibilities
(AW DDR-AUSSENWIRTSCHAFT, 10 Sep 80) 47

Less Specialization, More Advanced Training for Engineers Urged
(Wolfgang Biermann; TG TECHNISCHE GEMEINSCHAFT, Sep 80) 63

[III - EE - 64]

GDR Participation in Mozambique Trade Fair Publicized
(TEMPO, 31 Aug 80) 71

HUNGARY

Utilization, Role of Turnover Tax Explained
(Imre Vincze; FIGYELO, 17 Sep 80) 79

Manpower Management Problems, Measures Described
(Imre Gyuricza; FIGYELO, 20 Aug 80) 85

Importance, Regulation, Development of Private Agriculture Discussed
(Gyula Varga; KOZGAZDASAGI SZEMLE, No 7-8, 1980) 91

POLAND

Legal Aspects of Worker Participation in Management Explained
(Ludwik Bar; ZARZADZANIE, Jun 80) 109

Draft Plan for Reform of Financial System Outlined
(Roman Lencewicz; GAZETA LUBUSKA, 27 Aug 80) 119

YUGOSLAVIA

Fuel, Power Situation, Outlook Discussed
(Radmila Jovanovic; PRIVREDNI PREGLED, 26-28 Jul 80) 121

Newspaper Circulation, First Half of 1979, 1980
(NASA STAMPA, Jul-Aug 80) 124

Croatian Economic Chamber Alarmed Over Deteriorating Situation
(VJESNIK, 17 Sep 80) 125

Briefs
Yugoslav Enterprises in Angola 127
Small Business Loans 127
Kosovo Agriculture 127
Bakers' Strike in PEC 127
Energy Outlook 128
Energy Needs 128
Rijeka Refinery Below Plan 129
Oil Agreements 129
Kosovo Workers Abroad 129

PROBLEMS IN INCREASING EXPORTS, REDUCING IMPORTS

Tirana PROBLEME EKONOMIKE in Albanian No 2, Apr-Jun 80 pp 71-78

[Article by Hysen Kucani, Kostandin Kristo and Niqifor Aliko: "Some Problems Concerning the Increase of Exports, the Reduction of Imports and the Improvement of the Effectiveness of Foreign Trade"]

I

[Text] The development and continuous invigoration of the economy on the basis of the principle of relying on one's own forces have led to the increase in the social product and have created favorable conditions for increasing exports and reducing imports and for developing our foreign trade with higher effectiveness.

Despite the fierce imperialist-revisionist blockade and the betrayal of the Chinese social-imperialists, our foreign trade has scored increases. Our country, on the basis of the principles of Marxism-Leninism, today is developing its trade with about 50 countries of the world, and improvements have been made in the trade structure. The number of articles for export has been increased, the level of their processing has been improved and the demands for our products have increased in international markets. Many of the goods that were imported in the past now are being produced in the country, satisfying better and better the needs of the population and of the economy. In 1979, compared to 1976, the export of important goods, such as mineral ores and chrome concentrates have considerably increased; we exported about six times more gasoline, about three times more electric energy and about 50 percent more tobacco and so forth.

However, in order to further increase the quantity of goods for export and in order that they may be produced on schedule, in the proper quantity, quality and assortments, the following tasks emerge:

1. In the present conditions, more than ever, it is necessary that the struggle for increasing exports, on a priority basis, be correctly understood. Special attention must be given to increasing the production of those articles which constitute the foundation of our exports, without neglecting the other articles which also are important resources for increasing revenues in hard

currency, devoting more attention to the development of the range of those articles which are in demand in foreign markets and for which the raw materials are found in the country.

An important role in our exports is played by mineral ores, fuels and metals, such as chrome ores and concentrates, ferrochromium, ferronickel ores, pyrite ores and concentrates, petroleum by-products, electric energy, copper and copper wires and so forth. Therefore, as stressed by the Seventh Plenum of the Central Committee of the Albanian Workers Party, the improvement of the organizational and management work and of the research and scientific work, and the increase of efforts to raise the production of these articles rapidly, through the best utilization of the existing resources and of the measures for discovering resources, constitute some of the most important tasks entrusted to the workers, specialists and cadres that work and manage these important sectors of the economy. The increase of production in mines will be achieved mainly by assuring a higher level of mechanization and through the most complete utilization of the production capacities of plants for the enrichment and processing of mineral ores and the building of new plants.

In regard to increasing the export of fresh tomatoes and vegetables, greenhouses have been built and favorable conditions have been created to assure early products and high yields. This has made it possible for their production and export to be increased continually. However, yields and early deliveries have not been achieved in some units which are not utilizing the good experience of many other units.

Medicinal and ethereal oil plants and spontaneous flora crops have an important value as articles for export. Implementing the recommendations for making the inventory of the areas with medicinal plants and for creating special work brigades in agricultural cooperatives, brigades which will deal with their cultivation and collecting, it is appropriate to make all the efforts possible in order to increase their export, because, for example, with 1 ton of sage it is possible to buy 25 tons of coking coal.

The export of vegetables and dried fruits can be increased more rapdily by better utilizing agricultural reserves and capacities in the existing plants and, in some cases, by also increasing their cultivation.

In addition to increasing the export of traditional articles, opportunities have been created to appear in foreign markets with other articles which so far have not been evaluated, but which are in demand in these markets at quite profitable prices. Marble scraps in the form of crushed stones [Albanian words: cakullit], which it was thought, could not be exported, now are sold at 50 dollars a ton. The naphtha coke, too, which it was thought was not in demand is sold in free currency markets at 50 dollars a ton. There also are great demands for sea salt; however, greater efforts are required to implement the recommendations that have been given in order to appear in foreign markets with mineral ores such as the bauxites, nickel silicate, quartz, olivenites, volcanic glass, dolomites, asbestos, and magnesites and so forth, for which we also have demands.

2. The regular tempo of products for export is an essential requirement for achieving the established objectives. This tempo is required for each month and for each 3-month period; but, in 1979, in some cases, there were irregularities. There were enterprises which in December produced five times more goods for export than in January. Such a tempo not only creates difficulties in the fulfillment of the export plan, but also creates problems for providing hard currency funds in time and in a proportional manner during the whole year, becoming an obstacle to the import of goods on schedule, goods which are needed by our economy every day. Also, nonexisting problems are created in regard to the conclusion and execution of contracts, the assurance of the means of transportation, the storing of goods for export and the preservation of their quality.

3. Improvement of quality of goods for export and their production, in accordance with the requirements of foreign trade, is an important resource for increasing revenues in hard currency from exports. The increase of the volume of exports cannot be detached from the struggle and efforts to improve the quality. Attention to quality must, first of all, be concentrated on the basic articles, on mineral ores, especially chrome ore, in which a radical improvement is required in order to increase the assurance of selling it and to raise its value, by preserving it very carefully in the mines, by grading it and by preventing stones and inert materials from getting into it, by guaranteeing that the dust content is as low as possible and so forth.

The quality of tobacco and cigarettes for export is also important. There is a great competition in these articles in international markets. The hard currency revenues for 1 ton of tobacco of second quality are about twice as high as for those of fourth quality, five times as high as for those of fifth quality and six times as high as for those of sixth quality. There are cases when, in certain units, although the production and the quality of tobacco have been increased, the revenues achieved have been lower because of bad quality; therefore, this problem must remain in the center of attention of the production units and of their leadership organs. The reduction of the quality of tobacco in some units has occurred because of the following causes: the deterioration of seeds; the failure to carry out agro-technical services properly; the failure to assure the material base; the use of chemical fertilizer indiscriminately and in incorrect proportion with organic fertilizer; and the failure to pick and handle the tobacco in accordance with technical requirements. Of decisive importance in the production of tobacco, in addition to the varieties and quality of tobacco, is the work for the preparation of tobacco blends and for hardening, mixing, and packaging the tobacco because, it has happened that a lot of cigarettes has lost its real value simply because the cigarettes were not properly packaged or because the cartons were crushed during transportation.

The problems of quality are linked with a number of ideological, technical, technological and organizational factors. They require the coordination of party work with the work of leadership cadres and specialists in the enterprises in order to explain these problems to workers and, on this basis, to increase attention, responsibility and mobilization so as to increase production and, especially to improve tobacco quality so that the label "Made in Albania" is in a position to break through blockades and encirclements, to be in demand everywhere, and to raise higher and higher the good name of Albanian products.

4. The raising of the level of processing goods for export constitutes one of the most important resources for increasing their value and for increasing hard currency revenues. In executing the tasks assigned by the Seventh Party Congress and the repeated recommendations of the party, the level of the processing of goods for export has been improved from year to year. In this field, an important role is played by the enrichment and processing of minerals.

The copper processing in the country is of great interest. By producing wires and cables, the value increases more than 80 percent; while, from the production of thin and very thin wires, hard currency revenues increase two-three times.

The deep processing of petroleum has opened new prospects for this industrial branch both for satisfying the needs of the country and for export. The increase in the processing of food products and of alcoholic beverages is also of interest. Noticeable progress has been made in this field; but, it is not sufficient, when it is known that the reserves are great. The packaging of canned tomato sauce and of other articles in kilogram containers greatly increases the price and value of the product in foreign markets. Nevertheless, there are cases when, for example, we export unbottled wine, while we know that the price of bottled wine is about 1.5 times higher. Therefore, it is essential for the production enterprises, the executive committees and departments to understand and properly execute the party recommendation that we must continually increase the level of processing of our export goods, considering it as one of the important conditions for developing the economy and for increasing profits from foreign trade and for improving its effectiveness.

II

With the comprehensive development of our economy, along with increasing production and satisfying, better and better, the needs of the economy with domestic products, the demands for importing some articles--articles which under established conditions and in specific moments are not provided in the country--are also increased. Therefore, in accordance with the needs of the economy, in the future, too, along with our exports, we will also import those articles which are essential to the development of the economy and to the defense of the country.

Important tasks are assigned to the organs using imported goods for increasing their efforts to reduce the use of imports, through the reduction of raw materials and of other materials, by reducing consumption norms and by applying studied technical and scientific norms which assure their use sparingly.

However, to reduce imports, the tasks, ways and possibilities are very great. The study and research work and the technical and scientific revolution must lead to the programming of measures; they must aim at solving the technical and technological problems of production that make it possible to replace raw materials and other materials, which are expensive, with less expensive

ones, struggling for higher effectiveness, such as the use of synthetic materials and of new technological processes and the extension of precision castings and so forth. Along with these things, synthetic fibres will be introduced more rapidly in the textile industry, the artificial leathers, in the shoe industry and plastic raw materials, the mechanical and metallic products and in household equipment.

Also, noticeable savings can be assured in imports if the replacement of some ready-made goods with semi-processed goods or raw materials is given proper consideration. Thus, for example, in the place of some mixtures of non-ferrous metals we should import separate elements or in the place of offset paper, cellophane and aluminum foil we should import only the pulp and do the processing in the country.

When we say to cut down and reduce imports, in the first place, it is important to correctly understand the content of this requirement. If you shorten the list of the goods that are imported, for example, if you remove 60 percent of the names of goods that are listed, in this case, you may have shortened the list of imports but not reduced the volume of imports, because, all those "names" which you may have removed may represent only 10-15 percent of the value of the entire list of imports. Therefore, in struggling to reduce imports it is important, first of all, to deal with and stop those main articles which occupy a great piece in expenditures for exports, such as, for example, coking coal, the various metals, soldering electrodes, steel lines, refractory materials, cotton, natural and synthetic leather and so forth. By importing circular pieces of steel without many layers of thickness, so that the latter may be produced in the country, it is possible to buy more steel at profitable prices. Also, it is possible and must be possible to handle, in the country, the production of rail shifts for railroads because the possibilities for this exist. These articles are important for the economy and are expensive in foreign markets. As we have the raw material, it is possible to organize, in the country, the production of rolled copper, such as copper lines, pipes and sheets, by emulating the nail and bolt plant in Kavaje which has all these costly things which are not imported from abroad anymore. Also, there is no reason to import such articles as quartz sands, felspar, barite or perlite sands, because, the raw materials for their production exist in the country. The nomenclature of machines and equipment produced in the country is constantly increasing, because, a great deal of work is being done for this, and the possibilities for it are great; and, for these things, too, there are reserves, which can be used by expanding and raising, to a much higher level, study and design work, specialization, cooperation and the technical and scientific revolution.

In regard to spare parts, as the party has continually stressed, a special evaluation is required. Their production in the country is essential, because, first of all, we must assure the complete utilization of machines and equipment that we have and also because of the fact that they are of different types and of many kinds and are found with difficulty in foreign markets and are very expensive. Under these conditions, not only their production in the country, but also their repair and rejuvenation, are essential and effective for the economy.

The increased profitability export goods sets forth the need for the problems of their cost and prices to be known correctly, both by the organs and workers in foreign trade and by those in production. Of course, the main attention must be given to the basic articles for export, without neglecting the other products, which also have their own importance.

The party has taken important measures for increasing exports. The many projects, such as plants and workshops and lines and units, that are being built every year, also produce for export. However, when their construction is not completed by established deadlines, imports are not reduced and exports are not increased, because, it is calculated that, in the case of one project that is put into operation 1 month behind schedule, hundreds of thousands and even millions of dollars are lost. Of course, the failure to utilize the machines and equipment that are imported from abroad with hard currency damages the entire economy and the export tasks are also affected and the import funds are incorrectly frozen.

As a result of the expansion of the general crisis that has taken over the capitalist-revisionist world, the situation of prices has become a very unstable phenomenon. It gets involved with many economic, and sometimes speculative, factors. Therefore, the knowledge of this situation and its utilization must be considered as a serious problem of great importance for all workers. For example, satisfactory revenues are obtained from vegetables only if established tasks for their production and early delivery are fulfilled. However, while greenhouse space has been increased every year, early delivery in some units has been reduced. This phenomenon, no matter now partial it is, leads to the reduction of hard currency revenues per unit of production. On the other hand, since in heated greenhouses the main expenditure is for fuel, it is necessary that less costly heating systems be designed and built, using inexpensive energies and solid fuel, and also using them with the most scientific and strict system of savings.

The knowledge and exploitation of the situation in world markets is the main link on which the supplying of imported goods at most favorable prices depends. As a result of competition and other factors, the prices of imports move in the majority of the cases, in accordance with demands and offers; however, there are many other and very different factors, from seasonality of the product and the use of goods to the urgency of demands which, sometimes, have also caused disturbing problems. Therefore, as the party has continually recommended, it is necessary for every economic enterprise and unit to take measures, in an organized and planned manner, in regard to the reserves for the supply of raw materials and other materials so as to avoid cases of urgent demands which, even, when they are satisfied, are satisfied with great expenditures and with many difficulties.

In regard to imported goods, attention must be shown by the users; they must control the quality and other characteristics included in the contracts, because, it has happened that goods have been delivered with quality indicators much lower, even the weight of the standard units has been less than that indicated in the label, thus, causing great losses to the economy.

The increase of exports, the reduction of imports and the improvement of the effectiveness of foreign trade set forth the task for all the units and links of the economy to think and work seriously for continually increasing the quality and value of export goods and for continually reducing the demands for imported goods, by satisfying needs with domestic resources, fully implementing the slogan of the party that "without export there is no import."

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NEED FOR INCREASING LABOR PRODUCTIVITY STRESSED

Tirana PROBLEME EKONOMIKE in Albanian No 2, Apr-Jun 80 pp 53-58

[Article by Qimo Kocani and Dhimo Beleri: "Problems of Increasing Labor Productivity--Important Matters Concerning the Management of the Economy"]

[Text] The Albanian Workers Party has handled the continuous increase of labor productivity, as an indicator of the complex development, with great effectiveness, of the economy, of the economical use of manpower and concrete work, and of the implementation of the principle of relying on one's own forces.

The Seventh Plenum of the Party Central Committee and the important speeches of Comrade Enver Hoxha again stressed that the socialist organization and the increase of labor productivity are a broad and important field of the scientific management of the economy. The continuous increase of labor productivity is the objective economic law of socialism. It has a permanent and persistent character. The invigoration of the technical-material base, the perfection of the scientific organization and management of production and of work methods and styles and the expansion of the process of revolutionization of the entire life of the country, the struggle against foreign manifestations and against liberal attitudes toward these manifestions, for strengthening the socialist awareness of workers and so forth--are important factors for increasing production. It is important that these factors are well known and completely used in order to undertake increasingly greater tasks for increasing labor productivity.

Comrade Enver Hoxha says that the great projects of the draft plan of the Seventh Five-Year Plan cannot be achieved with small improvements. This also refers to the rates of increase of labor productivity. Important measures required in this field.

In the conditions of the rapid development of the economy and of social activity, the most complete and rational utilization of all forces capable of working are required. The increase of social productivity of labor is also linked with the correct distribution of workers in the production and non-productive spheres of work.

The party and government have given guidance and have taken measures so that the distribution of manpower will be given priority in the sphere of material production and so that the number of workers and of cooperative members will be increased at higher rates, in comparison with white-collar employees. This has a deep class character and is an essential condition for the development of expanded socialist reproduction. In 1979, the workers in the sphere of material production constituted 87 percent of the total number of workers. The number of workers in the non-productive sphere has also been increased, at the same time, in accordance with the tasks established by the party for the development of the social and cultural sector.

In this field, it is important that, in practical execution, these ratios be carefully observed in order to prevent cases when the number of workers in the non-productive sphere may increase at higher rates than the number of workers in the production sphere. The financial and planning organs in the districts and centers must monitor this process at close range, from the stage of planning and during that of the fulfillment of the plan.

Efforts are also made to preserve and improve the ratio between the number of workers and white-collar employees. During the years 1976-1980, the number of workers in production, construction and services has been increased at rates more than twice that of white-collar employees. There is room for this ratio to be further improved. The party guideline that production must be increased, but not the personnel, deals with the expansion of the masses' participation in the management of the economy and in governing the country and with maintaining an apparatus as simple and as flexible as possible, linked with the masses and financially less expensive.

For this reason, the class struggle against the tendencies to expand tables of organization without justification remains a permanent task for the government and economic organs. The fact that during the past 4 years about 46 percent fewer increases in personnel have been granted, in comparison with the demands, shows that it is possible to do better work, and that better work should be done in this field.

The relative reduction of the number of employees is closely linked with the simplification of organizational structures. These, in some cases, are heavy. There is room for increasing the quantity of work of the personnel of the organization and for making a better distribution of the number of workers between the same or similar enterprises and institutions and in the various links of the management of the economy. Much more can be done to mechanize work in administration. Some partial observations reveal that the accounting personnel in enterprises spend a relatively large amount of work time recording activities.

The structure of workers according to production fronts plays an important role in determining the rates of increase of labor productivity. At present, 83.7 percent of the workers work in the main units and sectors of production, while 16.3 percent of the workers work in auxiliary sectors, one of every five outstanding workers in production, is an auxiliary worker. However,

this ratio can be improved in favor of outstanding workers in production. Of course, this ratio also deals with the nature of production in enterprises. It changes from one economic branch to another. In the meantime, noticeable changes are observed between the enterprises of the different branches of production and those of construction and services. A large majority of them are not justifiable, but they also deal with the still artisan organization of work. Thus, there are mining enterprises where one of every 2-3 outstanding workers is an auxiliary workers; and in some communications enterprises one of every four outstanding workers is an auxiliary worker. In these sectors, labor productivity is also lower.

Problems also exist in the distribution of workers according to shifts. It happens that in many enterprises the first shift has more workers, the second shift fewer and the third shift even fewer. In the first shift, as a rule, there must be more workers. There are workers who have limited capacities and, who, at the recommendation of medical organs, are not allowed to work in night shifts, as well as in difficult and harmful kinds of work. It happens that there are not enough working places in every enterprise for day shift work only. However, possibilities also exist for this category of workers to work with greater productivity and effectiveness. The textile combines in Tirana and Berat have organized units for the processing of scraps, where a large number of workers with limited capacities have been activated. Life dictates the need to properly handle this problem and the organization of the physical and vocational capability of these workers.

In regard to the distribution of manpower, according to the branches of the economy, there is room for a more expanded work. There are cases when, in some production branches, the manpower needs are calculated on the basis of the level labor productivity achieved without analyzing it extensively. The production branch that has a level of productivity lower than the average at national level is obliged to have more manpower. But, this harms the economy.

Labor productivity is also increased by fully utilizing the existing production capacities and by further expanding the technical and scientific revolution. Many enterprises, workshops and plants have fulfilled and overfulfilled their planned production capacities; but, the technical and technological indicators, that are anticipated in projects, are not fully fulfilled everywhere. This requires the strengthening of technical discipline and the improvement of the training of workers, of specialists and of their personal and collective responsibility in regard to the exact management of production processes.

The complete utilization of production capacities is closely linked with the transition to work with three shifts everywhere, with the establishment of the best fronts of machine services, with the improvement of the quality of repairs and of maintenance of machinery and equipment and with the organization of work production and of technical-material supply and so forth. The fact that a central center for sharpening instruments was organized at the former "Traktori" plant and, therefore, about 2 hours of work time is gained by shifts, compared to some other machine plants, tells about the great reserves existing in these fields.

Perfection of technology is one of the main directions of expansion of the technical and scientific revolution. This direction, based on the increase of opportunities to produce many machines and complete equipment in the country for plants and workshops, speeds up the pace of the transition from the artisan stage to the industrial stage of production and for increasing production in many enterprises. From the change of the technology of dyeing threads alone, at the textile combine in Berat, not only was the quality of production considerably improved, but also possibilities for increasing labor productivity 5-6 percent were created.

The experience of this enterprise and of many other enterprises shows that all the conditions have been created for the technological bureaus of the enterprises to tackle the planned concrete tasks much better in order to study, find, experiment, design and implement the most advanced technology in all the branches of production, especially in the exploitation of mines, in the enrichment and working of mines and in the timber and canning industry and in light industry and in the other branches of production.

The improvement of the level of mechanization of work, especially of those works that require many workers and heavy physical labor, demands attention. Now that our machine industry is producing machines and equipment of different kinds, the level of mechanization of work can and must be improved at higher rates, putting workers and specialists in action so that they will make studies, experiments and designs and will broadly develop a mass innovation movement. The tasks for improving the level of mechanization must be reflected more concretely in the annual plans of enterprises and departments; they must be substantiated with the kinds and quantity of machines and equipment that will be produced; and the fulfillment of these tasks must be pursued.

The scientific norming of work remains as an important factor for increasing labor productivity and for perfecting the planning of the economy. Now, 86.1 percent of workers are working with norms and 65.9 percent of the time worked with norms, has been worked with technical norms. We must work so that within this year no less than 90 percent of workers will work with norms and 70 percent of the time worked will be worked with technical norms.

The quality of work norming is the main problem. The main point is that the technical norm must not remain only in name, as happens in some enterprises. Its function, as a measure of work and of compensation, requires that the norms assure the complete utilization of work time and of machinery, the fulfillment of the production plan and of the tasks for increasing labor productivity and maintain correct relationships between production, yields, the number of workers, the wage fund and the average wage.

We believe that the re-examination and approval of single norms must adhere to these criteria. In the execution of their governmental functions of exerting control over the mass work and consumption, the central departments must direct the work norming on more scientific bases.

On the basis of advanced averages for fulfilling norms, it would be a good idea for each ministry to re-examine the single norms every year and, after having approved the new norms, in accordance with the procedure in force, to

send them to the enterprises for implementation within the month of May of each year. These will also serve to determine the task of increasing labor productivity in the draft plan for the coming year. The responsible ministry must approve obligatory single norms for implementation in dependent enterprises. Thus, the Ministry of Industry and Mines can determine the necessary time for the production of 1 ton of coal or of 1 ton of chrome, or, the Ministry of Light Industry and the Food Industry must approve the norms for the work time needed for the production of a pair of shoes and for a meter of material or of cloth and so forth. On this basis, the enterprises must set their norms for every work process. If we act in this way, labor productivity in the leather-shoe plant in Korce will not be 55 percent higher than in the leather-shoe plant in Shkoder and 14 percent higher in the Gjirokaster leather-shoe plant, despite the changes in the structure of production that these enterprises may have. Planning the leather-shoe branch on the level of production of the Korce plant would give an increase of production worth 15 million leks per year.

During their work of studying and designing projects, the study and design institutes must take more into consideration the techniques and technology of the new plants and workshops to be constructed, so that they will work with acceptable norms and with norms for the use of manpower per production unit.

The scientific work norming helps the enterprises to conduct a more scientifically based work for the planning of work indicators and to correctly forecast the necessary work time per unit of ready-made product, so as to correctly determine the need for workers. On this basis, the wage fund can also be calculated in an analytical manner, the relationship between production, yields and wages can be maintained in all the cases and it would be possible to move on to the calculation of the price for every unit of ready-made product and the monitoring of its fulfillment serves as a means of control over the expenditure of the wage fund in relationship with the given production or with the actual work done.

In the conditions of our country, greater attention is required for strengthening the socialist organization of work and for the complete utilization of work time, as another important field for increasing labor productivity. Experience has taught us that the improvement of annual balance-sheets of the work time of workers is another obvious reserve. In this field there is room for a more rigorous planning; and it is essential to struggle so that those branches which are further behind, such as the mining and construction sectors and so forth, will reach the level of advanced enterprises. Special attention is required to reduce unjustified absences in work which were more emphasized in agriculture, mines and construction in the first 3 months of this year. The strengthening of the struggle against violations of discipline and against liberal attitudes toward them remains an important objective for the organizational and management work in enterprises and for reducing the work days that are lost because of administrative leave, temporary work disability, taking care of families and children and so forth.

The work time lost by enterprises because of defects in machinery and equipment and because of interruptions in the supply of raw material and materials, power, water and steam and so forth is an important target for strengthening discipline. This requires that drastic measures be taken in order to assure the normal supplying of work places. There are opinions that wages of workers in the auxiliary sectors should be connected with the fulfillment of the plan of the production unit where they serve and with the elimination of interruptions in the supply of power, steam and water and so forth.

The increase of labor productivity is also related to the improvement of the level of education and training of workers and cooperative members. The party and government have made great investments in this field and the educational and technical-vocational level of workers and cooperative members has been improved beyond comparison with the past. However, the rapid development of the economy has greatly increased the needs for trained workers. About 37 percent of the workers who do not fulfill their norms are untrained. At the "Josif Pashko" combine about 60 percent of the cases of poor quality production and 66 percent of machinery defects are caused by unskilled workers.

Man is the main factor in increasing labor productivity. Our socialist system has created all the objective and subjective conditions so that each worker may show his skills and so that he may work with awareness and put all his capacities and talent in the service of the building of socialism. In this direction, it is the task of the government and economic organs to organize and broadly develop socialist competition and the revolutionary initiatives and movements of workers in order to improve the effectiveness of their work and to produce more, better and cheaper.

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CSO: 2100

MINISTER DWELLS ON PROGRESS IN ENERGY DEVELOPMENT

Sofia ENERGETIKA in Bulgarian No 7, 1980 pp 4-8

[Speech by Nikola Todoriev, minister of power supply: "Let Us Enrich the Tradition of This Holiday With New Experience and Creative Accomplishments"]

[Text] Dear comrades and guests:

We are gathered here once again in a good mood and with a feeling of legitimate pride in the results of a particularly fruitful year to the power supply workers, solemnly to celebrate the bright and happy holiday of our profession--Power Worker Day.

Last year the Bulgarian power workers considerably increased their contribution to the great labor accomplishment of our people. Implementing the strategic slogan of the five-year plan for high quality and effectiveness, the collectives within the Ministry of Power Supply dedicated many efforts and skills and met fully, promptly, and rhythmically the needs of the national economy and the population for electric and thermal power and fuels.

Within the short calendar period between the two anniversary dates of June 1979 and June 1980, the energy potential of our economy rose by another 432 megawatts. The final and sixth unit of the Varna TETs [Thermoelectric Power Plant] was commissioned, as a result of which today it is the biggest thermoelectric power plant in Bulgaria and in the Balkans. The third consecutive power unit, developing a 210 megawatt capacity, was commissioned at the Maritsa-Iztok 3 TETs. By the end of the year the Kozloduy AETs [Nuclear Power Plant] will increase the atomic capacity of the power system by another 440 megawatts.

No other example may be found in the history of the power industry of such a record commissioning of major energy capacities within such a short time.

We can proudly state that the main task set by the 11th Congress on the accelerated and faster development of the power industry is being implemented systematically and successfully.

I am particularly pleased to obey the instruction of the management of the Ministry of Power Supply and the Central Committee of the trade union of miners, metallurgical workers, power workers, and geologists to warmly greet our guests, the leading workers in the power industry, and everyone present at the ceremony, as well as all power workers in economic combines, organizations, enterprises, institutes, and bases of the Ministry of Power Supply on the occasion of Power Worker Day, wishing them health, strength, happiness, and new creative successes in the building of our bright socialist future.

This year the celebration of this holiday is distinguished mainly by the maximum concentration of the efforts of labor collectives for the successful completion of the Seventh Five-Year Plan.

Even though it is still too early to draw final conclusions, the year is almost half over and our accomplishments so far give us reason to state that the tasks of the power industry, as formulated by the Seventh Five-Year National Economic Plan, will be successfully implemented.

In the first 5 months of 1980 the electric power plants within the ministry's system generated over 13 billion kilowatt hours, or about one billion or 7.6 percent more than the power generated in the same period of 1979. The bulk of this power was generated by the thermoelectric power plants. Plants operating with local coal accounted for 56 percent of the total. This is a particularly good illustration of the line followed particularly firmly in recent years of increasing their output at the expense of power plants using liquid and gas fuels.

I would also like to inform you that the tasks we have set ourselves on the intensification of coal extraction are being properly implemented.

So far, from the beginning of the year, nearly 13 million tons of coal have been mined, or 3 percent more than in the same period of 1979.

The achievements of the power industry in the Seventh Five-Year Plan are another remarkable stage in its nearly 40 years of socialist development.

This five-year plan the national energy complex made decisive progress in the specialization, concentration, and modernization of power production and distribution thanks to the application of general systems for the development of the complex on the basis of the multiplication approach.

According to preliminary estimates, the created material prerequisites are a good foundation for the successful beginning of the following stage

in the development of the power industry in the light of the latest stipulations formulated by Comrade Todor Zhivkov at the national conferences of 31 October 1979 and 30 January 1980.

Last year the efforts of the ministry and of the managements of the economic organizations were focused on the development of the most favorable conditions for the effective application of the new economic approach and the reorganization of the work on the basis of the requirements of the economic mechanism. This is a ripe socioeconomic need at a stage when the task of raising social labor productivity several hundred percent through the accelerated utilization of scientific and technical progress could be implemented above all by rapidly surmounting the contradiction between the great potential of the developed material and technical base and our skill to guide it effectively.

The systematic and overall application of the new economic approach created real prerequisites for broadening the self-initiative of economic organizations, combines and their branches, the development of the creative forces of labor collectives, and the ever more complete coordination between the interests of the state and those of the collective and the individual worker.

Rapid economic progress and an increased living standard led to a great increase in overall power consumption. At the end of 1979 it exceeded 4,800 kilograms of conventional fuel per capita. The expected figure for the end of 1980 is 5,100 kilograms. With a specific electric power consumption of 4,106 kilowatt hours per capita in 1979 our country has outstripped in terms of this indicator all neighboring countries, most CEMA-member countries, and some advanced countries such as, for example, Italy.

In 1979, however, we witnessed a trend toward a change in the nature of electric power consumption which will be intensified in the future. For this reason I would like to emphasize it in particular.

Last year the national energy complex fully met the needs of the country for energy. In order to cover peak loads in the autumn and winter periods the electric power system had at its disposal reserves. For this reason no restrictions were imposed caused by capacity shortages.

The annual growth of electric power consumption compared with 1978, however, was only 2.7 percent. This is the lowest growth registered over the past 15 to 20 years. What does this prove?

The ever more acute shortage of recoverable resources, the increased price of their highly effective share, the exhaustion of good quality local coal, the mastering of most of the hydroelectric potential of domestic rivers, and difficulties in importing resources have set as the

main task insuring the future economic development of the country on the basis of minimum energy outlays.

This means that in the future the optimizing of the power balance structure should take place by maximally upgrading the effectiveness with which power resources are used and reducing production power intensiveness.

In 1979 the national income rose by 6.5 percent compared with 1978, whereas overall power consumption rose by less than 2 percent while the growth of electric power consumption, as we pointed out, was 2.7 percent. These figures are the value equivalent of the systematic course of energy and resource conservation as stipulated in a number of Council of Ministers orders, carried out on a broad basis with the participation of state departments and economic organizations and the active support of the National Council of the Fatherland Front, the Bulgarian trade unions, the Scientific and Technical Union, and the Dimitrov Komsomol. We are already able to assert that the strategic task of energy and raw material conservation is becoming a nationwide project.

The introduction of utilization ceilings also contributed to the lowering of electric power consumption.

A trend toward a reduction in the growth of electric power consumption may be noted in virtually all advanced countries, reflecting a global policy of energy and resource conservation and reduction of industrial power intensiveness. In our country this trend will become more intensive.

Compared with the 1979 level, for example, relative energy costs should be about 13 percent lower by 1985 and about 17 percent lower by 1990. At the expense of this reduction, the share of local resources will be growing steadily at a high pace. From 27 percent in 1980 it will reach 35 percent in 1985 and 45 percent in 1990.

The state policy of upgrading the energy effectiveness of the national economy was expressed in a number of documents. As early as 1976 the Council of Ministers drafted and approved a national program for the effective utilization of material resources in the Seventh Five-Year Plan. The 1978 decrees on a strict regimen for saving on liquid fuels and electric power and of 1979 for their additional conservation played a particular role.

The management and coordination of such activities have been assigned to an interdepartmental coordination council, while systematic control over the consumption of power resources and the technical condition and effectiveness of power-technological installations in all sectors have been assigned to the State Energy Control Inspectorate and its rayon inspectorates.

The great task of mastering the third source of energy was not limited to the organization of coordination and control. The next absolutely necessary and important step was taken which insured the technical implementation of the tasks related to upgrading power effectiveness in the national economy. This was accomplished through the creation of the Industrial Energetics NPK [Scientific Production Combine], in charge of resolving problems related to the overall rationalization and reduction of power consumption either independently or in cooperation with specialized institutes in other sectors.

The combine has covered the organizational stage and the initial results of its work are visible. We must point out that the results are optimistic. In the first quarter alone over 400 industrial and heating boilers needing improvements were detected. By the end of the year savings totaling 250,000 tons of conventional fuel are expected as a result of such activities.

The ministry's management is confident that the good beginning laid in the Seventh Five-Year Plan for the development of this basic strategic direction in the power industry will continue. All the necessary prerequisites to this effect exist: Well-trained cadres, possessing the necessary experience and skills, are staffing the inspectorate and the combine. The young specialists now entering the field have someone to learn from. We are convinced that the important tasks related to control and to upgrading the energy effectiveness of the economy are in experienced and reliable hands.

I discussed in greater detail the third direction, the third energy source, as we call it, as being relatively new and still not traditional in the power industry.

Naturally, the nuclear power industry is a new direction in the development of the power industry. However, we have already become accustomed to its essential newness as a remarkable scientific and technical achievement. This is largely due to the stable and, allow me to emphasize, traditionally good work of the power plant and its collective. This must be justifiably pointed out in terms of our own terminology as belonging to the credit side of the holiday balance drawn on the occasion of Power Worker Day.

The annual utilization of installed capacities in the AETs in 1979 exceeded 7,000 hours. In terms of this indicator it is superior to all European nuclear power plants. Its annual electric power production set a record, exceeding six billion kilowatt hours.

A particularly impressive feature in the development of the nuclear power industry in the future will be the accelerated pace of completion of atomic electric power generating capacities.

By 1981 the Kozloduy Nuclear Power Complex will have four nuclear reactors of the VVER-440 type generating an overall power of 1,760 megawatts. Several years later, two 1,000 megawatt reactors will be commissioned sequentially. The construction of a second nuclear power plant will be undertaken so that by 1980 [sic] nearly 5,000 megawatts originated through atomic power will be operating within the energy system of the Bulgarian People's Republic.

What is the participation of our main source--thermoelectric power plants--in the energy balance?

Despite major difficulties in supplying them with energy resources, their technical and economic indicators have been improved.

In 1979 specific conventional fuel outlays declined by 7.4 grams per kilowatt hour. This resulted in considerable economy of primary resources. In the first quarter of 1980 outlays were reduced by another four grams.

A variety of conclusions may be drawn from the work of the thermoelectric power plants in the autumn and winter season, and since some trends in the organization of their work, meaning adverse trends, have recurred, we must stress them quite seriously, even though this introduces a jarring note to the overall enhanced mood of celebration. This will not detract or lower the significance of our successes. Let us recall Lenin's words. He said that focusing efforts on unresolved problems is the best celebration of an anniversary.

In the autumn and winter season some of the main thermoelectric power plants failed to reach their stipulated capacity as the result of the unrhythmical deliveries of coal and insufficient coal deposits in their warehouses. Such was the case with the Purva Komsomolska and Bobov Dol Thermoelectric Power plants. The difficult weather conditions hindered the extraction and delivery of coal to the Maritsa-Iztok 3 TETs. Unrhythmical deliveries of imported coal for the Varna TETs hindered its participation in achieving the power balance.

That is why this year's experience points at the categorical conclusion that whereas the generating capacity of the system has increased in terms of absolute value, and whereas the quality of repairs has been improved and the level of operative and technological discipline raised in the electric power plants, the basic and the most difficult and responsible task remains that of coal supplies. If we wish to welcome the autumn and winter season of 1980-1981 with the real confidence that last year's results will not be worsened, our efforts currently must be focused on insuring coal supplies.

The emphasis on coal, naturally, does not annul all other tasks related to the timely completion of repairs of installations in power plants and

substations, maintaining model order in the power distribution and carrying grids, preservation of the water which this year nature has generously "released," recharging the nuclear power plant reactors, and so on. In these areas our power workers have a firm tradition. If we were to stress the new and stricter requirements they face, they would be related mainly to the quality of the work, to the utilization of all reserves, to upgrading the level of individual creative participation in the conservation of materials, raw materials, and energy, and the systematic implementation of the decisions of the National Party Conference.

To sum it up, it would be no exaggeration to say that the overall assessment of the results of the work of our collectives is consistent with contemporary requirements facing the power industry and that no contradiction exists between the growing needs and the realities of our work. The successes and accomplishments of 1979 were the result of the efforts of all workers, specialists, and managers of economic combines, organizations, institutes, and the ministry. They were the result of the work of the trade union and the Komsomol members, and the thousands-strong army of power workers in the country. Allow me from this high rostrum, on behalf of the leadership of the Ministry of Power Supply, to express the warmest gratitude to all for their adamant and selfless toil for successes in the power industry and the good of the entire nation.

In terms of its basic purpose of providing energy and fuels for the dynamic, proportional, and intensive development of all branches of the economy, the power industry is the base for the development of scientific and technical progress. In the Eighth Five-Year Plan this will be the main direction leading to the intensification of economic growth and increasing social labor productivity not in terms of percentages but of multiples of 100 percent.

Metaphorically speaking, whereas the wide tree of scientific and technical progress stretches its boughs in all realms of life, its roots, we could say, are in the power industry which provides the power carriers: the initial products for electronics, instrument manufacturing, robotics, automation, and so on. If we wish to take good fruits from this tree we must care for its roots.

Comrades:

The tradition of our holiday has two basic dimensions:

The first is from the viewpoint of the problems of today;

The second, considered on a broader level, must be looked at through the lens of future assignments.

We have entered the 80s of the 20th century--this conflicting century consecutively charged with hopes, concerns, pessimism, and faith. Our century has already been recorded in the history of nations with two world wars but also with a lengthy period of nearly 40 years of peace. It gave to the world the Great October Socialist Revolution and, with it, the greatest victory for the social progress of mankind: the birth and establishment of real socialism.

The 1980s are particularly noteworthy by a date under whose sign the entire progressive world is drawing a balance of its ideological and social gains in the struggle for human rights and progress.

We are also celebrating the 110th anniversary of V. I. Lenin's birth.

In his time Bernard Shaw wrote: "We should not believe that Lenin's importance is a matter of the past merely because Lenin is dead. We must think of the future and his importance to the future is such that should the experiment undertaken by Lenin--that of socialism--fail, modern civilization would perish as have many civilizations in the past."

Today the world is the witness that the experience of socialism has succeeded. Lenin's ideas are winning and their attractiveness and power are growing steadily.

Lenin gave the Soviet state and mankind a remarkable formula for the socialist way of construction: "Communism means Soviet power plus electrification of the entire country." This Leninist formulation became a guide in the economic practice of our party as well with the very first steps which the people's democratic system took under the leadership of Georgi Dimitrov, the great son and leader of the Bulgarian working class. In his remarkable report to the Fifth BCP Congress, Georgi Dimitrov formulated the general line for the transitional period and for laying the foundations of socialism, stressing the priority role of electrification.

In its April course, the BCP Central Committee, headed by Comrade Todor Zhivkov insured the faster pace in the development of the energy race which now, as we approach the Eighth Five-Year Plan, is providing all the necessary energy prerequisites for the implementation of the program in the next stage of the developed socialist society in Bulgaria.

Which are these prerequisites?

The 20th century is a century of tempestuous development of the scientific and technical revolution. It opens boundless possibilities to mankind for prosperity and all-round upsurge.

Naturally, each age has its problems. At the same time, however, it also provides the key to their solution.

Our age created the energy problem. To a certain extent, this is natural, for in the age of the scientific and technical revolution the need for energy and resources has risen sharply.

It took billions of years for nature to turn wood into coal and to create petroleum and natural gas deposits--treasures which contemporary civilization is using up at an incredible pace.

Since the beginning of the 20th century the population on earth has increased from one to four billion people, i.e., it has quadrupled. Within that time overall output has risen by a factor of 30 while energy requirements rose by a factor of 600.

Modern technical systems and efficient energy extraction and transformation methods led to a tremendous increase in the amount of power consumption in the world. Could it be otherwise? Energy is a booster for progress and limiting its consumption would mean interrupting the development and blossoming of science and culture, and of upgrading the living standard. Is it possible, is it conceivable to imagine today our homes without electricity, radio, or television? Could we conceive of transportation without electric or diesel traction? Could we conceive of metallurgy without electricity or organic synthesis without petroleum? The enumeration of the gains of the expansion of electric power consumption could be continued endlessly.

Whereas in the first 50 years of the century the production of all types of prime energy totaled 2.7 billion tons of conventional fuel, in 1978 it was 9 billion, or higher by a 3.3 factor.

Today energy consumption is almost commensurate with extractable fuel deposits which are the base of global energetics.

Some authoritative studies point out that by the year 2000 such consumption would reach 20 billion tons of conventional fuel while 100 years later it would triple. These are huge amounts.

The question is the following: Could such needs be met, how, and from what sources? This is a question whose answer contains the solution to the energy problem.

According to its existing domestic resources, pace of utilization, and import possibilities, each country has a different answer to this question.

However, one general principle remains:

The energy crisis of the 1970s, which spread over the Western world, indicated, above all, that the energy ocean is not limitless. It also reminded us of some truths we had tended to neglect: the fact that non-recoverable resources--coal and petroleum--are basically limited and that the atom must be, above all, a worker rather than a soldier, and that the sun and the wind are not only ageless but could also be the latest sources of energy, and that the waste of raw materials is not in the least a feature of abundance and "economy is not the mother of misery."

That is why, on the eve of the 1980s, we are witnessing a total reassessment of energy programs on a global scale, a reorientation from highly effective fuels to coal, even no longer of the best quality, and, above all, to the search for new unconventional methods for meeting energy requirements.

All in all, the European countries do not have many favorable alternatives. The only country in Europe and throughout the world able to satisfy its energy requirements through domestic resources is the USSR. Furthermore, the Soviet Union is developing its own energy base both to meet the requirements of its own economic development and to help the energy-fuel balances of the members of the socialist comity and of other countries.

At the latest 34th CEMA Session, held in Prague, Aleksey Kosygin, USSR Council of Ministers chairman, noted that in the current five-year plan, thanks to petroleum supplies from the Soviet Union, the socialist countries have been able to save about 13 billion rubles compared with world petroleum prices.

In this respect the long-term target program for cooperation in the fields of energy, fuels, and raw materials is becoming ever more important.

Bulgaria is poor in natural resources. Our small country has been generously granted natural beauty which warms the heart of every Bulgarian and draws to it millions of foreigners every year. "Land no bigger than a human hand but more than that I do not need," as the poet said. Even though as a slight aside from this statement, allow me to mention that now, on the eve of the great event--the celebration of the 1,300th anniversary of the birth of our state--we are becoming ever more aware of its beauty, its past, and its heroic history. The more we are approaching this sacred anniversary the more it is capturing our patriotic awareness and raising our pride. Hardly any other contemporary event could remind us so strongly that we are the heirs of a great history and great accomplishments, that we must increase them and that our

filial duty to the fatherland demands, above all, faith and work for the future, and work and faith in the future, in the bright socialist future of the very old yet eternally young 1,300 years old Bulgarian state.

From the professional viewpoint we have all the necessary reasons to consider the future of the power industry clearly and with bright horizons. First, because it is in our hands and it is up to us, above all, to create it. Second, because we have a long-range program. Yet, as we know, there is nothing more mobilizing and stimulating than a precisely and accurately set target.

Bulgaria entered the 1980s with a powerful energy base comparable with that of many advanced countries. The program we have formulated for its development through the year 2000, based on our own possibilities and on cooperation with the CEMA-member countries and, above all, the Soviet Union, gives us the confidence to look at the future fearlessly.

It is no secret that the illusion of total energy sufficiency is no longer shared even by the biggest optimists. It is no secret that the age of the cheap flow of energy, which until recently was generously flowing, and about which we notice only now that it was very cheap, that this age has gone forever, yielding its place to the strict, sensible, and rational utilization of the basic human resource--energy. That is how we could briefly formulate the approach adopted by our state in its energy policy at the present stage and in the longer run.

Henceforth, there will be two basic criteria governing the development of the national energy base: the thrifty utilization of resources and their long-range conservation.

This development will follow three strategic directions:

- Maximum utilization of natural resources;
- Accelerated development of the nuclear power industry; and
- Maximum conservation of primary resources and energy, combined with the systematic and steady increase of the energy effectiveness of their utilization.

Such is the energy program of the 11th Congress.

Such is the energy program of the Eighth Five-Year Plan and of the subsequent stages.

The purpose is, in the final 20 years of our century, to lay realistic and scientific foundations for the power industry of the 21st century.

The basic direction in the energy program is the improvement of traditional energy extraction methods and the maximum utilization of local resources with a reassessment of their effectiveness criteria. That which was considered a proper criterion yesterday is today obsolete. Coal, which until recently was not considered an energy resource on a global level is becoming in our country the main fuel base of Maritsa-Iztok, the biggest industrial-energy complex, and Bulgaria's experience in burning such coal is becoming ever more popular.

The bulk of the extracted coal--over 80 percent--will be used in the production of electric and heat energy in big condensation and thermofication power plants.

In the next few years we shall undertake the building of hydraulic power plants along the Mesta and Struma rivers. Together with the Romanian Socialist Republic we have already undertaken the construction of the Nikopol--Turnu-Magurlele Hydraulic Power Complex on the Danube River.

Bulgaria's favorable geographic location and suitable climate create very good conditions for the use of solar energy.

Solar heat installations are already under construction in tourist areas, resort complexes, and others, to be used for water heating purposes.

Various energy wastes and secondary energy resources obtained from some technological processes in metallurgy and the chemical, food, and light industries are another promising energy source.

The task of their utilization and application has been assigned to the New Energy Sources Scientific Production Economic Combine of the Ministry of Power Supply, created in 1979.

We foresee that its activities will greatly expand so that in the near future it will meet a substantial part of our energy requirements.

The pace of which our energy base will be developed in the immediate and more distant future calls for new reinforcements by young people, able independently to resolve the increasingly complex scientific-production problems, enter new areas of human knowledge, and truly convert science into the main productive force of our society.

We are awaiting the young specialists, trained in secondary vocational schools and higher technical educational institutions, to begin practical work with a good basic and specialized training which will insure their rapid adaptation to each workplace.

The reorganization of our educational system, which was the focal point of attention of the first education congress, held recently, earmarked the main ways leading to the development of many-faceted and, in the future, comprehensively developed individuals.

The young generation must be exposed to our traditions. This is best achieved within the creative environment of the labor collectives where tried power workers, tempered through numerous difficulties, are at work, power workers belonging to the older generations and for whom successes are not an exceptional phenomenon but a logical result of steadfastness, industriousness, and conscientiousness.

Let us take as an example a small labor collective which was recently named champion in the competition among hydroelectric power plants: the collective of the Batak VETs [Hydroelectric Power Plant]. At the national conference of hydroelectric power plants, the Batak VETs workers, sharing their experience, said: "We have never felt that our work and successes are something exceptional, nor do we wish to consider them such. They are the result of our long years of daily efforts. Now we are asked to describe to you how we have achieved something of a 'model' nature. The word is too strong. We can tell you only most ordinary things of our daily work and the way we did them not for the sake of glory but because they help us in our work, reduce stress, and provide order."

"Peak times," or heroism in the conventional meaning of the term, rarely take place in the work of the energy worker. His actions fit most accurately Lenin's words: "They cannot be resolved through the heroism of the individual thrust but require the longest, the most adamant, and the most difficult heroism of mass daily work."

The people to whom we shall entrust the future of the power industry are not a matter of indifference to us. The golden book of the power industry carries the names of hundreds of workers and specialists who have invested a great deal of work and dedication to enhance the honor of their profession and develop the industry. Dozens of new names have been added today to this list.

I am particularly pleased, in the holiday atmosphere of our celebration, to announce to you the decision of the State Council of the Bulgarian People's Republic, awarding orders and medals to power workers who achieved the highest results in their labor activities last year. They include Pavel Dimitrov, electrician at the Electric Power Supply Combine in Varna, who is a new Hero of Socialist Labor in Power Industry. The title "Deserving Power Worker" has been awarded to Stefan Mishev, director general of the control block at the ministry, and to Nikola Bulgarenski, director of the Dams and Power Systems Directorate. Obreten Bozhilov, from the Electrical Installations Administration in

Pernik, and Albert Barukh, director of the Central Power Repairs Base in Sofia, were awarded the Order of Georgi Dimitrov.

High distinctions were awarded to yet another 41 production champions and leading workers.

We are convinced that the new bearers of state awards will continue to dedicate their forces and skills, sharing their rich experience, to the successful development of the power industry and the prosperity of the country.

Offering our warmest congratulations to our champions and order bearers on the occasion of their deserved rewards, I wish them most warmly new and ever greater successes in their honorable careers.

Interpreting the historic path covered by our power industry in the course of the building of socialism, against the background of the real problems and gains within the specific period which we traditionally review on our holiday, allow me to reemphasize with gratitude and respect the comprehensive importance of our cooperation with the Soviet Union in the building of our power industry.

We are developing our energy base shoulder to shoulder with Soviet specialists. It is an old truth that when a true comrade stands by your side your work goes better. We realize that without the firm support of this comradely shoulder we would be unable to achieve rapid progress in our power industry.

Fraternal relations between our two nations cover literally all fields of life. "As the potential of our countries rises," Leonid Brezhnev has said, so do the possibilities for the intensification of Bulgarian-Soviet cooperation."

It his remarkable speech at the meeting of the National Council of the Fatherland Front, Comrade Todor Zhivkov emphasized that, "Now as well, on the eve of the 1,300th anniversary of the Bulgarian state, we say confidently and proudly that our country has never had a more loyal, more selfless, more sincere, and more reliable ally than the Soviet Union; never has it been so free, so independent, so confident in its present and future as it is in the fraternal family of the members of the socialist comity."

We offer our "thanks from the heart!" to all Soviet specialists who are dedicating their efforts, skill, knowledge, and experience in the development of the Bulgarian power industry, guided by their high international spirit, and applying socialist internationalism in action.

Comrades:

The circumstances throughout the world have become noticeably more complex. The process of detente had been put through a major test. Forces using all possible means to oppose the principles of peaceful coexistence have been energized in international life.

Peace-loving humanity is pitting its firm steadfastness in the struggle for peace and security on earth against the feverish arms race.

The Bulgarian people are responding to war threats through the full mobilization of their creative forces for the successful implementation of the decisions of the 11th Congress and for insuring the most favorable prerequisites for moving on to the next stage in building a developed socialist society--the stage of the Eighth Five-Year Plan.

The power workers have always stood in the leading ranks of the Bulgarian working class. Through their labor accomplishments and traditions, displaying firm consistency and ideological convictions, they are participating in the fulfillment of the party's economic program for renovation, social progress, and upsurge.

From the high rostrum of Georgi Kirkov Party House, on the day of our professional holiday, allow me to assure the BCP Central Committee, its first secretary, Comrade Todor Zhivkov and the government that the labor collectives of the Ministry of Power Supply will continue to dedicate all their forces, willpower and ambition to the successful completion of the Seventh Five-Year Plan and through their contribution to the building and development of the energy base of the Bulgarian People's Republic will report to the 12th Party Congress the successful start of the five-year plan of the future, in the age of technical progress, the age of the comprehensive blossoming and upsurge of our socialist homeland.

Many happy returns on the occasion of Bulgarian Power Worker Day!

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DEPUTY MINISTER DESCRIBES ATOMIC POWER STATION

Sofia ENERGETIKA in Bulgarian No 7, 1980 pp 9-15

[Article by Engineer Oved Tadzher, deputy minister of power supply: "The Kozloduy Nuclear Power Complex--Scales and Development Prospects"]

[Text] The commissioning of the first reactor of the Kozloduy Nuclear Power Plant marked the beginning of a new stage in the development of our power industry. Within record-setting time two blocks with a generating capacity of 440 megawatts each were installed. Today the nuclear power plant accounts for 20-22 percent of the country's electric power. In terms of this indicator--the share of nuclear power in the energy balance--today Bulgaria is in third place in the world.

By 1985 the Kozloduy AETs [Nuclear Power Plant] will have a generating capacity of 2,760 megawatts, which will be 28 percent of the maximum peak load of the energy system, and 32 percent of the country's electric power output. By 1987 these figures will rise, respectively, to 36 and 39 percent.

Such concentration of capacity, unheard of in terms of our scale, determines the comprehensive approach which must be applied in the development of the plant. The Kozloduy AETs must be fully supplied with everything necessary for normal operations--highly skilled cadres, repair capabilities, buffer warehouses of various kinds, construction and installation capacities, living amenities, and others.

The program for the development of the national energy complex stipulates that by 1990 atomic power in the power industry must reach 5,760 megawatts. The third and fourth blocks of the Kozloduy AETs will be commissioned in 1980-1981, thus raising its overall capacity to 1,760 megawatts.

The subsequent blocks will involve new generation reactors developing a capacity of 1,000 megawatts each.

Detailed studies were made by the Energoproekt NIPPIES [Scientific Research Planning and Design Institute for Power Systems] and the

Ministry of Power Supply on the location of the new VVER-1,000 reactors both on the site of the Kozloduy AETs and on other sites. Consultations with Soviet organizations were held as well.

The possibility to concentrate a capacity of 3,760 megawatts on a single site was considered in detail. The results of the studies and comparative data for other countries have confirmed the expediency of building two blocks with an overall capacity of 2,000 megawatts on the site of the Kozloduy AETs.

In the USSR, for example, sites for a 4,000 megawatt capacity are being selected, with a possibility to raise it to 6,000 megawatts. They include the Smolensk, Chernobyl', Khmel'nik, and other sites. Nuclear power plants on sites with capacities similar to ours have been built in Japan, the United States, the GDR, France, the FRG, Canada, and elsewhere.

Insuring the normal operation of the four blocks of the VVER-440 blocks and the two new blocks generating 1,000 megawatts each called for the adoption of a number of new qualitatively different designs. This is also related to the closeness of the suggested site for a second nuclear power plant and the convenient transport route of the Danube River.

The development of the Kozloduy Nuclear Power Complex was based on an order of the Council of Ministers. The complex will be a powerful base for our power industry whose role and significance are determined by the basic strategic direction followed by the party's energy policy of accelerated development of an atomic power industry.

The nuclear power complex (AEK) developed gradually and systematically, in accordance with requirements governing operations and construction, and cadres and their training.

It could be said today that its scale has been defined. It will have an overall generating capacity for 3,760 megawatts (4 x 440 + 2 x 1,000), covering installations for the transportation of the spent fuel, processing shops and warehouses for the storage of a variety of radioactive waste, repair capacities, and a powerful construction and installation base (Fig. 2). Delivering and training conditions of cadres within the complex will be based on the latest requirements.

The development of the complex covers the following stages:

Kozlodouy AETs-first stage-2 x 440 megawatts

The project was completed in 1975 with the commissioning of the second 440 megawatt reactor. In the subsequent five-years the plant operated

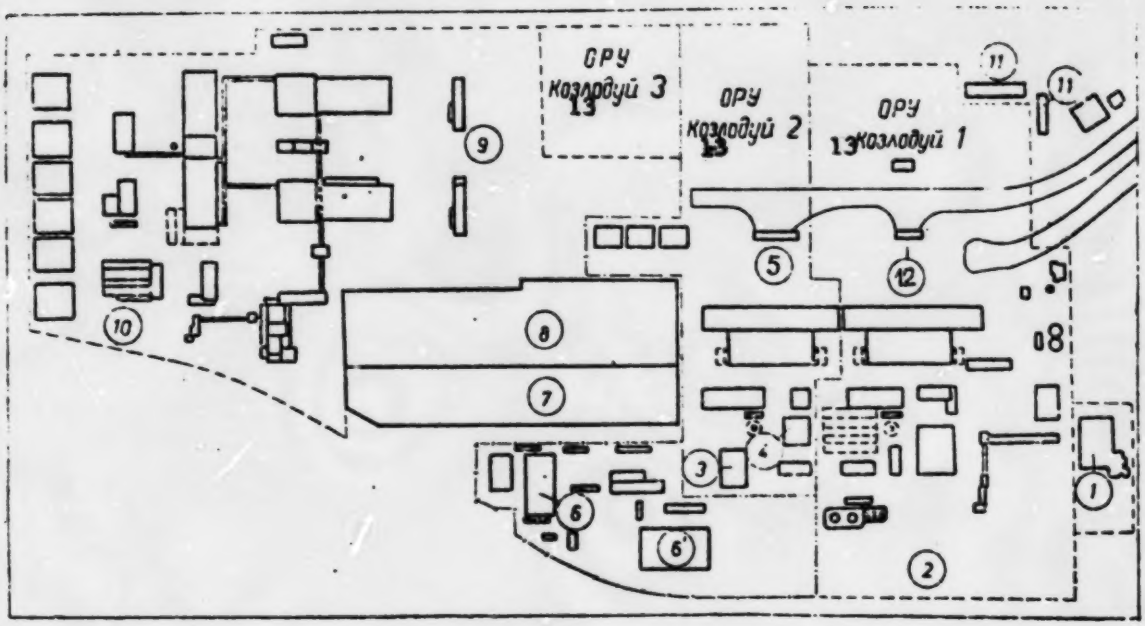

Fig. 1. Diagram of the Kozloduy Nuclear Power Complex

Key:
1. Training center
2. Nuclear electric power plant 1
3. Spent fuel storage
4. Workshop for the repair of installations in the first section
5. Nuclear power plant 2
6. Repair base (first stage)
6' Repair base (second stage)
7. Construction base
8. Installation base
9. Nuclear power plant 3 (2 x 1,000 megawatts)
10. Base of the Tekhenergo NPP [Scientific Production Enterprise]
11. Warehouse for soft polluted waste
12. Shore pumping station
13. Kozloduy ORU

in a stable and reliable manner. All planned indicators were outstripped in 1979 and over 6.1 billion kilowatt hours of electric power were generated.

Kozloduy AETs--second stage--2 x 440 megawatts

The two new blocks of the Kozloduy AETs, to be commissioned in 1980 and 1981, have an advanced design with additional systems which offer better support to the plant's work under different systems. Thus, for example, a more reliable solution has been provided to the systems for emergency injection of a boric acid solution, a sprinkler system, the feeding of

steam generators, and others. Industrial water supplies have been considerably improved. Three separate systems have been planned for the major consumers of each block. A better technical solution has been found for the shore and circulation pumping station. The two shore pumping stations are connencted, which insures their operational maneuverability. The possibility of the flooding of shore pumping stations has been avoided, and so on.

More advanced solutions have been applied also in the electric power supply systems which will become more autonomous. Particular attention has been paid to the reliability of the system for emergency electric power supplies to first category consumers. The possibility of emergency stopping of the block and reducing its capacity with an emergency control panel has been stipulated.

Before the new blocks have been commissioned the bulk of the measures for raising the seismic resistance of the blocks will be carried out. They are contained in a special project designed by Soviet specialists and call for upgrading the seismic resistance of equipment and buildings for an earthquake rated as 7 on the Richter scale and a recurrence possibility of once every 10,000 years. The basic systems of the first section will be reinforced: the reactor building, the steam generators, the main circulation pumps, the actuating mechanisms, and others.

To this purpose special hydraulic shocks are being procured from Japan. The main steam pipes and other systems of the second part of the plant will be reinforced. A special system will be installed for industrial antiseismic protection which will switch off the generators should an earthquake reach a certain level. The existing battery system will be replaced by a seismically resistant one.

Later on, the main circulation pumps will be replaced by new inertial-type pums (with a flywheel).

All measures aimed at strengthening antiseismic protection will be also implemented later on at the operating blocks of the first stage of the Kozloduy AETs.

The Kozloduy AETs--third stage--2 x 1,000 megawatts

The third stage of the Kozloduy AETs will also have water-water type reactors developing an electric power generating capacity of 1,000 megawatts and saturated steam turbines with a unit power of 1000 MW, 3000 min^{-1}. The basic equipment will be procured from the USSR. Other parts will be delivered by the remaining CEMA-member countries as well, on the basis of an intergovernmental agreement. The plan for the Kozloduy 3 AETs is being drafted in a way which will make it possible to build and commission initially one block, followed by the second.

Industrial water supplies for the first 1,000 megawatt block will be provided through existing hydroengineering systems; the second block will require the building of a new water supply system from the Danube River. The two water supply systems will be connected. This will make the water supply system more flexible and more reliable.

The new reactors of the VVER-1,000 type (Fig. 2) represent a higher level in the development and perfecting of this type reactors. We know that water-water reactors are exceptionally reliable and stable and that their coefficient of use between recharging exceeds, in many of them, 0.90-0.95.

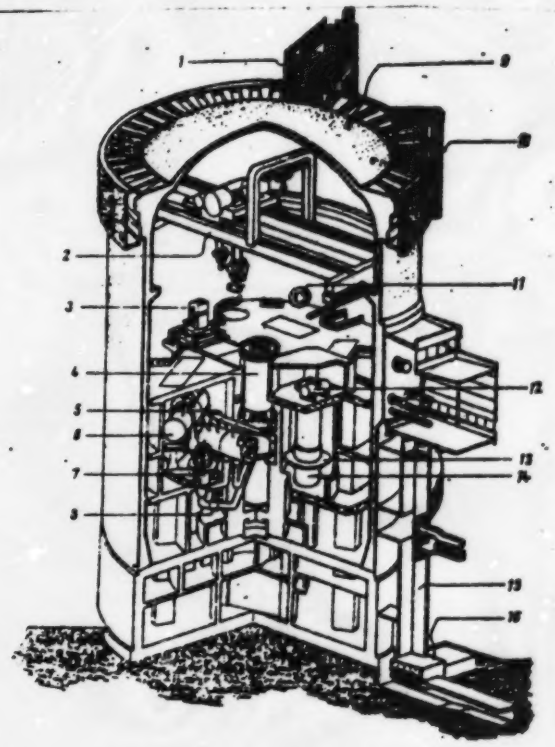

Fig. 2. Block with a 1,000 megawatt nuclear reactor

Key:
1. Roof exit
2. Bridge crane
3. Reloading machine
4. V-1,000 reactor
5. Steam mains
6. Steam generators
7. Main circulation pump
8. Main stopping valve
9. Reactor reinforced concrete cover
10. Upper manipulator
11. Emergency exit
12. Emulsifier
13. Service area
14. Volume compensator
15. Cable shaft
16. Pipeline passageway

The nuclear steam generating system will be located under a protective cover (dome) which will insure the radiation safety of the plant localizing their radioactive environment in the case of a breakdown cracking of the first section, accompanied by an increase in the internal pressure to 3.6 MRa and a temperature of up to 150°C. The dome will also serve as a protection from outside shocks such as a shockwave or a falling object.

The cover will consist of prestressed reinforced concrete with an internal steel lining based on a technology especially developed for the purpose by Soviet specialists. Under our circumstances this will require the organization of a new construction and installation base equipped with the necessary shops and machinery and proper crane mechanisms.

The designing of the construction and installation base was preceded by a detailed study of Soviet experience and consultations with respective Soviet organizations.

The annual gross electric power production will be about 7.5 billion kilowatt hours per block operating on a basic system of 7,000 effective hours. The reactor fuel will be uranium dioxide. Two variants--3.5 percent or 4.4 percent--had been planned, depending on the interval between recharging.

Spent Fuel Storage

In accordance with the recommendations of Soviet specialists, and on the basis of the territorial and geographic conditions of the Kozloduy AETs, the decision was made to build a storage for exhausted fuel on the plan's territory. Its purpose will be to receive, store, and ship out the cases with spent fuel. The design stipulates that all operations shall be in full accordance with technological requirements and radiation safety norms. The plant will have a special trailer truck for the transportation of the spent fuel. With the help of lifting equipment, the spent fuel will be taken from the truck to its allocated storage area. In the converse operation--the removal of the container--it shall be washed with special solutions and systems so that it may be deactivated to the level of the stipulated health norms.

The storage area will consist of individual and separate water-filled basins. The containers will be located at the bottom in other special containers. The storage area will have all the necessary systems for safety storing conditions.

Their capacity will be sufficient to take the containers from the four blocks of 440 megawatts each for a 10-year period. The problem of storing in the same area the containers from the 1,000 megawatt blocks is under study.

The design calls for the maximum utilization of existing installations and buildings for the preparation of deactivation solutions, water treatment, storing of radioactive waste, water supplies, steam supplies, sanitary living conditions, and others. The size of the personnel has been reduced to a minimum.

With the completion of the storage area for the spent fuel the power plant will become far better equipped and flexible in resolving problems related to spent fuel in various situations.

Installations for the Transportation of Spent Fuel

The shipping out of the spent fuel is a basic problem facing the power plant. In accordance with the intergovernmental agreement concluded between Bulgaria and the USSR, the spent fuel will be shipped to the USSR and processed in Soviet plants.

The transportation of the spent fuel is one of the most complex and difficult problems to resolve in the operation of nuclear power plants. That is why particular attention was paid to it. The plan for the transportation of spent fuel was developed by the Energoproekt NIPPIES with the active technical assistance of Soviet specialists. The necessary transport facilities for hauling the spent fuel have been secured and the hauling technology is fully in accordance with the stipulations of the International Atomic Energy Agency. Some of the fuel transportation cycles have already been successfully implemented. This is a major Bulgarian achievement.

The Tekhenergo NPP Base

The development and improvement of power production and distribution called for converting from the automation of individual production sectors to the creation of a unified interrelated automated system for the control of production processes.

Its implementation involves the saturation of technological processes with technical automated facilities and the utilization, along with mass-produced instruments, of a broad variety of specialized and one-of-a-kind apparatus based on the characteristics of the specific processes and installations. The various such apparatus have been produced either in small series or on a custom-made basis.

Studies have indicated that the need for specialized equipment in the sector is rising steadily and that by the end of the Eighth Five-Year Plan it will exceed 12 million leva per year. On the other hand, the ever stricter requirements for full metrological support of the production process call for the adoption of a new approach to the solution of the problem of automated technical facilities through centralized repair operations under industrial conditions.

So far, the Tekhenergo NPP has mastered the production of a certain variety of technical facilities with an annual output in excess of one million leva, including some 50 different types of items. The number of such items is being steadily expanded and developed in order to cover also installations which are currently being imported. In order to make such activities consistent with the increased requirements, in 1979 a branch of the Tekhenergo NPP was opened on the territory of the Kozloduy AETs. Its production program includes the making of specialized equipment for the needs of the sector and for spare parts, as well as centralized repair of technical means for the control and management of technological processes.

The subsequent development of this branch as a sectorial plant with an annual output scheduled to exceed five million leva by 1985, employing about 400 people, will make it possible to successfully resolve several other problems such as:

Sets of apparatus for the control and automation of newly built, reconstructed, or modernized projects in the power system through cooperation and integration with CEMA-member countries and with domestic plants;

Acceleration of the pace of automation of the energy system through electronics, robotics, and the application of other achievements of technical progress;

Fuller employment of women in the area of the Kozloduy Nuclear Power Complex.

At the end of this development the plant will encompass all engineering activities related to automation in the power industry.

Base for Equipment Repairs at the Kozloduy AETs

The high concentration of capacities at the Kozloduy AETs calls for the creation of a corresponding repair base. The 440 megawatt blocks will have two 220 megawatt turbines each. Every year each block will be recharged with fuel. The recharging takes 35 to 40 days. Meanwhile, the remaining power systems in unserviced premises and in the general part of the block will be repaired. Every year capital repairs will be made on one of the turbines and limited repairs to the second.

The capital repairs of the turbine will take 65 to 70 days. Therefore, the time for the reloading and repair of the four blocks will be 150 days, while that of basic repairs of the turbines will be about 260 to 280 days. Subsequently the time of repair operations of the 1,000 megawatt blocks will be added.

A large number of various installations will be concentrated in the Kozloduy AEK: turbines, pumps, transformers, generators, electrical equipment, a large number of control-measuring apparatus, and others. The cost of such installation will be about one billion leva. This will require the annual production of spare parts worth 30 million leva. This is the base of the development of repair capacities on the site of the Kozloduy AEK.

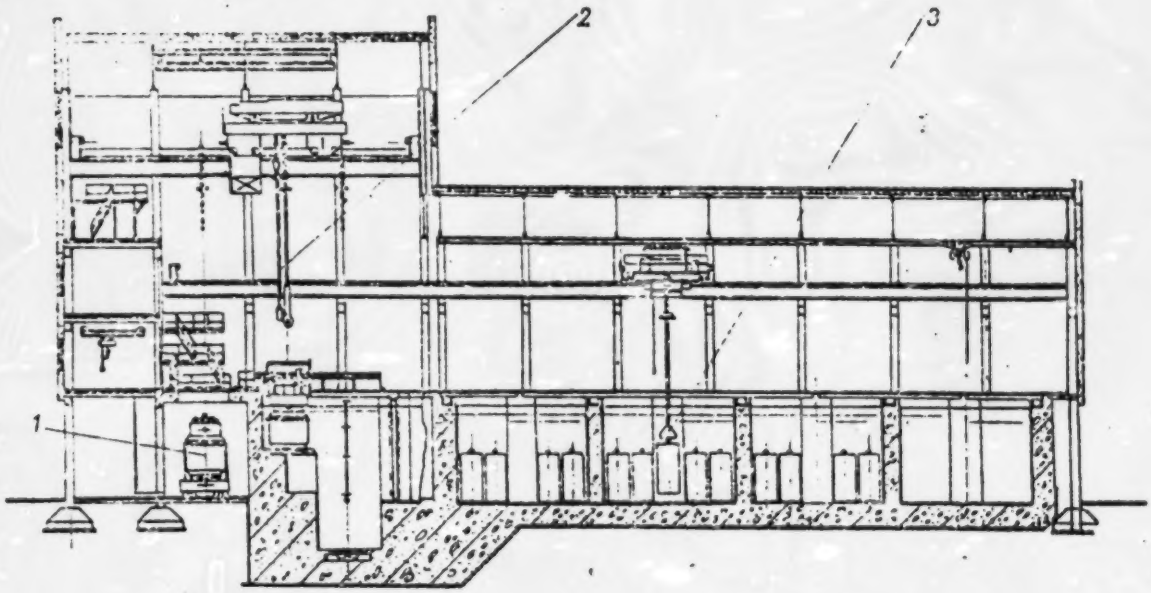

Fig. 3. Spent Fuel Storage

Key: 1. Spent fuel container
2. Valve and lever with special clamp
3. Special shielding container for the containers with spent fuel (slipper).

Fig. 1 shows the Kozloduy AEK repair shops. Several basic considerations governed the positioning of repair capacities, such as:

Insuring the most effective utilization of the manpower. This means, for example, the use of the entire repair personnel in periods of major labor-intensive repairs at the plant and the transfer of some personnel to the repair base in slack periods;

The possibility and expediency of using a number of common installations and engineering facilities such as roads, water and sewer mains, steam pipes, communications systems, production cooperation facilities, and others, thus saving consideral capital investments;

Better possibilities for the organizational coordination of repair operations;

Utilization of some buildings and installations of the construction base which will become unnecessary after the future expansion of the Kozloduy AEK.

The designing and construction of a base for the production of spare parts, attachments, and equipment for the Kozloduy AETs was undertaken by Decision No 631 of the Council of Ministers, dated 29 October 1974.

The first stage of the Kozloduy BREO [Spare Parts Production Base] was commissioned in May 1978. The production program of the base amounts to 5.2 million leva per year.

The base can repair high tension electric motors, machinery operating with direct current, and explosion-proof low tension electric motors.

Laboratories for metal control and weldings, OTKK [Technical Control Department], and units for the drafting of design and technological documents and production preparations have been set up.

In 1979 the Kozloduy BREO produced goods worth about three million leva. The base also developed a one-of-a-kind container for checking the body of the VVER-440 reactor of the AETs, thus saving substantial funds. Important equipment was produced for the thermoelectric plants within the system, such as drum-scraper metering devices, work wheels for grinding fans, bodies of air and smoke fans, pressure containers and reservoirs, and others.

The completion of the second stage of the base will create conditions for expanding the production of auxiliary equipment for the AETs.

Between 1980 and 1982 the Kozloduy BREO will be expanded (second stage) with the addition of three industrial premises. The production program will be expanded by including the production of spare parts, repair appliances, and some type of atomic systems.

A modern hammer-press section will be built. The Energoremont SO [Economic Trust] will organize a cooperated system with the castings plant in Kresna for the manufacturing of special castings of steel, cast iron, and nonferrous metals.

The completion of the second stage will provide the solution to a problem of essential significance in the building of power projects: anti-corrosion lining and rubberizing of containers and pipelines.

Workshop for the Repair of First Section Installations

In addition to general purpose repair capabilities, the nature of the production process in the nuclear power plant calls for the development of capabilities for the repair of installations which have operated in the strict regimen area. The main buildings of the power plant contain some deactivation systems whose possibilities are rather limited.

Repairs of first stage installations are related to a number of characteristics and requirements affecting both the equipment and the personnel. The equipment calls for special installations for transportation to the repair shop where, along with cleaning and lubrication operations, it must be deactivated with special solutions on the basis of a specific technological discipline for the separation and storage of waste--liquid (solutions, oils, and so on), soft (threads, clothing, and others), and solid (shavings, instruments, and others).

The personnel in this workshop must obey the general requirements for personnel working in an environment containing radioactive pollution. A number of other requirements must be observed in terms of the ventilation system, purification of the air, waste water treatment, and so on.

The workshop for the repair of first stage installations, currently being designed, will insure their repair along with the capital repair of a power block and the running repair of the second. Meanwhile, the remaining blocks will operate normally.

The workshop will have facilities for disassembling main circulation pumps, their electric motors, conduits for SUZ [Control and Shielding Systems], main blocking valves and other armatures, heat exchange systems, pumps, low tension electric motors, fans, and others.

The workshop will have a section for pressing and briquetting of shavings, laboratories, drying premises for engines, an instruments workshop, and others.

The size of capital investments has been substantially reduced through the utilization of many joint buildings, equipments, and systems.

The workshop will be equipped with a special system for dosimetric control and biological protection facilities will be provided in the respective premises.

Training Center

The specific nature of the nuclear power industry requires the steady upgrading of the skills of the operational personnel, the improvement of their knowledge and skills, and maintaining it in a state of readiness. This cannot be achieved exclusively through theoretical studies but calls for systematic personnel training under complex emergency conditions. This applies both to the training of existing cadres as well as the personnel of the new blocks scheduled for commissioning.

To this effect the Kozloduy AETs is building a training center equipped with laboratories for various subjects, classrooms, a projections hall with about 700 seats, and others. Subsequently, a simulator for the 440 megawatt and 1,000 megawatt blocks will be added to the training center. The training center will be used also by the nuclear power industry technical school located in Kozloduy and for holding international meetings, symposiums, conferences, and so on.

Construction-Installation Base

In the building of the first and second stages of the Kozloduy AETs, the output requirements for construction and installation were fully met by the developed facilities at the site without requiring, even in the most stressed construction periods, the delivery of structures or installations by other producers.

However, the requirements of the 1,000 megawatt blocks would require a radical reconstruction of the base part of which will be used to meet operational requirements as well.

In accordance with the Council of Ministers decision a new modern construction and installation base will be built to provide all the necessary prerequisites for the building of the new capacities within the stipulated short times with considerably stricter requirements. Because of the convenient transportation connections with the site of the second nuclear power plant, this base will be used for the production of construction and installation items and to meet the requirements of the second power plant as well.

Warehouse for Soft Polluted Waste

Some quantities of soft radioactive polluted waste develops in the course of the operation of the plant: clothing, threads, rags, and so on. Their processing and storage creates certain difficulties. This was the reason for the building of a warehouse for such purposes. It consists of reinforced concrete cells whose insulation will be achieved in two stages: the first before packing them and the second which will involve their sealing. The dimensions of the storage area will make it possible to retain properly pressed waste for a period of 10 to 15 years.

Shop for the Processing and Storing of Radioactive Waste

The problem of processing and storing liquid radioactive waste which contain components with a long half-life is one of the most complex in the operation of nuclear power plants. Our specialists from the Institute of nuclear research and nuclear power industry, Energoproekt NIPPIES, and Kozloduy AETs have joined efforts to resolve the problem through the development of various alternatives for the processing of radioactive waste. Global experience in this area is being energetically studied as well. At the same time, Soviet organizations are being consulted for purposes of designing and building such a shop with their cooperation, based on the bitumen lining. It is believed that its construction could be undertaken at the beginning of the next five-year plan.

It is worth mentioning that the building of the Kozloduy nuclear power complex is being paralleled by the extensive urbanization of Kozloduy. A program has been drafted for the next 5 years stipulating the building of a number of new sports, health, training, and commercial installations, heat supply facilities, and others. This will help to improve the living and recreation conditions of the workers and specialists of the biggest energy complex in the country.

5003
CSO: 2200

MORE EFFICIENT UTILIZATION OF INDUSTRIAL BASE URGED

Prague TRIBUNA in Czech No 35, 1980 p 13

[Article by Zdenek Haba]

[Text] Our republic belongs among the countries possessing a highly developed technical base. During the years of the successful building of socialism we have built in our country hundreds of new factories, established new production branches which we never had before, and put our agriculture on new technical foundations. In 1948 our production sector possessed capital assets worth Kcs 335 billion. Today, the overall value exceeds Kcs 1.3 trillion; in other words, Kcs 220,000 of capital assets per worker in the production sector.

This is a very respectable amount which poses a legitimate question: Can we manage it well? Or, to use different words, are we able to force the complex and mutually interrelated system of machines, instruments, equipment, buildings, construction sites, technological complexes, etc, which represent this amount of money, and which Marx long ago figuratively called the "bone and muscle system of production" to serve the needs of development of a socialist society to the best of its ability? The "Set of Measures" could not ignore this question, either for general reasons (the level of the social productivity of labor and thus, in the final analysis, the growth of the people's standard of living basically depends on the effectiveness of the means of production) or for immediately practical reasons, because the effectiveness of the means of production has not been developing favorably in recent years.

Extensive development of our national economy emphasized primarily the quantitative aspect of the development of capital assets to the detriment of their qualitative aspects. The consequence of this development was the fact that the growth of capital assets was accompanied by a demand for more manpower--and this demand was bigger than the natural increase in manpower. A necessary consequence of all this has been a decline in the number of shifts persisting since 1962, which has led to less than full utilization of effective and expensive facilities. In

certain cases these factories have been utilized at only 50 percent capacity. If our entire industry were to work in two shifts we would need an additional half million qualified workers. Insufficient utilization of capital assets is aggravated by the fact that not even during the regular worktime are the machines fully used--at times because of organizational reasons and at other times because of shortage of materials and energy, absenteeism of workers, etc. This shortcoming is especially conspicuous in the construction sector. Another factor causing lowering of effectiveness of capital assets is the everincreasing price of construction, machinery and equipment. The purchase price is rising faster than the advance in equipment efficiency, thereby causing a worsening of anticipated economic results. As a consequence of all the above, and other circumstances, we have witnessed a decline in the effectiveness of capital assets of 9 percent during the 1971-1979 period.

It seems paradoxical that even under this situation pressure by the production sector of the economy persists for new facilities even if the existing ones are not fully utilized. However, this attitude is a logical consequence of extensive development. As long as we have a planning system which determines the targets in gross production, and regularly increases these targets from year to year, the simplest way to fulfill the plan is to expand the production capacity, all the more so when the expense connected with the construction of new facilities is paid for by the state. Pressure to increase the volume of production results in a pressure for investments and, in turn, the pressure for investments leads to extensive development. It is necessary to radically change this investment atmosphere.

From Extensive to Intensive Production

The "Set of Measures" starts from a correct premise by stating that a change in the attitude of the production sector toward capital assets and toward their intensive utilization depends on the realization that the great dimensions of these assets represent economic disadvantage. Thus, the "Set of Measures" contains, among other things, a measure according to which approximately one-fifth of the wage fund (the so-called incentive component of wages, namely, premiums, bonuses, shares in economic results) is paid according to the fulfillment of the profitability plan of capital assets. This is an indicator which measures the volume of production funds by the amount of profit. The smaller the size of production funds needed for the realization of the planned profit, the more favorable this indicator is for the pertinent economic unit, which means higher bonuses. Managers, who are most influential in the investment policy of the economic production unit, are especially affected by this incentive system thanks to special regulations. Thus we can expect that the attitude of the production sector of the economy toward the effectiveness of capital assets will undergo a change, and that the need for the utilization of assets will occupy the foremost place.

Higher effectiveness and quality of production require not only better utilization of capital assets, but also further capital construction. The basic prerequisite for achieving higher effectiveness of production is the application of the current scientific-technical development while fully utilizing all advantages of the international socialist division of labor. This means a selective investment development, namely, the abandonment of certain traditional production branches and specializations, and an intensive development of other branches. It is obvious that such a development requires large investments because we deal here with the creation of new branches: We will need new machines and technological units which sometimes will require the construction of entire new factory complexes. The structural conversion of production is unthinkable without large investments. At the same time it is necessary to modernize and technically reconstruct those branches of production which do not have much of a future, but which will be needed for complementary production. Consequently, we cannot do without investments even in this case.

However, there is the objection that we lack manpower, without which we will not be able to start new plants operating. Instead of saying "there is a shortage of manpower" we should say: "Our production sector uses too much manpower." With a better organization of labor and a higher quality of production norms on the one hand, and a higher technological standard of production on the other, it would be possible to achieve today's results even with a substantially lower number of workers. Then, the "saved" manpower could be transferred where it is more needed, and where its contribution to society would be much more effective. Thus, we must reject an argument that we should not invest because of the shortage of manpower. On the contrary, we must invest and undertake technical reconstruction in order to gain more manpower. This, the so-called subjective effect of capital construction, (i.e., replacing manpower by machines) has not been widespread in our country so far. It is enough to recall the difficulties regarding the fulfillment of the plan to eliminate unsuitable plants and operations, or to eliminate worn out capital assets. A high technological level of investments, together with other measures, will make it possible to change this situation.

What Are the Priorities?

How will we secure the necessary scope and structure of investments in the years to come?

The "System of Measures" anticipates that in the capital construction plan, priority will be given to those construction projects which help to realize the results and tasks of the state's final programs and the state technological development tasks. The most important investments will be listed in the category of mandatory and centralized construction

projects, which will be speified in the state plan, or their realization will be supervised from a central place. Money for the realization of these investments will be drawn from the construction fund. This fund will specify the amount planned. Deliveries of material and labor will be accounted for centrally. In the case of centralized construction projects, the funds earmarked for them may not be transferred to other construction projects. These measures ought to secure the realization of the basic tasks of the structural conversion of production, not only as far as the scope of the plan is concerned, but also in regard to its realization.

The second group of investments will consist of the so-called limited investments. They include construction projects costing over Kcs 2 million, but not specifically listed in the first category of investments, as well as all construction requiring up to Kcs 2 million and machines and equipment not included in the budgets of the construction projects. This category of investments will be financed from the development funds and their realization will also depend on the amount of money the VHJs will themselves provide for their capital construction.

All this is a basic change in comparison with the past. In the past, the investor did not lose any sleep worrying about costs. He was not responsible for them, did not pay them, and regarded the resulting capital assets from the point of view of how they helped him fulfill the plan. In the future, however, the situation will be different. State budget allocations for investments are to be given only in exceptional cases. Money provided by the VHJs and bank loans will play a decisive role in financing investments. In order to make this possible, it will be necessary to increase the amounts held by the VHJs. This could be achieved by reducing the payments the VHJs return to the state budget. The "Set of Measures" anticipates such a development.

These new rules for financing investments greatly increase the responsibility of the VHJs for implementing effective investment policy. If we anticipate that approximately half of the overall volume of capital construction will belong to the category of limited investments and will be financed from the development fund which will be created from depreciation, profit, and possibly other resources owned by the VHJs), and also that the state budget does not list individual projects of this category, but only the overall limits for their realizations in individual branches, then it is obvious that the effectiveness of realized projects and their concentration will, to a certain extent, depend on the production sector, and on concrete investment plans this sector will select and will be able to realize.

For limited investments, too, there are naturally strict criteria governing planning, approval, and realization of construction projects. However, the VHJs will have, within the framework of these criteria, the possibility of choosing between more and less advantageous variants. This, after all, is the intent of the above-mentioned measures. However,

it does not follow that what is advantageous for the VHJs must necessarily be advantageous for our entire society. For example, today the construction of civic facilities in individual developments is less advantageous for our construction organizations than is housing construction. This advantage is being demonstrated in practice despite the fact that it is in the social interest to offer necessary services to those who move to new housing units. For this reason, the central organs of individual sectors face a serious task, namely, to see to it that a responsible approach is adopted in the decisions concerning the preparations for and construction of projects--among other things also because, especially in capital construction, which is subject to a maze of different regulations, the enterprises have enough experience in methods of circumventing regulations and orders.

The full utilization of capital assets and their further development by means of planned capital construction is one of the most serious questions which the improved system of planned management must face. We have to exert much effort before the intentions of the "Set of Measures" will be turned into reality. However, this is the only way available to improve the overall effectiveness of our national economy and create the prerequisites for the further growth of our country's standard of living.

1277
CSO: 2400

NEW STATUTES OUTLINE FOREIGN TRADE ENTERPRISE RESPONSIBILITIES

East Berlin AW DDR-AUSSENWIRTSCHAFT in German Vol 8 No 37, 10 Sep 80 'Documents' supplement pp 5-11

/Official text of statutes for 13 GDR state foreign trade enterprises (VEAHB), signed by minister for foreign trade in August 1980, published by Information and Public Relations Department, GDR Ministry for Foreign Trade/

/Text/ DEFA-Aussenhandel

Article 1

(1) This VEAHB is named DEFA-Aussenhandel, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as DEFA-Aussenhandel). It is domiciled in Berlin, the capital of the German Democratic Republic.

(2) DEFA-Aussenhandel is a legal entity.

(3) DEFA-Aussenhandel has a capital stock. The capital stock amounts to:

500,000 (five hundred thousand) marks of the German Democratic Republic.

(4) DEFA-Aussenhandel is liable with its capital stock for any obligations.

(5) DEFA-Aussenhandel is subordinated to the minister for culture.

Article 2

(1) The objectives of DEFA-Aussenhandel are the export and import of

Entertainment, documentary, children's, instructional films and cartoons
Inspection and measuring films
Film copying and services relating to films.

(2) The further objectives of DEFA-Aussenhandel are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters DEFA-Aussenhandel is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent DEFA-Aussenhandel in legal matters.

Article 4

The general director and the deputy to the general director are appointed and dismissed by the minister for culture following approval by the minister for foreign trade.

The above statute of DEFA-Aussenhandel, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed.

Berlin, 1 August 1980. The Minister for Foreign Trade

signed: Horst Soelle

Baukema Export/Import

Article 1

(1) This VEAHB is named Baukema Export/Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as Baukema Export/Import). It is domiciled in Berlin, the capital of the German Democratic Republic.

(2) Baukema Export/Import is a legal entity.

(3) Baukema Export/Import has a capital stock. The capital stock amounts to:

10,000,000 (ten million) marks of the German Democratic Republic.

(4) Baukema Export/Import is liable with its capital stock for any obligations.

(5) Baukema Export/Import is subordinated to the general director of the VEB Kombinat Baukema Leipzig.

Article 2

(1) The objectives of Baukema Export/Import are the export and import of construction machines,machines and equipment for the manufacture of building materials,ceramics and fireproof products,household and sanitary ceramic

products as well as the scientific-technical results and services related to these products.

(2) The further objectives of Baukema Export/Import are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters Baukema Export/Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent Baukema Export/Import in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for construction of heavy machinery and equipment following approval by the minister for foreign trade.

The above statute of Baukema Export/Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 20 August 1980. The Minister for Foreign Trade

signed by proxy: Dr Beil

Chemieanlagen Export/Import

Article 1

(1) This VEAHB is named Chemieanlagen Export/Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as Chemieanlagen Export/Import). It is domiciled in Berlin, the capital of the German Democratic Republic.

(2) Chemieanlagen Export/Import is a legal entity.

(3) Chemieanlagen Export/Import has a capital stock. The capital stock amounts to:

10,000,000 (ten million) marks of the German Democratic Republic.

(4) Chemieanlagen Export/Import is liable with its capital stock for any obligations.

(5) Chemieanlagen Export/Import is subordinated to the general director of the VEB Chemieanlagenbaukombinat Leipzig-Grimma.

Article 2

(1) The objectives of Chemieanlagen Export/Import are the export and import of plant and equipment for the chemical industry, tank plant, machines and equipment for the sugar industry and an Korobon products as well as related scientific-technical results and services.

(2) The further object of Chemieanlagen Export/Import is all business operations which, directly or indirectly, may assist the goal of the enterprise.

Article 3

(1) In all legal matters Chemieanlagen Export/Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent Chemieanlagen Export/Import in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for chemical industry following approval by the minister for foreign trade.

The above statute of Chemieanlagen Export/Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 20 August 1980.

The Minister for Foreign Trade

signed by proxy: Dr Beil

Fischimpex Rostock

Article 1

(1) This VEAHB is named Fischimpex Rostock, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as Fischimpex). It is domiciled in Rostock.

(2) Fischimpex is a legal entity.

(3) Fischimpex has a capital stock. The capital stock amounts to:

5,000,000 (five million) marks of the German Democratic Republic.

(4) Fischimpex is liable with its capital stock for any obligations.

(5) Fischimpex is subordinated to the general director of the VEB Fischkombinat Rostock.

Article 2

(1) The objectives of Fischimpex are the import and export of

-- Fish, fish products, crustaceans and other marine products,
-- Licenses for scientific-technological services related to the fishing business,
-- Commission processing of fish, crustaceans and other marine products,
-- Rights to carry on fishing and related operations,
-- Services within the scope of cooperations.

(2) The further objectives of Fischimpex are all business operations which, directly or indirectly, may assist the goal of the enterprise.

Article 3

(1) In all legal matters Fischimpex is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent Fischimpex in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for district managed industry and foodstuffs industry following the approval of the minister for foreign trade.

The above statute of Fischimpex, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed.

Berlin, 1 August 1980.

The Minister for Foreign Trade

signed Soelle

GERMED-Export-Import

Article 1

(1) This VEAHB is named GERMED-Export-Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as GERMED-Export-Import). It is domiciled in Berlin, the capital of the German Democratic Republic.

(2) GERMED-Export-Import is a legal entity.

(3) GERMED-Export-Import has a capital stock. The capital stock amounts to:

10,000,000 (ten million) marks of the German Democratic Republic.

(4) GERMED-Export-Import is liable with its capital stock for any obligations.

(5) GERMED-Export-Import is subordinated to the general director of the VEB Pharmazeutisches Kombinat GERMED.

Article 2

(1) The objectives of GERMED-Export-Import are the export and import of the following type of product:

Finished pharmaceuticals (human and veterinary), pharmaceutical elements, anterior products and ancillary materials, dressings and bandages, medical hollow articles, pharmaceutical vitamins and hormones for livestock feed, drugs, laboratory and refined chemicals. The objectives of GERMED-Export-Import include the export and import of scientific-technological services for the products listed.

(2) The further objectives of GERMED-Export-Import are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters GERMED-Export-Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent GERMED-Export-Import in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for chemical industry following approval by the minister for foreign trade.

The above statute of GERMED-Export-Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 15 August 1980.

The Minister for Foreign Trade

signed by proxy: Dr Beil

Pneumant-Bereifungen Export-Import

Article 1

(1) This VEAHB is named Pneumant-Bereifungen Export-Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as Pneumant-Bereifungen Export-Import). It is domiciled in Berlin, the capital of the German Democratic Republic.

(2) Pneumant-Bereifungen Export-Import is a legal entity.

(3) Pneumant-Bereifungen Export-Import has a capital stock. The capital stock amounts to:

500,000 (five hundred thousand) marks of the German Democratic Republic.

(4) Pneumant-Bereifungen Export-Import is liable with its capital stock for any obligations.

(5) Pneumant-Bereifungen Export-Import is subordinated to the general director of the VEB Reifenkombinat Fuerstenwalde/Spree.

Article 2

(1) The objectives of Pneumant-Bereifungen Export-Import are the export and import of tires (including inner tubes and tire outers) as well as related scientific-technological results and services.

(2) The further objectives of Pneumant-Bereifungen Export-Import are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters Pneumant-Bereifungen Export-Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent Pneumant-Bereifungen Export-Import in legal matters.

Article 4

The general director and the deputy to the general director are appointed and dismissed by the minister for chemical industry following approval by the minister for foreign trade.

The above statute of Pneumant-Bereifungen Export-Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 15 August 1980

The Minister for Foreign Trade
signed by proxy: Dr Beil

Schienenfahrzeuge Export/Import

Article 1

(1) This VEAHB is named Schienenfahrzeuge Export/Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as Schienenfahrzeuge Export/Import). It is domiciled in Berlin, the capital of the German Democratic Republic.

(2) Schienenfahrzeuge Export/Import is a legal entity.

(3) Schienenfahrzeuge Export/Import has a capital stock. The capital stock amounts to:

10,000,000 (ten million) marks of the German Democratic Republic.

(4) Schienenfahrzeuge Export/Import is liable with its capital stock for any obligations.

(5) Schienenfahrzeuge Export/Import is subordinated to the VEB Kombinat Schienenfahrzeuge Berlin.

Article 2

(1) The objectives of Schienenfahrzeuge Export/Import are the export and import of rail vehicles, their equipment parts and components as well as supplies and services related to rail vehicles: Passenger and freight cars, other rail vehicles, specific equipment, components and replacement parts for rail vehicles, diesel and electric locomotives, tracklaying machines, components, parts and replacement spares for tracklaying machines, diesel and electric driving gear, streetcar trains and cars, hydraulic gears and gearing units, spiral springs, annular springs, laminated springs for rail vehicles as well as buffer springs, electrical equipment, special test stands and facilities, pallets and transport containers made of metal, scientific-technological services.

(2) The further objectives of Schienenfahrzeuge Export/Import are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters Schienenfahrzeuge Export/Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent Schienenfahrzeuge Export/Import in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for construction of heavy machinery and equipment following approval by the minister for foreign trade.

The above statute of Schienenfahrzeuge Export/Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 30 August 1980 The Minister for Foreign Trade

signed by proxy: Dr Beil

SKET Export/Import

Article 1

(1) This VEAHB is named SKET Export/Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as SKET Export/Import). It is domiciled in Berlin, the capital of the German Democratic Republic.

(2) SKET Export/Import is a legal entity.

(3) SKET Export/Import has a capital stock. The capital stock amounts to:

25,000,000 (twenty five million) marks of the German Democratic Republic.

(4) SKET Export/Import is liable with its capital stock for any obligations.

(5) SKET Export/Import is subordinated to the general director of the VEB Schwermaschinenbaukombinat "Ernst Thaelmann" Magdeburg.

Article 2

(1) The objectives of SKET Export/Import are the export and import of rolling mill plant, cement plant and equipment, machines and equipment for hot and cold processing, plant and equipment for wireworking and processing including cable, wire rope and steel cord production, machines and equipment for the manufacture of vegetable oils and fats, foundry plant, machines and equipment for the foundry industry and industrial complexes of machine construction as well as the export and import of scientific-technological results and services related to these products.

(2) The further objectives of SKET Export/Import are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters SKET Export/Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent SKET Export/Import in legal matters.

Article 4

The general director and the deputies to the general director are appointed or dismissed by the minister for construction of heavy machinery and equipment following approval by the minister for foreign trade.

The above statute of SKET Export/Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 20 August 1980 The Minister for Foreign Trade

signed by proxy: Dr Beil

TAKRAF Export/Import

Article 1

(1) This VEAHB is named TAKRAF Export/Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as TAKRAF Export/Import).

(2) TAKRAF Export/Import is a legal entity.

(3) TAKRAF Export/Import has a capital stock. The capital stock amounts to:

20,000,000 (twenty million) marks of the German Democratic Republic.

(4) TAKRAF Export/Import is liable with its capital stock for any obligations.

(5) TAKRAF Export/Import is subordinated to the general director of the VEB Schwermaschinenbaukombinat TAKRAFT Leipzig.

Article 2

(1) The objectives of TARKRAFT Export/Import are the export and import of strip mining plant and equipment, cranes, products and equipment for internal transport and the scientific-technological results and services related to these products.

(2) The further objectives of TAKRAFT Export/Import are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters TAKRAFT Export/Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent TAKRAFT Export/Import in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for construction of heavy machinery and equipment following approval by the minister for foreign trade.

The above statute of TAKRAFT Export/Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 20 August 1980 The Minister for Foreign Trade

signed by proxy: Dr Beil

Textima-Export/Import

Article 1

(1) This VEAHB is named Textima-Export/Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as Textima-Export/Import).

(2) It is domiciled in Berlin, the capital of the German Democratic Republic.

(3) Textima-Export/Import is a legal entity.

(4) Textima-Export/Import has a capital stock. The capital stock amounts to:

25,000,000 (twenty five million) marks of the German Democratic Republic.

(5) Textima-Export/Import is liable with its capital stock for any obligations.

(6) Textima-Export/Import is subordinated to the general director of the VEB Kombinat Textima Karl Marx Stadt.

Article 2

(1) The objectives of Textima-Export/Import are the export and import of machines and plant for the textile industry, especially trade with complete textile plants, machines for spinning mills, weaving mills, knitting mills, hosiery mills, clothing manufacturing machines, presses, household and industrial sewing machines, trade in scientific-technical results in the field of the textile industry, also trade in technologies, processes and know-how.

(2) The further objectives of Textima-Export/Import are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters Textima-Export/Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent Textima-Export/Import in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for construction of machine tools and processing machinery following approval by the minister for foreign trade.

The above statute of Textima-Export/Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 15 August 1980 The Minister for Foreign Trade

signed by proxy: Dr Beil

Zellstoff und Papier Export/Import

Article 1

(1) This VEAHB is named Zellstoff und Papier Export/Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as AHB Zellstoff und Papier). It is domiciled in Berlin, the capital of the German Democratic Republic.

(2) AHB Zellstoff und Papier is a legal entity.

(3) AHB Zellstoff und Papier has a capital stock. The capital stock amounts to:

8,000,000 (eight million) marks of the German Democratic Republic.

(4) AHB Zellstoff und Papier is liable with its capital stock for any obligations.

(5) AHB Zellstoff und Papier is subordinated to the general director of the VEB Kombinat Zellstoff und Papier, Heidensu.

Article 2

(1) The objectives of AHB Zellstoff und Papier are the export and import of

-- Paper, cardboard, pulp
-- Coarse linter
-- Wood fiber
-- Sulfite waste liquor
-- Wastepaper
-- Machines for the paper manufacturing industry.

(2) The further objectives of AHB Zellstoff und Papier are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters AHB Zellstoff und Papier is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent AHB Zellstoff und Papier in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for glass and ceramics industry following approval by the minister for foreign trade.

The above statute of AHB Zellstoff und Papier, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed.

Berlin, 1 August 1980 The Minister for Foreign Trade

Soelle

Polygraph-Export/Import

Article 1

(1) This VEAHB is named Polygraph-Export/Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as Polygraph-Export/Import).

(2) It is domiciled in Berlin, the capital of the German Democratic Republic.

(3) Polygraph-Export/Import is a legal entity.

(4) Polygraph-Export/Import has a capital stock. The capital stock amounts to:

10,000,000 (ten million) marks of the German Democratic Republic.

(5) Polygraph-Export/Import is liable with its capital stock for any obligations.

(6) Polygraph-Export/Import is subordinated to the general director of the VEB Kombinat Polygraph Leipzig.

Article 2

(1) The objectives of Polygraph-Export/Import are the export and import of plant and machines for the printing industry, especially the design, construction and equipment of printing works, including the relevant supply units, sheet rotary offset machines, platen rotary machines for offset and photogravure printing, bookbinding machines including assembly lines for book and brochure collation, guillotines, photo reproduction cameras and devices, devices and machines for the manufacture of printed forms, the export and import of scientific-technological results (licenses) for printing machine construction.

(2) The further objectives of Polygraph-Export/Import are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters Polygraph-Export/Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent Polygraph-Export/Import in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for construction of machine tools and processing machinery following approval by the minister for foreign trade.

The above statute of Polygraph-Export/Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 15 August 1980 The Minister for Foreign Trade

signed by proxy: Dr Beil

ORWO Export-Import

Article 1

(1) This VEAHB is named ORWO Export-Import, State Foreign Trade Enterprise of the German Democratic Republic (referred to in the following as ORWO Export-Import).

(2) It is domiciled in Berlin, the capital of the German Democratic Republic.

(3) ORWO Export-Import is a legal entity.

(4) ORWO Export-Import has a capital stock. The capital stock amounts to:

2,000,000 (two million) marks of the German Democratic Republic.

(5) ORWO Export-Import is liable with its capital stock for any obligations.

(6) ORWO Export-Import is subordinated to the general director of the VEB Filmfabrik Wolfen Fotochemisches Kombinat.

Article 2

(1) The objectives of ORWO Export-Import are the export and import of photochemical and magnetic materials for recording and storing data, chemicals for the manufacture, development and processing of photochemical recording materials, especially photographic and cinematographic film--black/white and color--, repro film, X-ray film, photographic papers--black/white, audio and video tape, computer tape, photographic chemicals, photographic gelatin, gelatinous crushed bone and scientific-technological services related to the products listed.

(2) The further objectives of ORWO Export-Import are all business operations which may, directly or indirectly, assist the goal of the enterprise.

Article 3

(1) In all legal matters ORWO Export-Import is represented by the general director or a deputy to the general director.

(2) The general director or a deputy to the general director may authorize other employees or persons to represent ORWO Export-Import in legal matters.

Article 4

The general director and the deputies to the general director are appointed and dismissed by the minister for chemical industry following approval by the minister for foreign trade.

The above statute of ORWO Export-Import, State Foreign Trade Enterprise of the German Democratic Republic, is hereby confirmed and takes effect on 15 August 1980.

Berlin, 15 August 1980

The Minister for Foreign Trade

signed by proxy: Dr Beil

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LESS SPECIALIZATION, MORE ADVANCED TRAINING FOR ENGINEERS URGED

East Berlin TG TECHNISCHE GEMEINSCHAFT in German Vol 28 No 9, Sep 80 signed to press 31 Jul 80 pp 5-8

/Article by Dr Wolfgang Biermann, member, SED Central Committee; director general, VEB Carl Zeiss Jena Combine: "Engineers' Training: The Whole Person Is Required"/

> /Text/ The engineer's responsibility to society and his indispensable qualifications were the main topic of TG TECHNISCHE GEMEINSCHAFT issue No 8, 1980. As promised then we continue to deal with this topic by publishing the contribution below. Our author explains that objective performance compulsions must have their effect upon the job of each individual engineer . Consequently much greater demands are made on his sense of responsibility, technical knowledge and readiness for constant further education. These new criteria equally and without exception apply to managers also.

The full exploitation of the revolutionary potential of electrical engineering/electronics implies great demands on our engineers. We cannot possibly reduce these demands to the scientific-technological aspects alone of handling problems. As far as the engineer is concerned, he is called upon to commit his entire person. In addition to advanced technical skills, his abilities and diligence in applying his special knowledge, he is expected to bring to bear his political and economic reflections and actions, in other words his total societal sense of responsibility which must be indivisibly linked to his job assignment.

The engineer's ideological attitude to his job is basic with regard to his effective handling of the tasks of science and technology. It is therefore important to guide this attitude from the earliest days of engineering studies. Included in it is a strong wish to do well, recognition of new demands and future trends, job responsibility observed up to the complete and satisfactory integration of new developments in production, constant readiness to learn, responsibility cooperation in the collective and the readiness to accept social responsibility.

To solve the complex scientific-technological problems arising our engineers need a great deal of persistence, resolution, a healthy readiness to accept risks, and endurance. Young graduates are often shocked when faced with the fact that there is this severe compulsion. Challenging tasks come their way in the course of studies also; they are completed more or less well, but all of this work is theoretical. In industry, on the other hand, the problem persists and--by way of an exact reporting system--is kept on the agenda and reported in competition appraisals until satisfactorily resolved. The scientist who, within the reproduction process,works out the basic principle at the beginning of the chain, is released only when series production is running smoothly and the product shown to respond to market requirements. Like the manager he neither can nor may shirk his responsibility to the entire complex.

Our graduates must appreciate that the compulsion to accomplish the task is harder the closer one arrives at the moment of truth, the smooth flowing output of products able to hold their own on the world market.

One of the crucial features needed by an engineer is an open mind. Education and training must enable the future engineer to independently maintain contacts with his "neighbors in the reproduction process" and follow up the conversion of his respective scientific discipline in the practical tasks of his own job. He must have some knowledge also beyond the limits of his specialty because, as we know, most reserves for scientific-technological advances nowadays tend to be located at the borders between the various special disciplines. In other words the engineer must be able to operate effectively also in those fields which are only beginning to evolve, and for which no specialized training is as yet available.

Not To Specialize Too Early

All this requires sound basic training which--as experience in industry has shown--should not be restricted in favor of undue specialization at an early stage. Professional life lasts a long time and does not exhaust itself in the deepening pursuit of the diploma thesis. If someone wishes to creatively work for 40 years in the natural sciences and the technical professions, he must be ready to tackle assignments and problems which may well have been totally unknown at the time he first studied his subject.

Consequently the experienced scientists in our combine do not think it altogether desirable to hurry specialization for future employment by such methods as practical courses, papers and diploma work--all in the same field and on the same topic--if this implies an early restriction of interests. On the contrary, we consider it beneficial and necessary to change the field of study after a certain time and thus promote the readiness and ability to maintain intellectual flexibility.

Much on the job experience has taught us that several changes in the direction of study (provided this does not involve a totally different

orientation are certainly neither injurious nor hampering. In fact they act rather like physical and mental stimulants to creative activity and are therefore generally conducive to greater efficiency.

Important and extremely topical is the call for an interdisciplinary work collective. Here the engineer is one of those responsible for the exchange of natural scientific and technical experiences. Top achievements in the new technology cannot possibly be developed in a vacuum. A Parmoquant, a magnetic ball teleswitch 6M, resulted entirely from the cooperation of interdisciplinary collectives and the combination of the greatest possible material and intellectual concentration.

This, however, is more than an organizational task; more than anything else it involves ideology. The efficiency of a graduate is therefore appraised also by the extent of his success in understanding his "neighbors" in the reproduction process and by his contribution to mutual understanding in the collective.

The efficiency of our national economy depends on the proper ratio of expenditure to the resulting functional value: The profit. A graduate must therefore have a clear appreciation of the correct cost ratios. In the final analysis the consumer determines the functional value of our products. Investment costs, operational costs, reliability, servicing costs and productivity are thus important factors deciding success or failure.

Conceding Economics Their Proper Place

Our experiences teach us that graduates do not always correctly assess the importance of these considerations. It will therefore be necessary for the training of engineers to emphasize the economic concerns of the future engineers by practice-related indications regarding intensification in science and technology. In other words, a good engineer in industry is successful only if he is familiar with economics also. Precise cost-profit considerations should not be regarded as a necessary evil; actually they must be an integral element of the engineer's work.

I see the challenges to the graduate listed above as an undivided whole. The young graduate must strive to think and act in this unity of politics, ideology and economics.

At the same time we must be aware that this graduate can only be the result of close cooperation between industry and the educational facilities, whether universities or technical schools. It is here in particular that I see opportunities for the planned involvement of students in cooperative research resolutely directed to the social partner, for practical work in industry oriented to the greatest possible efficiency and independence; and I see these opportunities in the cooperation of experienced practicians from industry in the education and training of our future scientists and engineers as well as in the temporary cooperation of university and technical school instructors in the resolution of enterprise tasks.

We have recorded satisfactory successes in the organization of coordinated and long-term cooperation between academies, educational facilities and our combine. Contracts on specific scientific-technical cooperation represent the basis of these close links.

Creativity Requires Wide Ranging Knowledge

The professional profile of the successful engineer includes sound technical knowledge and the ability to think creatively. The ratio of factual knowledge to creative imagination largely depends on the special field. There are differences between the engineer who works in research and development and one who controls a plant. This is not meant to be a value judgment.

As far as I am concerned creativity does not mean merely the development of a totally novel item. I consider it creativity for an engineer further to perfect an existing product, for example, or to further develop a product in quantitative parameters, or to make a conscious effort intellectually to digest existing information in order to use it to resolve the problems confronting him.

There is no such think as creativity as such. Creativity must needs relate to a specific fact. Creative performances are therefore impossible without extensive knowledge which must be constantly updated. At the same time this knowledge may not be confined to a restricted special field. The engineer must have a broad as well as sound basic knowledge and, as I noted earlier, should be familiar with neighboring disciplines also.

Training by Challenging Tasks

I certainly consider great special knowledge an indispensable prerequisite for creative problem solving, but on its own it does not necessarily provide for creative thinking nor lead to a creative product. For creative thought it is important appropriately to link the various elements of knowledge, relate new findings to earlier knowledge, speculate even about apparently useless incidentals, be able to discard traditional modes of thought and integrate known facts in new contexts.

To my mind it is vital for student training and later professional practice to assign the utmost importance to this aspect. It is therefore necessary not only to acquire comprehensive specific knowledge but also the relevant methodological knowledge--in other words to know how properly to handle information. I consider this an interesting field for educational and further educational facilities, including the KDT /Chamber of Technology/. If the unity of technical-specific and methodological knowledge is taught and later practiced, we will have advanced a considerable step in the further improvement of the creative standard of our work.

In order better to convey methodological information, to practice the correct application of these methods and, additionally, to develop the whole person, we in our combine, for example, have successfully used various behavioral training programs for the purpose of further education. These include improvements in mental flexibility, the creativity of managers and their collectives, the social behavior of managers, political debating skills. To even more efficiently carry on this new and effective form of further education we have provided the appropriate modern technical prerequisites by the construction of a video training cubicle.

Of course I am quite aware that the most important educational method with respect to creative thought consists in advanced and challenging tasks to be assigned our graduates. The principle here is encouragement by challenge. At the same time we must be careful to ensure that creativity is never made a goal per se. The scientist and engineer must always be aware that really vital is not the novelty of the effect but the improvement in functional value.

The question whether an engineer does justice to his tasks must therefore be considered from two aspects, one objective, the other subjective. Economic requirements and market demands objectively call for advanced targets. Arising from them, again objectively, are the actual problems to be settled by our scientists and engineers.

From the subjective aspect it is a matter for management properly to motivate the engineer to meet the respective job target. He must fully identify with his task, on his own initiative trace possible reserves and set himself targets on the approach to solutions, which may well transcend the original job target.

Further Education--A Duty

Many of our scientists and engineers are so committed to their jobs. This attitude was brought about by managers who served as role models and constantly made the greatest demands on themselves. Moreover we have insisted on exact reporting of competition results, coupled with an effective system of material and moral incentives.

Systematic further education is an indispensable prerequisite for the continuity of such advanced achievements. In this day and age hardly anyone still believes that an engineer--however brilliant his performance at the university--has there acquired sufficient knowledge to last him his entire professional life. Consequently the further education of the engineer is not a matter of "may," "might," or "would like to," but an objective necessity to be regarded as an indisputable duty for the cadre himself as well as for the combine generally.

I do not think that there are ready made prescriptions for the precise form such further education is to take, neither regarding content,

organization nor institutionalization. However, I would like to address three groups of specific issues. First of all further education within the immediate job process is and will always be most important. By this I do not mean merely the acquisition of job specific skills but also the steady study of the pertinent literature with a view to constantly following the development in the respective sphere, including related disciplines. Arising therefrom are specific obligations for the combine and the enterprises also. By modernizing our library and acquiring a large stock of the most modern technical literature, for example, we have provided the prerequisites for this type of individual further education. Management must ensure that the respective cadres are able to use these facilities and are indeed made to do so.

Helpful Work of the KDT's

In addition to this type of further education I consider it necessary also for every engineer to set aside a suitable period of time for comprehensive further study. If this is not done I foresee the danger of his declining into department-specific routine work, in other words an increasing constriction of his ability to carry out interdisciplinary creative and forecasting work. Such a decline would, at the same time, result in the reduced open-mindedness of the cadres.

In our combine such types of further education consist in courses of instruction in enterprise educational facilities, general or specific KDT course, courses at universities and technical schools, attendance at important conferences, the collection of experiences in other combines or facilities.

Hereafter I will briefly report the organizational forms by which the research center of our combine, for example, encourages further education:

--"Scientific Life." These are optional lectures for a selected group of auditors (dealing with advance research, economic problems, issues of management science, sociological topics, and so on).

-- Internal university and technical school further education for cadres. This involves obligatory and intensive courses for scientific staff only at intervals of 4 years; they last 1½ weeks. The targets of this measure are the combined utilization of job methodologies and the improvement of cadre flexibility.

-- Further education in microelectronics. Here selected cadres are delegated to other facilities for participation in special instruction courses or to gain experience.

-- Special examinations in close cooperation with the KDT. These take place 3 times per month.

As many engineers are employed in management functions at various levels, it is necessary also to take into account the management training of these cadres. Care must be taken on the job and by specific training measures to see that the appropriate junior cadres are gotten ready. At the present time we handle this as follows: We pick out young cadres who do outstanding work on the job and in social activities; they are then purposefully prepared for taking over management positions.

Though there certainly is no cut and dried recipe for types of further education, I do think that greater coordination of educational operations in a combine is desirable from the economic standpoint as well as with regard to the textual standards of education. Of course such coordination does not necessarily have to be accompanied by the centralization of education as such.

I want to emphasize first of all that further education must be relevant to the job and the function as well as oriented to pre-production. We have implemented this principle in our combine. The KDT activist group in the combine and the executives of the enterprise sections carry on further education in close coordination with the key issues set out by the combine management.

In this spirit KDT further education supports the further educational measures of the combine. Some of these measures are independently prepared and organized by the KDT. That was particularly important for the preparation of the collectives in research, development and material production for the manufacture of the equipment as per the microelectronic program assigned our combine. This task confronted all of us with completely new tasks which had to be accomplished within the briefest possible introductory periods.

The further educational measures organized by the KDT and coordinated with other university facilities in the GDR include, among others,

-- Instruction in the basic findings of microelectronics,
-- Integrated curcuits, microprocessors and their use,
-- The programming of microprocessors,
-- Hybrid circuits, and
-- Micro computers.

The target is the preparation of the theoretical bases for development work regarding the use of micro computers in our devices.

The KDT committees in our combine lent their support to the "microelectronics consultative agency" in Erfurt. At the same time a consultative office for microelectronics was established at the research center of the VEB Combine Carl Zeiss Jena, which provided practical instruction on the micro computer.

The development of top achievements and the transfer of the next generation of microelectronic devices involves new demands on the educational measures carried out by the KDT in research centers and device producing departments.

Later in 1980 we will start to train university and technical school cadres in our research center to become software specialists in the course of 6 months programs. It is our aim to train 10 software specialists per product group.

These pre-production oriented further educational measures derive from the long-range development conceptions of the main products and the intensification conception of the combine. They are a valuable contribution by the socialist engineers organization to the achievement of the central leadership targets of the combine earlier described. Good results were recorded by the members of the socialist engineers organization in our combine working with KDT project passports. That is an initiative movement of the KDT activist group which, by the concentration of efforts, stimulates additional activities by KDT members and collectives for the accomplishment of key targets of the plans science and technology and socialist rationalization.

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GDR PARTICIPATION IN MOZAMBIQUE TRADE FAIR PUBLICIZED

Maputo TEMPO in Portuguese No 516, 31 Aug 80 pp 12-15

[Advertisement: "The GDR at FACIM 80"]

[Text] The Economy of the GDR--High-Powered Trading Partner

The GDR is taking part for the fifth time in the International Trade Fair, FACIM, in Maputo. Some 10 foreign trade companies are being presented to the international public. There are two basic reasons for this participation, which is growing year by year. The first is the lively economic development in the GDR itself, evidenced by the fact that the GDR currently produces in a single month as much merchandise as it did in all of 1949. Its position as one of the leading nations in the economic sector implies participation in the international area of activity, through increasingly active foreign trade. In this regard, economic relations with the young nations play a prominent role.

And this is the second reason why the GDR participates in the Maputo international fairs.

After the signing of the friendship and cooperation accord between the GDR and the People's Republic of Mozambique, on 24 February 1979, economic cooperation developed very rapidly, to the benefit of both peoples.

TRANSPORTMASCHINEN

Highly Advanced Modern Technology

The foreign trade firm TRANSPORTMASCHINEN EXPORT-IMPORT maintains close relations with partners in the People's Republic Of Mozambique, relations which have been developing continuously since 1977. The first trucks, Model IFA W50, manufactured by the Ludwigsfelde automotive firm, arrived in Maputo in December 1977, and have been seen since then on all the highways of Mozambique, where over 1,500 of them are currently in use.

In the current Maputo fair, TRANSPORTMASCHINEN EXPORT-IMPORT is exhibiting a representative selection of its line of cargo vehicles.

MULTICAR Line With Several Variations

Two products of our industrial complex are sure to attract the interest of specialists in all countries. First there is the MULTICAR IFA 2548/20, a sanitation and sprinkler truck which can be used to clean sidewalks, narrow streets, plazas, etc. As a cleaner, the sprinkler truck can also be used to clean transit signs, metal guards and facades, as well as to maintain parks. Its tank holds 1,800 liters of water.

The other vehicle exhibited at the fair is the MULTICAR IFA-25. It has a 4-cylinder, 4-speed diesel engine and up to 33.1 kw of power, guaranteeing speeds up to [speed apparently dropped] km/h. At the customer's request, a "ralentis" gear can be installed as an accessory. The vehicle can be fitted with a wide variety of accessoreis.

Highly Regarded: Trailers

The foreign trade firm TRANSPORTMASCHINEN EXPORT-IMPORT rounds out its exhibit with trailers from the VEB ANHANGER UND SPEZIALAUFBAUTEN WERDAU, for use in highway transport, agriculture and container transport.

FORTSCHRITT LANDMASCHINEN

Bringing Together Research, Production and Foreign Trade

The VEB FORTSCHRITT LANDMASCHINEN industrial complex, created in 1978, combines production in the highest tradition with modern science and technology and foreign trade. Some 65,000 workers are turning out machines and equipment for use in harvesting grains, potatoes and beets, ground-breaking machines, mechanized lifting equipment and various equipment for the food industry.

E 512 Combine Proved Useful in Rice Harvest

The necessary increase in agricultural yields calls for the application of high level agricultural technology. Hence it is not surprising that the E-512 combine [reaper-thresher] is attracting interest and buyers in many countries. It can be used to harvest any crop requiring threshing; i.e., grains, corn, oleaginous fruits and legumes. The E 512 can process wheat at 12.5 kg/s and corn at 15 kg/s. It is among the most powerful combines in the world, easily handling record harvests of 100 to 120 dt/ha. FORTSCHRITT's modern machines proved their usefulness, for example, in the rice harvest in the Limpopo region.

Now Even More Powerful and Economical

The ZT 300 tractor is on exhibition at the FORTSCHRITT LANDMASCHINEN pavillion. Its engine capacity has been increased to 112 cv, or 82.5 kw, on all models. The ZT 300 is not unknown in Mozambique. Only a few months

ago, 30 Mozambican tractor operators completed a 2-week training course, conducted near Maputo, to familiarize themselves with these tractors, which will be used in silviculture. The powerful ZT 300, with 4-wheel traction, can be seen here at the Maputo fair. Over clay and sand-clay terrain, it has developed traction power of up to 13 km. [as published]

Sure and Simple

In addition to displaying two interesting types of apparatus for processing potatoes, and a silo, the exhibit includes two milking machines and a mobile group of milking machines for use in the pasture. With the milking machines, a 100-percent increase in labor productivity is guaranteed.

The GDR at FACIM 1980

The GDR is participating in the Maputo International Fair, FACIM 1980, with a collective and representative official exhibit. As a traditional exhibitor in Maputo, it is primarily presenting machines and equipment geared to the needs of the national economy of the People's Republic of Mozambique.

The following firms are participating:

Maschinen Export
Technocommerz
Transportmaschinen Export-Import
Elecktrotechnik Export-Import
Robotron Export-Import
Textilcommerzi
Intermed Export-Import
Unitechna
Limex

The exhibit includes fork lifts, small-scale lifting equipment, cranes (models), excavators, agitators, electric and diesel units, pumps and compressors, air-conditioning, ventilating and cooling units, small "MULTICAR" vehicles, trailers, the ZT-300 tractor, milking machines, communications technology, accounting technology, typewriters, drafting equipment, textiles, blankets, pharmaceuticals, materials for medical use, and an information booth.

TAKRAF and BAUKEMA

In 30 Years, Over 3,000 Port and Shipyard Cranes

The GDR TAKRAF industrial complex, with 40,000 employees, specializes in the production of open-mining equipment and transport, transhipment and warehouse machinery and equipment. VEB Kranbau Eberswalde produces a line of cranes.

In the last 30 years, the firm has produced about 3,000 port, shipyard and construction cranes, which are in operation in over 20 countries in the most varied climatic zones of four continents. The firm, the major manufacturer of port cranes in Europe, is exhibiting two port cranes for the handling of merchandise in volume and in bulk, including containers, at the Maputo pier.

Last year, 14 rotary portal cranes were installed in the Angolan ports of Luanda and Lobito. Some 50 meters tall and with a 25-meter reach, the cranes can handle 6.3 tons of cargo. With the TAKRAF cranes in operation, the above-mentioned ports' capacity to transfer cargo was improved by 30 percent.

High Capability With Little Maintenance Required

VEB Verlade und Transportanlagenbau Leipzig, another firm in the TAKRAF industrial complex, has been producing forklifts for 20 years. Its production line includes diesel-powered forklifts with a 6.3 ton capacity. In operation in over 35 countries under extreme weather conditions, these are reliable machines. Specific characteristics which are internationally recognized include their ability to move up and down rapidly, their power, and the fact that they require little maintenance. The diesel-powered forklift exhibited at this far has a 3,200-kg capacity, a speed of 20 km/h, an ascending speed of 20 to 25 meters per minute and an ascending capacity of 20 to 25 percent. [as published]

Small-Scale Lifting Equipment of Great Interest

TAKRAF is also exhibiting an interesting collection of small-scale lifting and short-distance transport equipment at the Maputo fair. It includes, for example, hydraulic and electric jacks and rackrail lifts, essential for transport within factories. The appliances are inexpensive, operate under all conditions and can handle large loads.

More Rapid and Economical Construction With BAUSEMA Equipment

The GDR has a strong industrial sector for construction equipment. At FACIM 1980, BAUKEMA is exhibiting the UB 1232 universal excavator, manufactured by VEB Schwermaschinenbau Nordhausen. This excavator, a powerful and fully hydraulic machine, enables more efficient operations in soil preparation, mining and industrial and residential construction, as well as construction of highways and infrastructures in general.

Applications in Many Branches of Industry

Civil construction calls for increasing quantities of high-grade cement. BAUKEMA offers powerful interior and exterior cement mixers. A selection of these machines is on exhibition at the fair.

TECHNOCOMERS

Products for a Better Climate

Several endorsements from clients in over 25 countries of four continents stress the quality of ILKA products, from the GDR Luft und Kaltetechnik industrial complex. The NEMA plant of Netzschkau is one of the oldest and largest manufacturers of axial ventilators, particularly suitable for use in industrial sections, work rooms, storage depots, laundries, dry cleaning establishments, bath houses, restrooms, large kitchens, agricultural enterprises and, with certain limitations, even movie theatres and restaurants. The firm produces about 200,000 axial ventilators per year for export to many countries. The ventilators are distinguished for their low energy consumption, broad range of applications, light weight and high adaptability.

The same firm produces icemaking machines, which have proven their usefulness in the GDR and abroad. These modern appliances, producing ice continuously rather than cyclically, have a capacity of 5 to 20 tons per day. The small shell-shaped pieces of ice, up to 3 mm thick and about 5 cubic centimeters in volume, have a relatively large surface, permitting efficient cooling. The ice can also be transported long distances at high temperatures.

Exhibiting at the Maputo fair, VEB Kuhlanlangenbau, Dresden, is showing refrigerators. The GLN-T model, created especially for use in tropical countries, is already working satisfactorily in the People's Republic of Mozambique.

Relations With 40 Countries

The "Pumps and Compressors" industrial complex, comprising all the producers in the sector in the GDR, maintains relations with 40 countries. The firms produce a series of appliances and complete installations for the chemical and petrochemical industries, pipelines, agriculture, water treatment, metallurgy and electric power plants. The fair exhibit includes two portable compressors, with a capacity of 10 cubic meters per hour and 240 cubic meters per hour, respectively.

Models on Internationally Renowned Products

Offering products of international renown, "Karl Liebnechy" VEB Schwermaschinenbau of Magdeburg is familiar in many countries throughout the world. The industrial complex is among the strongest manufacturers of motors in Europe, producing each year diesel engines with a total capacity of 750,000 kw. On view at the Maputo fair is a model of a diesel electric power assembly, type 6 VD 18/15. It has a potential of up to 400 kv.

Useful in agriculture, it can operate at temperatures as high as 60 degrees centigrade.

UNITECHNA

Machines Producing Everything From Fibers to Clothing

The dedication of 30,000 workers, engineers and scientists, as well as a tradition of over a century in the manufacture of textile machinery, insure trustworthy cooperation with clients the world over. A complex comprising all the firms in this field in the GDR, TEXTIMA is synonymous with modern technology, characterized by internationally known and highly valued products. The machines include such attractions as a broadloom for wool, model 1505/6, an automatic knitting loom with a "Jacquard" arrangement, model 54 806, and a knitting machine, Kokett type. TEXTIMA's modern technology also means the MALIMO and LIROPOL technologies, and FLOROPOL, a new fabric combining polyester and secondary materials. The fabric was developed in the GDR, and TEXTIMA is the sole manufacturer.

Complete Installation By A Single Supplier

VEB TEXTIMAPROJEKT has designed, supplied and installed 200 complete industrial plants. Over 75 cotton- and wool-spinning mills have been installed in 18 countries. Over 60 modern plants have been constructed in 19 countries, for knitting, weaving, finishing and garmentmaking. In 1979, TEXTIMAPROJEKT signed a contract with the Mozambican government to furnish a textile complex.

Upon installation, the complex will produce 25 million meters of cotton and mixed-fiber textiles. TEXTIMA is taking part in the Maputo fair, offering information on textile facilities, primarily complete installations, and exhibiting textiles produced on GDR machines.

ELECTRONICS

Always in Touch With Technical Progress.

For some years, electric/electronic technology has recorded the most rapid development of all industrial sectors in the GDR, representing 10 percent of all industrial production. Last year, GDR exports of electrotechnical equipment to the People's Republic of Mozambique increased sixfold over 1978, an indication of the dynamism of its foreign trade. Prominent in this area are communications technology and the installation of electric power plants. Currently in progress is the Nacola-Nampula project, where the GDR is assisting in the installation of 110-kw stations and high tension lines.

Everything Depends on the Right Connections

The rapidly growing need for information has led to the improvement of communications systems. In the GDR industrial sector, RFT, a firm devoted to communications and transmission technology, has contributed much to this

improvement, occupying a prominent position in the world. The RFT is internationally recognized, primarily for the installation of communications systems and technical equipment in over 20 countries.

On exhibition at the Maputo fair is an automatic telephone switchboard, alternating-current telegraphy installations, telegraphic linking apparatus, two-way call installations of various kinds, electric power supply equipment, field telephones and the most varied products of telephone communications technology.

Reception With Minimum Effort

Shortwave communications technology is another important department in our exposition, including mobile and stationary equipment to establish medium- and long-distance connections under the most varied climatic conditions. For example, we are exhibiting the RKD 300 receiver, a table model that can also be installed in automobiles, motorcycles and boats.

ELECTROTECHNICA

Programs For Today and Tomorrow

Products of the GDR VEB ROBOTRON industrial complex have proved their usefulness in all computing and accounting work. At the Maputo fair, we are presenting high-quality products such as the ROBOTRON 1720 and 1711 automatic billing and accounting machines. The latter combines electronic calculating, computing and programming units, controlled by microprograms, and an electric typewriter. Based on our experience, gained over many years, and using the advantages of electronics, we have developed the automatic accounting machine, ROBOTRON 1355. Designed for use in small and medium businesses, it is a table model with numerical control and free programming.

Handsome Printing--

--is guaranteed with our mechanical and portable typewriters. ROBOTRON 20, with a 47-cm carriage, and ROBOTRON 20 [sic], with a 32-cm carriage, permit fast and pleasant work. Key pressure is always even, insuring uniform letters. ERICA 115 is the successor to ERICA 105, already known in Mozambique. For the first time at FACIM, we are displaying a drafting machine of the series ORDINAT III, with a movable carriage, outstanding for its precision and ease of maintenance.

INTERMED

One-Third of Production For Export

With about one-third of its production for export, the GDR pharmaceutical industry supplies pharmaceuticals and medicines to over 60 countries on every continent. The 15,000 workers in this branch produce a broad range

as reliable, the products are exported under the trademark GERMED and offer security for patients and doctors. In 10 years, the offering has been expanded by 200 new or modified medicines. At the INTERMED display in Maputo are exhibited human and veterinary medicines, including soporifics and antidiabetics, measles, tetanus and cholera vaccines, and vitamin preparations. The veterinary medicines include not only remedies for sick animals but preventive medicines and products to strengthen the resistance of the livestock.

Medical Technology For the Good of Mankind

Under this motto, we are exhibiting orthopedic aids, material for medical use, surgical suture material, bandages and various types of adhesives at the Maputo fair. Materials for medical use include an artificial skin, SYS pur-derm, of particular importance. This material has proved its usefulness in clinics in the GDR, and was awarded a gold medal at the Spring Fair in Leipzig this year.

TEXTILCOMMERZI: 4,000 NEW DESIGNS EVERY YEAR

Many high-quality products, including a wide variety of textiles of natural and synthetic fibers, are exhibited at the Maputo International Fair. They illustrate the variety and excellent quality of the work of the GDR textile industry. Every year, 4,000 new designs in textiles are brought out.

Some of the products have already won a secure place in the Mozambican market. We note, for example, cotton towels, blankets of acrylic fibers and wool-cellulose, and light-weight cotton fabrics already cut for sewing. Again this year, these products are included in the presentation of the GDR textile industry, represented here in Maputo by the foreign trade firm TEXTILCOMMERZI. Among the products presented for the first time are work clothes, such as pants, coveralls and shirts.

LIMEX

GDR Specialists Investigate Geological Deposits

In addition to construction equipment, the GDR is also offering technical scientific services at this Maputo fair. Attending FACIM for the first time, the LIMEX firm undertakes civil construction projects, giving technical advice and also assuming responsibility for execution of such projects.

Research and exploitation of mineral wealth are of substantial importance in the economic development of the People's Republic of Mozambique. LIMEX has experience in this area, in conducting geological surveys and in elaborating geological, minerological and civil construction studies. It is also equipped to conduct hydraulic and geophysical studies to locate sources of petroleum. GDR specialists have already been in Mozambique for several years, assisting in the investigation of mineral and coal deposits. LIMEX is responsible for sending specialists and equipment to Mozambique to increase coal production.

Through its planning studies, LIMEX is also participating in the construction of the Mocuba textile complex and the Tete/Mtundo urban project.

6362
CSO: 4401

UTILIZATION, ROLE OF TURNOVER TAX EXPLAINED

Budapest FIGYELO in Hungarian No 38, 17 Sep 80 p 5

[Article by Dr Imre Vincze: "Concerning the Role of the Turnover Tax"]

[Text] The turnover tax--as a form of social net income coming between the producers prices and the consumer prices--plays an essential economic policy and social policy role.

The socialist countries for several decades and many West European capitalist countries for the past 10 to 15 years have developed their national price and financial systems so that the full net income is not realized in the price of production tools in trade between enterprises and thus the producers prices are relatively low. The full net income is realized in the price of consumer articles and services. The segregated social net income, the turnover tax, appears between the producers price for articles and services in popular trade and the consumer price--as reduced by the commercial profit margin. Theory justifies such a construction of the price and financial system primarily for the following reasons:

--A significant proportion of the social product reaches its final consumption site with purchase by the populace so it is justified to realize a significant proportion of the social net income here;

--This procedure has a certain economic incentive effect, primarily in regard to investments and export; and

--The procedure is economically useful because it eliminates superfluous movement of money.

In addition to the above the turnover tax is a useful tool because with its aid the consumer prices for certain retail articles and popular services can be made to deviate--for social policy reasons--from the producers prices.

Requirement and Practice

In Hungary it is a general basic principle of consumer price policy that the consumer prices should correspond, in their ratios, to the producers prices and that consumer prices and producers prices should change together. In addition to realizing this general principle the political and social relationships of socialism justify over the long term that certain preferences and limiting discrimination be realized in the consumer price system and that this be done more broadly than is done in countries with nonsocialist social systems.

A general turnover tax should apply to all those products and services in popular trade, the consumer price of which can be determined by an adjustment to the producers price. A turnover tax substantially higher than the general one should apply to those articles and services the consumer price of which should be higher than the social value, in order to limit consumption. For those articles and services for which we want a consumer price lower than the social value the turnover tax can be lower than the general one, or they can be sold without a turnover tax or with a consumers price subsidy.

We should change consumer prices, especially the price level of basic foodstuffs, fuels and services (rents, transportation) which have a sensitive effect on the standard of living, over longer periods of time and even then the magnitude of the change should be the subject of careful consideration. It follows from this that there is a significant deviation between the price system being realized and the requirement formulated theoretically as the long-range goal in connection with producers and consumer prices.

The Goals of the Price System

There were significant changes in consumer prices in the middle of 1979, taking into consideration the new producers prices, and again on 1 January 1980.

The intended goals of the price changes were:

--To create a two-level price system, that is to realize in the price for articles and services in consumer trade a net income which was of considerable magnitude on the average, which is the basis for levying the general turnover tax;

--To reduce the number of articles and services the consumer price of which deviates disproportionately from the social value and which enjoy an unjustifiedly large consumer price subsidy; and

--To reduce the excessive differentiation in the turnover tax and to realize the general turnover tax for a broad range of goods, or rather to realize a turnover tax which deviates from the general one for only a few large commodity groups.

The realization of these goals began on 1 January 1980 and the process is continuing today. It is worth reviewing, by commodity group, the turnover tax system now valid. The turnover tax keys are expressed in percent of the consumer price, as reduced by the retail profit margin; this is also the basis for consumer price subsidies. In the case of services the basis for the turnover tax or consumer price subsidy is the consumer price of the service.

The great majority of basic foodstuffs enjoy a consumer price subsidy, the only exception being a 5 percent turnover tax for salami. The price subsidies for other items are as follows: beef, 48 percent; pork, 28 percent; sausages, 26 percent; smoked and cooked meats, 34 percent; canned meat, 65 percent; poultry, 27 percent; cows milk, 38 percent; milk by the glass, 65 percent; cheese, 60 percent; butter, 81 percent; jam and preserves, 36 percent, canned vegetables, 12 percent; canned foods, 44 percent; sugar, 13 percent; bread, 8 percent; rye mixture breads, 17 percent; and baked goods, 5 percent.

These data show that to a significant degree the state supports the consumer price of basic foodstuffs and that they differ to a large degree from the producers prices. It should also be noted that the artificial fertilizers, crop protection substances and protein fodders used by the farms enjoy significant supports which do not appear as production costs in agriculture. On the basis of the magnitude of the supports for agricultural purchasing prices alone, the trade in foodstuffs which has no turnover tax can be reckoned as enjoying preferential producers and consumer prices.

The turnover tax keys for luxury articles are as follows: brandy, 88 percent; wine, 34 percent; beer, 67 percent; coffee, 22 percent; tropical spices (pepper, clove, cinnamon, etc), 52 percent; and tobacco products, 62 percent.

A significant step was taken on 1 January 1980 to reduce the excessive differentiation in the turnover taxes for clothing articles. A general turnover tax key, which now stands at 23 percent, was prescribed for yarn and thread, textiles, knitted materials, dry goods, underwear, outerwear and other readymade articles. There were a few exceptions, primarily for infants and children's clothing. In general, the latter are sold tax-free while there is a 50 percent consumer price subsidy for infants clothing and Pioneers uniforms.

The general turnover tax key for footwear is 22 percent while children's footwear enjoys a consumer price subsidy of 81, 58 or 39 percent, decreasing as the size increases.

There is now an 11 percent turnover tax key for furniture industry products while baby carriages, baby beds and feeding chairs enjoy a 134-178 percent consumer price subsidy and other children's furniture enjoys a 20 percent subsidy.

Since 1 January 1980 the general turnover tax key for iron and technical goods has been 11 percent. A zero percent turnover tax is enjoyed by a relatively broad range of products (that is, they are sold tax-free). This includes metal and wire materials, electric cord and cables, electric stoves, electric washing machines, the Trabant Hycomat automobile, the Velorex wheelchair, baby carriages, and gas water heaters and stoves.

The turnover tax for passenger automobiles is 51 percent, but the total consumers turnover tax per car cannot exceed 80,000 forints. The turnover tax for jewelry and objects made of precious metal is 40 percent.

Coal is sold with a consumer price subsidy ranging from 194 to 498 percent; household coke enjoys a consumer price subsidy of 277 percent. Brick, tile, slate and building fasteners are sold tax-free. There is a 12 percent turnover tax on pine lumber but building carpentry products are tax-free.

In the area of household chemical articles and cosmetics there is a 5 percent turnover tax on wetting and rising agents and detergents. Materials for dishwashing are tax-free. There is a general turnover tax of 20 percent on comestic and body care articles, but baby preparations and tooth preparations are tax-free. There is a 50 percent turnover tax in the price for cologne and perfume, face and lip care preparations, and manicure materials.

In general the price paid by the populace covers only 15-20 percent of the producers price for medicines. Special supports cover the costs of running pharmacies.

In regard to transportation, a full price rail ticket enjoys a consumer price subsidy of 175 percent. There are different consumer price subsidies for various special tickets, ranging from 25 to 900 percent. There is a 10 percent turnover tax on long-distance bus transportation, but the turnover tax is not calculated in the schedule for international routes. Season tickets for students enjoy a 410 percent subsidy. Budapest tram and bus transportation and tram and bus transportation in the larger cities (Miskoc, Szeged and Debrecen) enjoy a consumer price subsidy ranging from 133 to 286 forints, calculated per 1,000 passenger kilometers. The consumer price support for air tickets to socialist countries comes to 240 percent.

Central heating in Budapest enjoys a consumer price subsidy of 220 percent, while in various megyes the consumer price subsidy established for central heating is between 209 and 331 percent. The consumer price subsidy for central hot water service is 192 percent while in various megyes it enjoys a consumer price subsidy between 235 and 342 percent.

Deviations To Be Considered

The net turnover tax for articles in popular trade--that is, the balance of the turnover tax realized and the price subsidy extended--is 7 percent. so at this time this is the magnitude of the bilevelism realized in the price of products sold by retail trade. On an average popular services enjoy a consumer price subsidy of 32 percent. A total net turnover tax of 1.6 percent is realized in the price of retail products and services.

Reviewing the present development of the turnover tax by commodity groups we can say that social preferences are being realized in it but the range of deviations is much broader than we have prescribed for the long term and in several respects the magnitudes of the deviations are a matter for concern. Even following the adjustment of 1 January 1980 the bilevelism of the price system is still tiny, as an average, for articles in consumer trade.

The turnover tax receipts expected in 1980 come to 65 billion forints--45 percent from luxury articles (alcoholic beverages, tobacco goods and coffee), 16 percent from clothing articles, 16.2 percent from chemical articles and 14.7 percent from iron and technical goods. Consumer price subsidies are expected to come to 50 billion forints--25.7 percent for basic foodstuffs, 29.8 percent for transportation (rail and urban passenger traffic), 13.6 percent for popular services (largely electric power, sewage, central heating and hot water), 13 percent for fuels and 11.5 percent for medicines.

Temporary Price Subsidies

The large consumer price subsidies now entailed in authoritative prices for foodstuffs and services could be moderated only in the event of a modification of consumer prices. Changing the consumer prices of these articles and services of key importance can take place only within the framework of standard of living and income policy measures. We can also reckon with the fact that the producers prices for these articles and services will increase while the consumer prices for them remain unchanged temporarily. In this case there will be an increase in the price subsidy.

The degree of support for fuels (coal and coke), central heating, rail transportation and rents is excessive. But changing these can be done only within the framework of standard of living policy measures.

At this time the general turnover tax key being realized for clothing articles is higher than we imagine it to be in the future. But we cannot decrease this by itself because it would come out of the planned receipts of the state budget.

We must regard it as a justified requirement that the consumer price of consumer goods in the free price form should change simultaneously with

and to the same degree as changes in the producers prices. In the case of free price articles we should emphasize the normative or relatively stable character of the turnover tax.

It may happen--as it has frequently happened in past years--that in the interest of maintaining the planned development of the standard of living we will have to initiate additional reductions in the consumer prices--reductions which did not figure in the plan--so that increases in producers prices or import prices do not appear in the consumer prices. In past years--and in a few cases this year already--this has been done by modifying the established turnover tax or price subsidy keys.

With Attention to the Standard of Living

The problem with such a modification of the turnover tax keys is not only or even primarily that it decreases the planned turnover tax receipts of the state budget or increases the consumer price subsidy, but also that it has further increased and continues to increase the complexity of the turnover tax system and makes it impossible to maintain the combination and simplification of the turnover tax keys realized in the course of the price adjustments.

It would be useful if other methods could be used in the future for the temporary neutralization of increases in producers prices and import prices. One method might be to establish temporary consumer price subsidies. The temporary key might supplement the normative consumer turnover tax keys (or consumer price subsidy keys); that is, the two would be realized together. By "temporary" we mean that as soon as possible they would be abolished and we would return to the base keys. Another method might be to stick to the established turnover tax (or price subsidy) keys despite the increase in producers prices while extending temporary support to the articles in question from a central price policy fund.

These methods could be used even in the case where the consumer price of certain articles was temporarily moderated in the interest of realizing the planned change in the consumer price level without there having been a reduction in the producers price or import price of the articles affected.

Both the use of temporary price subsidy keys and the creation of a price policy fund would serve to preserve the relative stability and normativity of the turnover tax system.

8984
CSO: 2500

MANPOWER MANAGEMENT PROBLEMS, MEASURES DESCRIBED

Budapest FIGYELO in Hungarian No 34, 20 Aug 80 p 3

[Article by Dr Imre Gyuricza: "Manpower Management: Signs of New Development"]

[Text] During the first half of 1980 significant differentiations arose in the production developments of industrial enterprises. At some enterprises production has increased by 40 to 50 percent, while at some other companies it has declined by 5 to 15 percent. Our chief economic policies produced a number of initial results in the area of the differentiation of production. These results manifest themselves in the increased production of sought-after products, and in the reduced manufacturing of products that are more difficult to market.

The productivity of enterprises that are increasing their production dynamically (20 to 40 percent) has generally increased even faster. The size of their wage adjustments, however, has hardly differed from the average.

Company management during the first half of this year was characterized by a great degree of uncertainty, circumspection, and by a reduction of economic activities. Because of the late appearance of production prices (1 April), in the course of the first quarter the companies lacked the necessary orders, and solvent demands were lukewarm both in the area of means of production, as well as consumer goods.

For these reasons, a significant portion of the production mills--in line with the experiences of earlier years--continued to produce on the basis of the production programs developed for the first quarter, and in many instances they produced only for the warehouses. This means (and meant in the past) considerable risks for the companies--at least until the sale of their goods.

Although they are still somewhat behind the similar period for the previous year, orders for the second quarter surpass those for the first quarter.

Defensive Strategy for the Enterprises

We can expect a further differentiation in industrial production. A dynamic increase in production is planned first of all by those companies that also produce for exports to the capitalist states. The management of wages is also characterized by circumspection. The majority of enterprises are resorting only to such wage increases as are based on wage reserves and on labor force reductions. From the point of view of company management, increasing effectiveness and the development of profits contain many factors of uncertainty. Wage increase possibilities derived from these are generally kept in reserve by the enterprises, with the intention of using them only during the second half of the year. In spite of the careful approach by the companies, there was a relatively high degree of variation in the level of wages, amounting to between -5 and +15 percent. A portion of the enterprises intends to pay wage increases in the form of sliding wages--either partially or fully.

The wage levels of various companies and the variations in these levels are more intimately connected with the above-described wage management, than with differences in efficiency. Today, it is customary to resort to the utilization of labor and wage reserves, which involves fewer risks. With the decline in the companies' reserves it is expected that efficiency will increase, i.e. changes in profits will have an impact upon the size and level of the wages. It seems that most of the companies are proceeding along the path of least resistance. During the first half of the year, while trying to improve results, it proved easier to increase the average wage by reducing the labor force.

But in the long run, no company that pursues the path of rational planning can allow itself this type of defensive strategy. Thus, in the near future--under the compelling impact of new and harsh economic and market conditions, and in the wake of the lukewarm economic activities that characterized the first two quarters--the enterprising spirit of the companies will doubtlessly increase, and thus the relationship between efficiency, profitability, and personal incomes will become tighter.

The Demand for Labor Is Decreasing

Economic developments during the first two quarters have led nationwide to a more rapid decrease in the number of those who are employed in industry and in the construction field than in the preceding years. As a result of the development that began in 1974, and that has stabilized since, the number of those employed in industry has decreased by 100,000 in the course of the past 6 years. In spite of this, no unemployment problems exist. This decline in the labor force was the result of a natural process, and not even production was influenced by it negatively. It enabled a more rapid increase in productivity than earlier to take place, as well as improvement in the balance of employment.

In light of the reduced rate of economic growth in 1980, a further improvement in productivity was possible only through an economical utilization of human labor, i.e. through further reduction in the number of those employed in the area of production. The modified economic indexes made it the interests of all companies to reduce the number of superfluous workers. This goal was defined by the companies as follows: "We are in need not of numbers, but a working force."

During the first 6 months of this year, there were 2.9 percent fewer people employed in industry than during the comparable period of the previous year. An even greater rate of employee decline was realized in the construction industry (4.2 percent).

The decline in employment in industry and in the construction industry is basically a "forced path," which is the result of the tightness of the labor goal, i.e. the transfer of labor to the nonproducing branches, and of the growth of productivity.

In spite of the increased decline in the labor force, there are still significant labor reserves at the functioning enterprises. The uncertain economic conditions, and the difficulties in production, in material supplies, and in marketing that characterized the first 6 months were viewed by most companies as being of a temporary nature. And because it is impossible to secure labor freely and at anytime from the available "labor pool" for the purposes of supplying the possible labor needs of new production goals and developments, the companies naturally try to retain their labor reserves.

In light of the exhaustion of the labor pool, and in view of the official measures directed toward the lessening of the search of labor, the level of employment is expected to decline somewhat. This will make it possible, even in case of a transformed production structure and unchanged quantity of production, to increase the average wage, and thus create better conditions for differentiated incentives, which--especially among individuals--do not as yet manifest themselves to the desired degree. It is increasingly frequent in the wage and labor management of the companies to separate efficiency and social considerations.

More Realistic Plans for the Size of the Laobr Force

Industrial companies have prepared more realistic plans than earlier concerning the size of their labor force. They have taken into consideration the fact that for years their labor force has been shrinking, and they have also calculated into their plans for the current year an expected decline. This shrinkage of the industrial labor force is influenced to a considerable degree by the growing attraction of the nonindustrial branches. In this process, the conscious factor is represented by the hiring limitations of the companies. These limitations may apply to the employee, to the individual trades, to areas of employment, as well as to those who have left prior employment. The elimination of vacant and unnecessary jobs is also in the process of being realized. (As an example, within 1 year, 3,000 jobs have been terminated in Hajdu County).

Small industrial companies and cooperatives have reacted in a more sensitive fashion to these altered conditions. Significant differentiations appeared in their production, productivity and wage level of various companies and cooperatives. They have experienced both outstanding results and regressions. Their sensitivity to the markets, and their ability to conform is at a higher level than in the case of the large enterprises.

The attitudes of the small and large companies are also different in the area of wage management. While the large companies--probably because of their greater labor reserves--generally tend toward the reduction of their labor forces, small companies and cooperatives are characterized more by the desire to retain and even increase slightly the number of their employees. The chief causes of this phenomenon include their greater flexibility in adjustment, and the fact that the development of the "background industry" demands first of all an increase in the production of small- and medium-size companies. Moreover, at the small companies (especially at the cooperatives) the narrow cross-section of production is constituted by the labor force.

Company plans concerning the labor management of various plants are in many instances incalculable even for the directors of these plants. It seems that the development of the economic activities of individual plants depends in many instances, and to an excessive degree, upon the decisions of the company headquarters. This creates problems, especially in the labor management policies of those counties where a sizeable portion of the labor force is employed at these plants.

Regional Characteristics

In light of the moderation in the demand for labor, in 1980 workers are more attached to their jobs than they were earlier, and the irresponsible switching of jobs has declined considerably. This resulted in the further moderation of fluctuation, especially in the ranks of the physical worker.

During the first 6 months, the number of those hired by industry and the construction industry was generally below the number of those who left their jobs. The companies have decreased their labor force by limiting their hirings. This process, which is essential for the national economy, is basically in accord with the aspirations of the workers--especially the young workers--that urges them to find employment primarily in areas other than production. Even so, there are 17,000 vacant jobs in Budapest alone in the tertiary sector.

In the Great Hungarian Plain and in the regions of southern Trans-Danubia--because of their lower level of economic development--the hiring potential of the tertiary sector is limited. This is particularly so in the villages. For this very reason finding employment there is a much more protracted process, and it is more common for workers to move back and forth between their homes and various remote places of employment. Such regions include certain areas of Borsod County, the northern section of Bekes County, the southern villages of Somogy County, and Veszprem County's villages of the Bakony region.

[Youth Employment]

Truly superfluous labor exists only in Szabolcs-Szatmar County. The county's favorable demographic conditions and its abundant supply of labor have made it possible for the county to engage in rapid industrialization in the past. True, this year the number of actively employed has increased by 500, but the county still has a potential labor reserve of 6,000 persons. This is especially true in the region of Fehergyarmat, Vasarosnameny, and to a lesser degree Mateszalka. The county's experts believe that the reason for this is the postponement of industrial developments and of new investments. The supplementary industrial branches of collective farms could play a significant role in raising the level of employment.

Preliminary surveys that examine the employment potential of young workers all indicate that those youngsters who complete only grade school, those who refuse to continue their studies and drop out, and those who graduate from trade schools will continue to have no difficulty in finding employment even in the future.

Those who graduate from technical high schools as chemical technicians, and those who finish economic high schools or high schools specializing in shorthand and typing, on the other hand, will find it more difficult to find employment in certain areas, and it will take them longer to do so. The graduates of gymnasia will also find it increasingly difficult to be employed in administrative capacities. On the whole, however, there is nothing to prevent them from seeking technical retraining, and then finding employment as physical workers. The employment of youth is especially critical in the Great Hungarian Plain, in the south Trans-Danubian counties, and in Borsod County. But the county councils still believe that they can solve these employment problems with local resources.

Past experiences reveal that many employers have slowed down or ceased their hiring of new workers because they intend to employ young people who, at the same time, are also paid low wages.

[Qualitative Changes]

One cannot draw long-range conclusions from the data of a half year. But in analyzing the developments in labor management we can tell that many of the earlier positive developments were speeded up (e.g. the decline of the number of industrial workers, the moderation of fluctuations, etc.), at the same time creating new phenomena. In certain areas, because of the declining demand for labor, labor supply demand came into balance. Shortage of labor is among the declining economic problems of the companies. Companies that have altered their product structure because of economic considerations (e.g. in machine industry and light industry) have generally also witnessed the regrouping of their internal labor force. But regroupings among individual companies have not become commonplace. True, some of the regions have experienced work force reductions of between 10 and 150 persons, but the resulting problems were solved locally and without stress. The laid-off personnel were regrouped and placed in new jobs.

Changes in the employment structure are still achieved primarily through the relocation of workers and through "demographical changes." Past experiences indicate that the companies are planning qualitative changes in their work force. They are trying to get rid of untrained and undisciplined workers, and to hire in their place well-trained and well-disciplined ones, including a sizeable number of young people. It will become even more difficult to place the so-called "low quality" workers, who at the time of hirings will increasingly experience rejection on the part of the employers. Should the above projection become a reality, these workers, or at least a portion of them, will undoubtedly change their customary attitudes. But there will be also those who will refuse to comply with the increase demands and the continuous activities. They will undoubtedly turn to occasional labor, will be employed in "low prestige jobs," and thereby relieve some of the labor problems in these areas.

National experiences tell us that the companies are not planning work force "reductions" significantly above those of the previous years. As such, for the time being, we do not have to face problems of significant unemployment.

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IMPORTANCE, REGULATION, DEVELOPMENT OF PRIVATE AGRICULTURE DISCUSSED

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[Article by Gyula Varga: "The Significance, Regulation and Chief Developmental Questions of Small Agricultural Production"]

[Text] The sphere of small agricultural production includes the household plots of producer cooperative and special cooperative members, the auxiliary farms of those not working in agriculture (including the production taking place on the subscription fields of state farms), the small farms of pensioners and the production of individual peasant farms which can still be found in small numbers.[1] The role of the household plots and auxiliary farms is the major one within the sphere of small production. Together they account for more than 90 percent of it. Within this the production of the household plots is decreasing in both volume and ratio, while that of the auxiliary farms is increasing. The relative decrease in the role of household plot production is due to the swift decrease in the number of producer cooperative members, primarily of pensioners. The reduction in the ratio of the peasant population within the sphere of small producers is accompanied by the consequence that small agricultural production itself is tied less and less to the peasantry, to those whose chief occupation is agricultural.

Small agricultural production comes to somewhat more than one third of the agricultural production of the country. This ratio decreased a bit in the past period and we can reckon on such a decrease in the future also. Despite the decrease in the ratio the volume of small production has been increasing continuously and very considerably for years. According to our estimates this growth process need not be turned around in the future. In the decade ahead one can hypothesize a small increase followed by a stagnation, depending on the recognition given to the economic regulation and environment are developed or preserved. What must be done can be formulated relatively precisely if we have objective information about the present situation and the motivations and trends of the internal transformation of small production.

Before all else, fundamental importance attaches to the circumstance that in the future the production of those whose chief occupation is not agricultural will increase. This will result in a radical transformation of the motives for and conditions of the production of small producers. The common farms of the producer cooperatives always had an influencing, integrating and regulating role on the household plots of their members. But it is necessary for the large agricultural operations and the general consumers' and marketing cooperatives carrying out trade tasks to undertake such an organizing, integrating role in regard to the auxiliary farms, which are of increasing significance, and to do this in accordance with the new demands which are appearing at a higher level. To a large extent we do not have today the economic and legal regulators necessary for this, regulators based on strictly economic foundations and mutual advantages which would encourage large enterprises and small producers to such an integration.

From the viewpoint of small production the second most important group of questions is the matter of prices and taxation, which is to say the profit interest of production. Two principles should be adopted to develop and preserve this. In the first place the work devoted to small production should provide those doing the work with at least as much personal income or wages as are enjoyed under large scale conditions for the same work. In the second place we must follow the principle that there should be a largely uniform price system for small production so that we can and should guarantee a justification for and the social competitiveness of it. By uniformity of the price system I mean that the acquisition prices for agricultural tools and the marketing (purchasing) prices for agricultural products should be substantially identical so that differences should reflect only the differences deriving from the quality advantages of large volume and uniform large-scale product purchases and sales. I also consider it an important requirement that the consumer prices for foodstuffs should always develop in accordance with the current cost relationships. Consumer prices which are forced down by supports put production for one's own supply in a disadvantageous situation; this represents a decreasing part of the volume of small production, but it is still the cheapest activity, making rational use of the most byproducts, waste and resources which cannot be used elsewhere.

The Development of the Volume and Structure of Small Production

In the course of the past 15 years the growth rate of agricultural production in Hungary has developed very favorably (by international standards). This includes the very dynamic expansion of the large agricultural operations, 5.3 percent per year, and the modest but not to be underestimated growth of small agricultural production, which can be estimated at an average of 1.1-1.3 percent per year. As a result of this differing rate of growth there has been a fundamental change in the ratio of large scale and small agricultural production. In 1961 small production came to 84 percent of the volume of large scale production; in 1971 it came to 61.8 percent; and since 1975 it has come to only 53-55 percent. Despite the decrease in the ratio the gross value of small production has increased by almost one third in 15 years.

Table No 1.

The Share of Small Producers In the Production of Crops and Animals (at 1976 prices)

Year	Crop Production		Animal Husbandry	
	Value in billion forints	Percent of national production value	Value in billion forints	Percent of national production value
1970	22,277	33.0	29,052	46.5
1971	22,479	30.4	30,889	47.0
1972	23,209	29.7	30,665	47.1
1973	24,255	28.8	32,303	47.5
1974	23,551	27.8	33,134	45.8
1975	22,785	25.6	34,373	46.4
1976	20,602	25.0	34,371	45.0
1977	23,299	25.3	37,262	45.1
1978	24,653	26.3	39,273	45.8

Source: KSH MEZOGAZDASAGI ADATOK, 1971-1979

In accordance with our goals and economic principles, formulated earlier but still valid today and for the future, the large operations have expanded their production not to the detriment of or in most cases even to replace small production, but rather primarily to benefit the productivity of the national economy as a whole.

The primacy of the production of the large agricultural operations as compared to small production is obvious. But this primacy does not mean it is exclusive, nor does it mean that the difference in rates of growth is given once and for all. There can be no doubt that a deliberate modification or change in the growth rate of small production is justified depending on the current capacity of the national economy. In the present situation it seems a justified solution if we moderate the growth rate of large-scale production to a level in line with the capacity of the national economy and achieve in small production a development which is most favorable to maintaining the balance situation of the country. There are two important aspects to this. We should exploit the possibilities lying in the lower assets demand of small production and we should make use of those manpower reserves which can be freed or acquired for the purpose of small production, but which in the great majority of cases cannot be turned to industrial production or large-scale agricultural production.

Special attention should be turned to changing the ratio of crop production and animal husbandry within an increase in small production. According to the data in Table No 1 the share of small producers in crop production shows an unambiguous declining trend. In contrast to this the share of their animal husbandry stagnated between 1971 and 1978 while the value of production increased by 30 percent.

The traditional cultures are declining more than the average within crop production; these are the ones which the large operations can handle with high labor productivity and favorable economic results. Here the small operations have finally lost the competition to the large farms. But in gardening production, which is based primarily on the live work capacity of the small farms, there will continue to be "free competition" based on a labor force which society cannot make use of in practice in any other way. A more rational division of labor is developing between the large operations and small production. The large operations produce the products which can be mechanized while small farms produce the products which require hand work. It may be worth noting that on the basis of this example we might consider the creation of auxiliary and craft industries which our present economic practice does not offer examples of, although the justification for them is rather obvious.

For years the significance of keeping animals and producing animal products has been increasing on the small farms, partly based on the manpower capacity already mentioned and partly to make use of the buildings in the villages. The raising of cattle and sheep has been stagnating or declining within animal husbandry, while pork production and poultry raising are of increasing importance. From the viewpoint of our export the production of rabbit meat by the small farms is of definite importance, which is a very good example of how a branch producing an income of many millions of dollars can be built up in this sector with little central expenditure in a surprisingly short time.

Transforming the Purpose of Small Production and Differentiating Among Producers

The transformation of the purpose of production merits attention in addition to and in close interdependence with the reordering of the structure of small production. The significance of supplying one's self is unambiguously decreasing while the volume of commodity production is greatly increasing (according to the data in Table No 2). According to the data the production by the small farms of a number of important foodstuff primary materials reaches or exceeds the volume consumed by an inhabitant of the country on the average! So in the case of a number of articles small production is a direct source of an export commodity base.

Table No 2.

Gross Price Trade (at current prices) of Products Deriving From Small Agricultural Production (data from producer cooperative household plots and auxiliary farms only)

Category	Yearly average in billions of forints			Average annual increase in percent comparing 1977-1978 to 1967-1970
	1968-1970	1971-1975	1977-1978	
Plant products	4.611	5.333	8.579	+ 7.2
Plow land prod.	1.556	1.108	1.325	- 0.1
Green vegetables	622	1.279	2.158	+18.6
Fruits	1.164	1.632	2.531	+ 9.5
Wine	1.217	1.134	1.742	+ 4.3
Animals and animal products	1.517	16.019	23.850	+12.9
Products of cattle raising	8.632	4.701	6.969	+ 7.9
Products of swine raising	3.376	7.866	10.775	+19.4
Products of poultry raising	2.007	2.304	3.512	+ 6.8
Total, small production	13.128	21.352	32.429	+11.2

Source: KSH MEZOGAZDASAGI ADATOK, 1970-1979

It is a significant characteristic of commodity production by the small farms that the ratio and volume of goods going into central sources are increasing. The organization and integration of small production are increasing at the same time too. The socially accepted price, cost and income levels and ratios determine the expenditures for and release of their production and keep them within well-controlled limits.

An internal differentiation of producers is taking place also together with the strengthening of the commodity-producing character of the small farms. It is characteristic of the trend of the changes within the internal differentiation that the household plots and auxiliary farms--which developed historically from household plots or at least on their model--which once produced primarily for self-supply--are being replaced by or supplemented by small farms engaged in commodity production which are specializing and increasing in size. On the other hand, there is an increase in the number of smaller little farms which are of less economic significance, compared to the chief employment of the owner, which represent a transitional stage between production and gardening or animal raising conducted as a hobby. The economic purpose of the latter is not even to provide self-supply and supervision of them is quite spotty. It is certainly worthy of note that

these two trends of differentiation require great circumspection when developing economic regulation and influence. It is obvious that the commodity producer, the person engaged primarily in self-supply, and the haphazard producer, largely unaffected by economic considerations, will react in completely different ways to the development of the economic environment. These three types of small operations are less and less sensitive, in accordance with the above listing, to external economic effects although--and this cannot be emphasized enough!-- the fate, the present and future, and the trend and magnitude of the internal differentiation of small production as a whole must be treated as an economic question.

The Production Forces of Small Agricultural Production

The manpower base of small agricultural production is provided by 1.5 million families. The small producers now use live work equivalent to about 270 million work days. The great majority of this is extra work done after working hours; the second most important factor is work done by pensioners and members of the household. It appears from a study done on this theme by the Central Statistics Office that the social status of the small producers is very diverse and well balanced. We can find among them peasants, people with two incomes, workers and intellectuals, pensioners, members of households and people who belong to every stratum and class of society.

This quite varied composition of small agricultural producers means that this activity is not monoploized by the possibilities of acquiring income; on the contrary--it is open to the broadest strata. Tamas Kolosi, in a manuscript study for the committee of experts mentioned above, could justly state: "Participation in the 'second economy' is not stratum specific. More or less every group has a chance to participate.... Naturally there are significant differences within these possibilities to participate and so the income differentiation deriving from it is not decided merely by factors of will. But this differentiation is not between the chief social strata; rather, it takes place within them."[2] It is worth adding to the above that in a few cases (for example, in the case of gardening with plastic sheet greenhouses) the credits and investment supports tied to permanent marketing contracts can reduce to a very large degree the above mentioned differences in conditions for participating.

Naturally, the productivity of the work used in small agricultural production lags behind the social average. The value of production per hour is three times greater in the large agricultural operations than it is on the small farms. This reflects the lower intensity of the work used, the significant proportion of work done by children and older people, the lower level of production equipment and the greater ratio of branches requiring live work, which are significant in small production. Taking into consideration the productivity of work the manpower expenditure used on the small farms is equivalent to the output of about 300,000 to 320,000 active earners.

If we compare the two main types of small production, the household plots and the auxiliary farms, then we find that each family member works an average of 5.1 hours per day on the former and 3.7 hours per day on the latter. The amount of work spent on the household plots bears a close relationship to the degree of urbanization and the magnitude of the activity in the two main branches. A direct relationship can be shown between distnace from the city and the time spent on household-plot animal raising. A larger degree of commodity production in animal raising is characteristic primarily of the village and rural household plots. The small producers around cities engage primarily in gardening-commodity production.

In addition to criteria characterizing the structure of the family labor force the undertaking of small production is also influenced, naturally, by other outside factors, difficult to quantify and largely belonging to the economic environment. It strengthens the enterprising spirit if the need to acquire durable consumer goods and housing encourages those with various main occuptionations to supplement their income. Such activity with such a motive can be expected, in the case of both agricultural and industrial workers, primarily among those living in villages or barred from access to state housing. The most general method of protecting themselves against disproportions in real income due to the unrealistically low rent for state housing, the preferential electric power costs of urban inhabitants, the still strongly supported central heating fees, etc. is to undertake extra work in production or services, including small agricultural production.

In contrast to their approximate one third share in total agricultural production the small farms have hardly one sixth of the land area of the country at their disposal, although this area includes a greater than average share of the plantation and garden areas (roughly 60 percent). There can be no doubt that small production represents the most intensive way of using the land. It merits special attention that the small farms can also use successfully areas with natural conditions which make them unsuitable for large-scale cultivation. In regard to the future of small production favorable conditions would be offered by releasing to individual use lands abandoned by their owners or owned by the state but not used, such as hillsides and barren areas, something that has not been done enough yet for various reasons. Use for small production of areas unsuitable for large-scale cultivation might increase productive capacity and take care of the environmental protection of a number of areas being destroyed and it might also contribute to bringing down the swiftly increasing price for plots of land. The best method for making these areas available might be offering long-term leases (for 50-100 years) if there were enough area to lease.

In addition to all this, it might be worth reconsidering whether there is any sense in excluding in advance the possibility of acquiring ownership of land by those whose chief occupation is not agricultural when what we really want to prevent is the breaking up of areas suitable for large-scale production!

The availability of buildings is a very important element in the production capacity of small producers. According to a 1972 survey by the Central Statistics Office, one could find on the small farms 472,000 square meters of cattle and horse shed, 1,488,000 square meters of swine housing, 375,000 square meters of wine storage area, 192,000 square meters of outbuildings and 1,652,000 square meters of other farm buildings (poultry houses, lumber rooms, etc.). Based on the average size of sheds and pens the small producers had housing for about 1.4 million large animals and about 6 million swine. We do not have a full picture of the state and quality of these buildings. A survey conducted by the Kaposvar Agricultural School and the Production Policy Main Department of the Agricultural Research Institute extending to 10,000 small farms provides approximate information about this. The following percentages for 1976 and 1977 list the animal buildings of the small farms in groups of good, medium and weak (hardly useable):

	Good	Medium	Weak	Total
Cattle space	38	49	13	100
Swine space	44	45	11	100
Poultry space	44	45	11	100
Sheep space	30	53	17	100

The supply of machines for small producers is perhaps the weakest point for the future of this sector. The equipment of the farms is at an extraordnarily low level--according to the unambiguous testimony of the limited data available. Tools for soil cultivation and machines for transportation are especially lacking.

One of the biggest problems of the small producers is the lack of transportation capacity. The number of draft horses has decreased to a minimum, partly due to lack of fodder and partly due to the taxes (which are the same for a horse as for a 35 kW passenger car). So teams represent in general very little transportation capacity in most villages. For various reasons the producer cooperatives are not happy to undertake transportation of the products of scattered small producers. It seems justified, from these considerations, to encourage small producers willing to do it to keep one or two horses by abolishing the horse tax. A breakthrough solution can be expected only from mechanization. It would be worth while to initiate domestic manufacture of small tractors which could be used to transport small quantities in addition to doing basic land work. This is also necessary because the increasing demand can hardly be satisfied from import. It is difficult to explain the reluctance of our agricultural machine industry to manufacture small machines when we think that for years it has struggled with an open or hidden capacity surplus and if we consider that the surrounding socialist countries do not manufacture small agricultural machines either. In my opinion (and many share it with me) we should

permit small producers to buy the universal tractors, not larger than 35 kW, scrapped by the large operations and we should provide service activity with them. This would indisputably serve the economic and political goals of society better than to continue to follow the present practice of sending to the smelting works thousands of tools which could still be used.[3]

We can say with little exaggeration that passenger cars represent the most important transportation tools of the small agricultural producers. It would also be worth considering that in the future we should develop passenger car import so as to increase therein the ratio of cars which can be used for production purposes too (for example, vans, cars equipped with trailers, or overland cars).

The mechanization of animal husbandry is limited to a few grinders, shellers and beet cutters although self-feeding and self-watering equipment is now spreading, which does not so much ease the work as aid the time use of the small producers.

There has been some favorable change in machine supply to small producers since 1975. But it is increasingly obvious that technical development and rational mechanization play a key role in the development of small production. It is all the more worthwhile to aid this and to try to satisfy the existing demand because the source of the investments, in contrast to the accumulation realized in other areas of the national economy, derives entirely from savings from personal incomes.

It would appear that the contradiction which may derive from the use of modern machines and the small size of small production might be resolved in two ways: by common use of the machines (the spread and popularization of this has been completely ignored thus far) and a suitable selection of the size of the machines. Loaning machines represents the most rational and most efficinet way to overcome the restricted capacity (in addition to which it might prove the justification of and way to technical development for a wide circle of small producers). It hardly needs to be proven that group machine use is more advantageous the less supply is able to satisfy machine demand.

Trade in machines is also made difficult by the fact that the work of enterprises working in foreign and domestic trade and belonging to different ministries is rather uncoordinated and there are simultaneous chronic shortages and excessive stockpiling. Parts supply and the provision of service are largely unsolved also. These factors are also the reason why there continues to be a spread of homemade tractors, powered "little wagons," powered cultivators, powered mowing machines, pumps, etc. which are accident-prone and which operate with very bad parameters.

But in addition to all this there has been an increase in the trade of tools, small machines and equipment sold to small farms in recent years, increasing from 670 million forints in 1976 to 980 million forints in 1978 (calculated

at current prices). And about half of this was of domestic manufacture. There is an especially great problem with acquiring tools, small machines with internal combustion engines, garden tractors and milking machines. Unfortunately, knowing the program of the Ministry of Metallurgy and the Machine Industry, we cannot count on the necessary progress and the chances of import from the socialist countries are very modest also.

It is worthy of note that according to our surveys of imports burdening the import allotment for the populace and serving tool supply for small production they are serving small production itself only in part and to an ever decreasing degree. The reason for this is that large-scale agriculture, and especially communal services (public sanitation enterprises, hospitals, park maintenance units, etc.), also require small machines which we market here at home as tools for small producers. So it appears that we are solving the problem of supplying tools for small farms but others (not unnecessarily) are buying these tools.

Energy supply is becoming an increasingly important factor for production around the house. It would be worth studying what possibilities there are for more rational electric power use by small producers, in production also. It would be possible to realize great savings if cheaper automatic thermostats could aid production in plastic sheet greenhouses or the regulation of air-space heating which is sometimes necessary in small-animal raising. Of course, the development of expert advice is also an important condition for all this. Today large-scale agriculture often jealously guards ("protecting social property") those by-products which could be used very well in small production and which are destroyed by the large operations with the use of more or less energy. Much oil and electric power could be saved by using straw, corn stalks, twigs and wood industry scrap if the small producers could get these materials and if the boilers and burners suitable for using them were manufactured, sold and popularized.

The fodder base is the most important factor in animal raising by household plots and auxiliary farms. Fodder needs, in regard to quantity and quality, are influenced by the pecularities of the several branches of animal husbandry, storage conditions, the type of small farm, the large operation background surrounding them and the production goal of the small farms. The manifold problems of fodder supply to household plots and auxiliary farms differ according to whether we are talking about feed grain, bulk fodder or rough fodder. The much debated problem of fodder supply for small farms is virtually coeval with the development of large-scale agriculture.

With the strengthening of the large agricultural operations and the improvement in their management level it has become possible to cover to an ever increasing degree the increasing fodder needs of the small farms while supplying the swiftly developing large-scale animal husbandry. This is aided and made realistic by the fact that trade between the large operations and the small farms increasingly takes place at current producers prices and it is incorrect to continue to say that the small producers are being "supported" by the fodder sales of the large operations.

Another much debated question is how efficiently the small producers use the fodder. In this connection we still meet with rather extreme opinions, as in regard to fodder use by the large operations too. There can be no doubt that the small farms use a lot of chance fodder (kitchen scraps, plow-land by-products, garden wastes) for animal products produced up to the level of self-supply, which would not fit into a large-scale technology. But even in the case of those producing for self-supply this makes up only a small part of the supplements fed.

The use of fodder of by-products and waste does improve the efficiency of meat production. But the general tendency in the case of commodity production, with the increasing magnitude of production, is for small producers too to acquire the necessary fodder from outside sources. The fodder expenses of small farms geared up for commodity production are similar to or identical with those of large-scale production. And the facts rather clearly refute the hypothesis according to which the small producers use fodder wastefully, worse than the large operations. The small producers do buy feed grains at trade prices, which is to say more expensively--due to the small volumes--than the large operations. But with uniform producer prices, the size of the income depends primarily on how the fodder is used, so we can hardly speak of waste. In addition, with the given prices for animal products, the small farms react better and more quickly than the large operations to changes in the price of fodders. We might interpret this to mean that efficiency requirements are truly realized in just this production sphere.

The fodder needs of the small farms are closely connected to the volume of products produced. In the future this connection will become even closer because in the sphere of small production the production of corn, which represents the feed grain base, is gradually being reduced. This is also true because more productive types and hybrids are spreading in the two branches using feed grain (swine and poultry raising). Better quality feed with a higher protein content is needed to produce these.

The Organization and Integration of Small Production

Of the small farms the household plots of the producer cooperative members work in the most organized fashion. Their link to the common farm is well known together with the legal and economic side thereof. It should be stressed that the economic link is being strengthened now as a result of the organizing activity of the large operations, primarily as a result of their increased interest in organizing commodity production. There is also increasing organizational activity by the large agricultural operations, primarily the producer cooperatives, in organizing commodity production by the other small farms in their operational areas. But their interest in this is much less than it should be and is essentially limited to seeing that a part of the large operation super-price for a few products stays with the large operation under the heading of organizing production. This, however, is far from sufficient for the large operations to be able to play an active, production-influencing and organizing role in place of the present

more or less passive accommodation. (A number of legal problems need to be remedied in this area; for example, what should be classified as secondary occupation, what should be classified as an odd job, etc.)

The general consumers' and marketing cooperatives (AFESZ) are playing an ever more important role in organizing the small agricultural producers. Contracts extending for several years are spreading. The state investment support which can be used in a few branches is increasing the organization of the small producers also; a condition for this is that the small producers sell to the purchasing enterprises a determined quantity of goods within a certain time. The activity of various foodstuffs industry enterprises in integrating small production is rather rare and, unfortunately, is not spreading. The meat industry, primarily, is carrying out such organization, but most often through an AFESZ or a producer cooperative. Unfortunately our foodstuffs industry, which is too centralized and too concentrated, has still not found a true partner in the small producers. For this reason there are frequent complaints about the shortage of products which demand live work and are typically small operations (berries and stone-fruits, small animals, etc.). To sum up we can say that the small farms are increasingly linked to the sphere of large socialist operations, including the large agricultural operations, the cooperative trade enterprises and sometimes the foodstuffs industry enterprises and trusts, but that this is far behind the rational limit of the possibilities.

However favorable the changes have been for small producers in regard to the economic regulator system or the free demand market, this in itself is not enough to increase commodity production. In our homeland the era of free market trade and of producer marketing is declining and is increasingly limited to those areas where state and cooperative trade cannot satisfy consumer demand because of the deficiencies of the shop network. To an increasing extent the illusion of a market in the large cities is given by middlemen disguised as the original producers. For the most part the real original producers are represented by old retired villagers with products which are poor in both quantity and quality. All of this means that well functioning, organized trade is at least as important for the small producers as are favorable income prospects. However favorable the potential profitability of the products, if the product cannot be sold or can be sold only late, the income is lost or substantially reduced. Thus marketing security is of fundamental importance to small producers and, fortunately, this coincides with the social interest attaching to the stability of small production and its purposeful development. But to a large extent we lack an enterprise structure, enterprises which organize and integrate production, which would exploit and integrate these two interests.

It is important that we create or substantially improve the economic and legal conditions necessary for this for the large agricultural operations, the AFESZ'es and the foodstuffs industry enterprises.

The Efficiency of Small Producer Work and the Income of Small Producers

An extraordinarily large degree of differentiation characterizes the efficiency of work done in small production and the utilization of the tools of production used here. Frequently even the meaning of measuring this efficiency is dubious because the human work and tool capacity being used here are such that they could not be used socially any other way and as such the degree of efficiency is unambiguously secondary and can be neglected. But this is less and less true on the small farms specializing in expanding commodity production where frequently they expand the production base with new investments. The efficiency of this work, on the other hand, can be called unambiguously good, because if it were not, their production would not be competitive with the production of the large socialist farms. The competitiveness of these small commodity producing farms is unambiguous and obvious. It is worth noting that to a large extent we help the large operations with significant super-prices thus balancing out those extra burdens which we place on the large farms with the tax system and the system of withdrawals which have developed. Thus, in the final analysis, the price system creates truly uniform income conditions.

According to our experiences and surveys the efficiency of the small farms reaches and often surpasses that of the large operations in those branches and for those products demanding much hand work and unique individual treatment. But small production as a whole shows a labor productivity which is a good bit lower than that for large operations, partly because of the much lower level of equipment and partly because the composition of the labor force is radically different from that of the large operations. Those working on the small farms are largely pensioners, juveniles or those with decreased work ability.

Together with the increase in the ratio of commodity sales by small production there is an increase in material use and in the purchase of tools of production of industrial origin. So the ratio of new value decreases within the products produced and the ratio of assets increases. In 1970 the gross income per 100 forints of production value was 63 forints; in 1977 it was only 55 forints. The small producers are trying to balance the decreasing profitability of small production by increasing the volume of production. This represents the chief incentive for the branch concentration and specialization of the small farms.

Most unfounded and contradictory opinions concerning the income which can be achieved in small agricultural production have developed in unprofessional public opinion and even among experts who are not agricultural specialists. The most dangerous of the views which look with prejudice on the income relationships of the small operations are those extreme positions one of which presumes that these incomes are unacceptably large socially and unjustified compared to the work. According to another equally prejudiced position the forced efforts performed in overtime by the small producers--lacking other sources of income--are recognized by society only fractionally.

Of course it is easy to find unique examples since we are talking about almost 1.5 million small farms. Perhaps there are more than a few extreme cases where we can find great differences. But the income situation of the great majority of the small producers is rather balanced, at least in regard to their accommodation to conditions and circumstances. If this were not so it would be difficult to explain why the volume and structure of small production have developed favorably--without administrative intervention--for years with a basically uniform price system for agricultural products, with the given consumer prices and under conditions of uninterrupted good foodstuffs supply levels.[4] If we evaluate this relatively even development of small production as a basically positive factor in the formation of the balance situation of our national economy, and if we accept that this position rests on economic foundations, then we can realistically reject the above extreme views, and must continue to reject them, in whatever form they appear, in economic or political guise, openly or indirectly. Then we must take cognizance of a part of the real problems while it is our obligation to remedy the remainder.

One can understand on a logical basis the large internal differentiation in the expenditure and profit relationships of small producers and the income differences which result. The quality of the land on the small farms varies from the most outstanding to the worst, unsuitable even for large-scale cultivation. Those working here include those with the greatest expertise, capable of satisfying virtually the individual needs of plants and animals, and also old people and children and lay hobbyists. The tools vary from modern automatic tools to ancient ones and so the efficiency of their use varies. All of this is transformed into a single average figure when we try to see how the work spent on small production relates to the value of the products produced. According to the survey done in 1972-1973 the value of the product of one hour of work came to 16 forints, which is about one third that of a product of work done on the large operations. Since at that time use by the producer came to almost half of the production value, the gross income for one hour can be estimated at about 8-9 forints. Knowing the expenditures of the small producers which burden the gross income (for example, land tax, income tax, wine tax, community development contribution, etc.) the sum remaining translated into wages can be put at about 7-8 forints per hour then, and 9-10 forints per hour today. If we calculate this sum for the work done by those of working age, largely after working hours, then it proves to be very little. But if we consider that about 60 percent of the work done on the small farms is done by pensioners, members of the household, and dependent family members then the value realized for the work can be called satisfactory.

Naturally these data are only approximate; there are problems which can hardly be bridged over in calculating expenditures; even establishing the volume and value of the product runs into difficulties (especially uncertain is the measurement and valuation of production for self-supply). But there is sufficient foundation for us to say without fear that the income requirement for commodity production work on the small farms is a good bit more than this if it is to be done by those of working age. We can roughly calculate that the income requirement for commodity production work done in small production

does not deviate from the total personal income per unit of work organized on the social scale. It is probable that in the future the income requirement for commodit producing work will increase relatively--because what is involved is largely overtime. This will further increase the difference within small production, between the valuation of live work in self-supply and in commodity production, and between the necessary income content of articles characteristically produced for self-supply and those characteristically produced as commodity production.

The chief guarantee, in addition to a uniform price system, that small agricultural production will not become, despite the tendentious statements still repeated about it, a source of real economic tensions is that production around the house, small scale activity, is a realistic possibility for many people. The ratio of those keeping small animals who have no land at all is considerable and gardening with plastic sheet greenhouses near the house requires very little land. Approximately every second family in Hungary has a small farm. In a significant number of cases the supports given to small producers or the credits available to them make it possible for a small farm just getting started to obtain good equipment for production.

We can regard the regulation and guidance of small agricultural production as reassuringly settled. The new system of small operation taxation which has been working for a few years is carrying out its tasks satisfactorily. But one can criticize the fact that the basis for taxation is the gross value of commodity production. At present the small producers are taxed not on the size of their income but rather on the basis of the size of commodity production. The weak point of the present system is that the tax brackets do not follow the increasing price level; that is, the same size tax burdens smaller and smaller incomes. This requires swift correction and it could be carried out very simply. But it is a correct principle of the tax system that it gives preference to the work of the family and puts a progressive tax on hired work. In practice the use of outside manpower is not at all characteristic of small agricultural production. It is thus worth noting that reports of the spread of hired work have been heard recently. Because of our interests attaching to small agricultural production we must urgently realize the principle that we will give preference only to incomes based on one's own work; we must eliminate that deriving from outside manpower. Moral and political behavior have an important role in this, in addition to economic tools and taxation.

Future Prospects

In regard to the future of small agricultural production--on the basis of a weighing of various economic and social conditions--we might make the following chief observations:

1. A reduction in the relative role of small production, in its share in total agricultural production, is a natural and lawful phenomenon. But this does not mean that the volume of small production must necessarily decrease

or decrease to a large degree. According to our calculations the total production value of small production to be expected by 1985 may increase by a few percentage points as compared to the average for the years 1971-1975.

2. The changes in the overall production of small production will appear as a function of very different branch growth rates. One can expect growth in a few branches (for example, green vegetables, fruit, rabbits, etc.) and a reduction in production in plow-land grain production and cattle raising; in the case of swine raising it is probable that the production level will be maintained.

3. The growth differentiated by branch will result in the specialization of small production, specialization in the direction desired from the viewpoint of the national economy. The annual output of small production is equivalent to the work of about 300,000 to 320,000 active workers. The overwhelming part of the fixed assets of the small farms, worth 50 billion forints, cannot be regrouped to another sector. The development of their assets may be small, but the source of this is almost exclusively the personal income of the populace, or rather the savings from this income.

4. It is indicative of the investment saving effect of the production of the small farms that the assets needed for one hectare of large scale green vegetable production amount to 30,000-50,000 forints, 120,000-350,000 forints for one hectare of fruit and 200,000-250,000 forints for one hectare of grapes. Despite the planned moderation of sector change the cow stocks of the small operations will be fewer by about 55,000-60,000 units in the Sixth Five-Year Plan, the replacement of which in itself will require the investment of 4 billion forints on the large farms. Every 10,000 tons of pork produced in small operations is equivalent to a large operation investment saving of 800 million forints, every 10,000 tons of poultry to a saving of 400 million forints, or the postponement of this to a later time.

5. Maintaining small production--and increasing it in a few branches--is an important condition for supplying the populace. Despite the decrease in production for self-supply the small farms provide one-half to two-thirds of the family needs for a number of products. The increase in the ratio of commodity production is a consequence of the operational specialization of production and the branch growth which accompanies necessary technological development. The linking of the small farms to organized production moderates spontaneity, and more and more elements of socialist planning are spreading to the sphere of small producers too.

6. The income sensitivity of small production and the possibility and necessity of economic integration increase with the strengthening of commodity production, and the demands made of economic regulation change too. Thus more attention than before must be paid in the guidance of agriculture to the unique interest system of the small production sphere and to creating a harmony between the production sphere and social questions.

7. The minimal condition for attaining the production and commodity supply planned for the Sixth Five-Year Plan is to maintain in the chief branches the profitability positions which have developed as of today. Without this our prescriptions cannot be regarded as realistic or well founded. Encouraging small production is a long-term obligation both economically and politically. That reproduction process, in which the small producers reinvest in production a suitable part of their current receipts and personal income, can be maintained only if the degree of economic incentive does not decrease and if the political statements made in connection with small production leave no doubt that we regard the small agricultural operations as an organic part of our socialist economy for a long time to come.

FOOTNOTES

1. This study is a slightly modified version of an article I prepared at the request of the Financial Main Department of the National Planning Office for the committee of experts working under the title "The Role, Magnitude, Regulation and Development of Activity Carried Out in the Secondary Economy." The debates which took place in this committee of experts greatly aided in a clearer expression of my position and encouraged me to make it public. Without going into detail I should note that I do not consider the concept of a "secondary economy" or "secondary distribution" suitable for an exact approach to or interpretation of the problem of small production or small agricultural production therein. It is enough to note that the expression "secondary economy" does not distinguish between income acquired by work and income acquired without work, so its use in economic analyses is not possible. This debate also called my attention to the fact that small agricultural production has a few specifics which could be useful in the course of organizing small production in other branches. These, briefly, are the following:

    1. The basis of small agricultural production is extra work in addition to the chief occupation.

    2. This activity is widely accessible; it is not monopolized.

    3. It functions with uniform and centrally regulated and controlled expenditure and final product prices under conditions of a strict economic competition situation.

    4. Shortage management in trading the products has essentially ended, in regard to purchases and sales alike, and this has also ended the possibility of acquiring extremely high incomes and of doubling the price level.

    5. Integration forms of varying strictness are spreading in the organization of trade as a result of which the socialist planned nature of small production is strengthening further.

2. Tamas Kolosi: "Secondary Economy and Social Structure," manuscript, October 1979.

3. This problem has been largely solved since the study was prepared.

4. It is worthy of note that in all socialist countries where small production has a relatively large significance, the foodstuffs supply difficulties double the foodstuffs market. For example, in most socialist countries there is, in addition to state foodstuffs trade, a free market (in a few countries it is called the kolkhoz market, according to local usage) the products, supply level and especially price level of which differ radically from those of state trade. A characteristic example of this is that the price of meat on the kolkhoz market "bazaar" is twice what it is in the "magazin" although it is also true that the supply of meat in the "magazin" is very bad. This phenomenon almost justifies and supports that dialectic link which exists between the balanced and consolidated position, but not a monopolistic position, of the small producers on the one hand, and the balance of supply and demand on the other.

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LEGAL ASPECTS OF WORKER PARTICIPATION IN MANAGEMENT EXPLAINED

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[Article by Ludwik Bar, Institute of State and Law of the Polish Academy of Sciences]

> [Text] The principle of worker participation in the management of state enterprises has been endorsed as a principle of constitutional law and as an integral feature of our political system. This endorsement was made by the Sejm of Poland on 10 February 1976 under the terms of Article 13 of the Polish Constitution which states that, "Workers employed in enterprises are to participate in the management of their enterprises." Thus, a principle has been written into the Polish Constitution which has always been regarded, since the very inception of people's power, as one of the underlying principles of the construction of the socialist state, i.e., the principle which acknowledges the right of the working masses to participate in the management of national affairs. In terms of organizational arrangements, this principle has been put into practice in various ways; one of the ways in which this has been accomplished is worker participation in the management of state enterprises. We have invited Prof Dr Ludwik Bar of the Institute of State and Law of the Polish Academy of Sciences to discuss this highly important issue.

Putting the principle of worker participation in management into practice proceeded at a slower pace in state-owned enterprises than it did in locally administered state organs. The difficulties attending this process were numerous and manifold. The state-owned enterprises went into operation almost immediately after they had been created. The postwar economy was managed along highly centralized lines. This

meant that all decisions on important issues were made for the most part by the central government and its regulatory agencies and then passed on to the enterprises to be carried out. Consequently, workers employed in state-owned enterprises were taken into account only as the recipients and executors of directives issued by regulatory agencies.

The Decree on the Formation of Plant Councils dated 6 February 1945 (DU [Dziennik Ustaw] No 8, item 36) was supposed to signal the start of the process dedicated to the implementation of the principle of worker participation in management. To some extent the Decree on the Formation of State Enterprises dated 3 January 1947 (DU No 8, item 42) also made allowances for public participation in the management of these enterprises in the form of citizens' oversight councils. However, the increasingly centralized management of the economy made it impossible as a practical matter to convene these councils. And by the time the Decree on State Enterprises (DU No 18, item 111, 1950) was issued on 26 October 1950, a law which has remained in force to this day, there was no mention at all about citizens' oversight councils or about worker participation in management. But in 1956 the workers made demands calling for the realization of their lawful right to participate in management, and on 19 November 1956 the Law on Workers' Councils (DU No 53, item 238) was passed, a law which was superseded by the Law on Workers' Self-Management dated 20 December 1958 (DU No 77, item 397). Worker participation in the management of enterprises was legally sanctioned in the form of the institution of workers' self-management To be sure, this institution was not set up in all state-owned enterprises, but as the years went by it eventually became an important factor in the development of social relations.

However, the organizational structure of the institution of workers' self-management ratified by the 1958 law could not keep pace with the rapid and far-reaching changes taking place in industry under the influence of the scientific and technological revolution. The concentration of industrial production, the creation of manufacturing and construction combines and the development of large-scale economic organizations necessitated changes and readjustments in the structure of worker's self-management. But, instead of moving in this direction, the central government issued directives in December 1969 that were accompanied by instructions which in practice made it possible for the combines to ignore the provisions of the law on workers' self-management. This then amounted to a major setback as far as the realization of worker participation in the management of enterprises was concerned, since combines are in fact large-scale enterprises.

The events of 1970 once again reminded us and made us aware of the great importance of the principle of public participation in the management of national affairs and of our duty to put this principle into practice in state enterprises. Consequently, the resolutions of the Sixth PZPR Congress came out strongly in favor of promoting workers' self-management

and giving it a broader role in the management of the economy. In turn the resolutions of the Seventh PZPR Congress backed up and reaffirmed the guidelines set forth by the Sixth PZPR Congress concerning workers' self-management.

We have enumerated the legal acts and the resolutions of the PZPR congresses that are indicative of the official actions and measures taken by our national political leaders in this area. But there is more to it than this. It should also be noted that during the past 35 years of socialist construction in Poland the workers themselves have become increasingly aware of the principle of worker participation in the management of state enterprises. They have displayed a keen interest in this principle and they regard it as a means to the realization of socialist democracy in state enterprises, which are viewed not only as production and service organizations, but also as communities of working people, key factors in the development of socialist social relations. The Sejm of Poland has rated these gains as affording sufficient grounds for recognizing worker participation in management as a basic principle of our form of government, a principle which should be written into the Polish Constitution.

The principle of worker participation in the management of state enterprises has been recognized as a basic principle of our form of government and, as such, it was written into the Polish Constitution on 10 February 1976. That was 4 years ago. It is essential that we should pass a law aimed at the further development of this principle so that we can delineate the basic organizational structure and organizational-legal frameworks of worker participation in management and the scope of its functions, rights and duties. The things that have been accomplished so far in terms of the statutory regulation of this institution do not go far enough. Thus, the laws and other acts passed in 1978 ought to be regarded as provisional measures, i.e., provisional until such time as the Sejm passes a law regulating the legal status of the institution of worker participation in the management of state enterprises. At that time the law of 1958 will have been superseded once and for all. For, as things now stand, this law is still in force and there is no way it could have been overridden as a result of the issuance of the directives of the Central Council of Trade Unions in 1978 on the by-laws of workers' self-management councils.

Since it has been pointed out that the implementation of the constitutional principle of worker participation in the management of state enterprises requires legislative validation, reasons must be cited to prove this. Therefore, it should be pointed out that what we are talking about is the statutory regulation of the ways in which workers exercise their rights and duties to participate in management, hence, the realization of the constitutional principle of socialist democracy in state enterprises. This is a subject matter that falls within the purview of the Sejm, and it is the Sejm that will resolve this matter by

legislative means. This subject matter cannot be regulated by any lower-ranking legislative body or by any act of administrative law.

It should be noted that the problem of the statutory regulation of worker participation in the management of state enterprises was deliberated upon while work was under way on a draft law on state enterprises. At that time various options were being mapped out in an attempt to resolve this problem. Consideration was given to a proposal for incorporating provisions on the participation of workers in management into the law on state enterprises. It was noted that since issues related to the management of state enterprises will be regulated under the terms of this law, the question of worker participation in management ought to be regulated by the same law.

While work was under way on the drafting of this legislation an alternative proposal was advanced that did not tie the statutory regulation of worker participation in management to the draft law on state enterprises. Instead the proposed changes were geared more toward the amendment of the 1958 law on workers' self-management or toward the passage of a new and completely separate law. Reference was made to the need for continuity with existing statutes. Finally, the view was expressed that work should begin on the drafting of a law which would regulate worker participation in the management of all socialist institutions, i.e., not just in the management of state enterprises. Thus far, none of the aforementioned proposals have been written up in the form of a draft law.

Prompt action needs to be taken to provide for the statutory regulation of this problem. It is necessary to decide on a way to achieve this goal as quickly as possible. But regardless of the kind of law according to which this problem is going to be regulated, it is essential that provisions be made under this law for solutions which will really promote the practical realization of the principle set forth in Article 13 of the Constitution.

Let us recall that this principle is worded as follows: "Workers employed in enterprises are to participate in the management of their enterprises." Let us reflect for a moment on the meaning of this important sentence.

The first word of this sentence--"workers"--signifies that:

--we are talking about all employees of state enterprises, regardless of the kinds of jobs they perform;

--the workers are represented by a general meeting of all enterprise employees or, if the enterprise has a large workforce, by meetings of delegates elected by the workers;

--we are talking here about the actual workers and their delegates, that is, not about societies, organizations or clubs which are active in a given enterprise and whose members happen to be employed in that enterprise.

The term "enterprise" refers to:

--all enterprises, regardless of the type of activity they are engaged in, and regardless of their organizational configuration, i.e., not just those enterprises covered by the 1958 law on workers' self-management;

--not only those enterprises that were intended to be covered by the 1958 law, but also other state economic organizations listed in the registry of state enterprises, provided that their real activities are intrinsically similar to those carried on by business enterprises, meaning that in some cases the associations can also be regarded as enterprises.

Worker "participation" in management means that:

--the workers have a right and duty to participate in management regardless of whether they express a desire to do so and regardless of the position taken on this matter by the management staffs of enterprises and by the higher-ranking organs that regulate these enterprises;

--no one has the right to hinder the workers in the exercise of their rights and duties to participate in management, rather all state organs and the management staffs of all state enterprises are supposed to assist, advise and support the workers in the exercise of these rights and duties.

The phrase [participation] "in management" should be interpreted to mean that:

--workers participate in all phases of the management process, meaning that they should take part in the development, planning, organization and supervision of production activities and in the evaluation and auditing of the performance of the enterprise and of its management staff;

--this participation should take the form of consultation, decision-making and control.

The proper interpretation of Article 13 of the Polish Constitution will result in the formulation of a regulatory statute which will first and foremost:

--make it possible for workers to express their opinions in all forums where decisions are made on enterprise business affairs;

--encourage state enterprise employees to take a personal interest in the business affairs of their enterprise, especially in the case of those business affairs related to economic management, the fulfillment of tasks involving the satisfaction of public needs, the quality of goods and services, and so on;

--tend to eradicate conditions conducive to the persistence of the antiquated notions which draw a distinction between "us" (the workers) and "them" (the enterprise and its management staff);

--get the workers and their authentic representatives involved in all phases of the management process, i.e., in the formulation, planning, organization and supervision of the fulfillment of tasks and in the evaluation and auditing of their enterprise's performance record--as equal partners with the management of the state enterprise;

--serve to raise the consciousness and sense of duty of the workers when it comes to their shared responsibility for conducting the affairs of a state enterprise.

The organizational and legal frameworks of worker participation in management should be flexible in view of the organizational and economic diversity that exists among state enterprises, and also in view of the differ levels of vocational skills and civic mindedness among the workers employed in state enterprises.

The political principle of worker participation in the management of enterprises as set forth in Article 13 of the Polish Constitution permits us to come up with the following definition of the organizational and legal framework of this relationship:

1. In the management of plants that form a part of a multiplant enterprise and in singleplant enterprises provisions will be made for the participation of:

--general worker meetings or, if the workforce of a given plant or enterprise is too large, meetings of delegates elected by rank and file enterprise employees;

--a workers' self-management conference, consisting of workers' councils elected by rank-and-file employees, plant councils, trade unions, and PZPR committees.

2. In the management of multiplant enterprises, and hence of combines as well, provisions will be made for the participation of:

--a workers' self-management conference made up of representatives of plant party organizations, and representatives of plant trade union councils;

--a presidium and a series of task-force committees elected by the workers' self-management conference.

3. In the management of associations of state enterprises provisions will be made for the participation of:

--an association board on which seats will be held, with the right to cast tie-breaking votes, by representatives of workers from all of the association's affiliated organizational components; the chairman of the board will be elected by the board itself or appointed to this post by a higher-ranking regulatory agency from a pool of candidates who are not employees of this agency.

The scope of worker participation in management needs to be examined in two stages. First of all, it is necessary to consider the general scope of this participation, and then we should proceed to an examination of the problem of the division of authority among the workers and their respective organs.

The general scope of worker participation in management should be the same for all enterprises, since all workers possess equal rights and duties in conformity with Article 13 of the Constitution. However, in certain types of enterprises it may be possible to draw distinctions between the kinds of powers conferred upon general worker meetings or worker delegate meetings, workers' self-management conferences and their presidiums and committees so as to endow each of these units with the kinds of authority that they will be able to exercise in a satisfactory manner and for the good of their respective enterprises. In an age dominated by automation, computers, electronics and other similar management tools the status of workers in their enterprises is becoming highly diversified, and this is bound to have an impact on the division of authority when it comes to worker participation in management.

Proceeding from these assumptions, we can now go on to discuss the catalogue of problems in the handling of which provisions ought to be made for the direct or indirect participation of the workers. This catalog comprises a list of issues that ought to be handled within the workers' sphere of authority. However, this listing is not meant as an attempt to assign the handling of specific issues to specific worker organs. This should be done by the workers themselves through the adoption of their own statutes and by-laws.

--Right of Petition

Both the workers, as a collective body and as individuals, and their official organs are entitled to submit petitions and proposals to the management staff of state enterprises concerning all matters affecting the business of a plant, enterprise or association.

Petitioners should be entitled to receive a reply within 30 days informing them of management's response to their initiative.

--Advisory Rights

The workers, acting directly or through their designated official organs, have a right and duty to give advisory opinions on matters such as the following: the appointment of enterprise directors, enterprise policymaking, decisions on the sharing of workloads among the organizational units that make up a given enterprise, proposed organizational changes, the procurement of raw materials, the marketing of finished goods, the rendering of services, production technology modifications, the raising of worker skill ratings, the advancement of the drive toward greater production efficiency, the fostering of conditions conducive to the development of new products and services and the promotion of technological progress, the awarding of state prizes and medals, and the rendering of advisory opinions concerning agreements with other branches of industry and other agreements entered into with state and cooperative economic organizations, as well as with national councils and local governmental agencies.

--Decisionmaking

Acting directly or through their elected representatives, the workers should have the final say on, or a voice in, the making of decisions on certain issues. Careful consideration needs to be given as to whether this category of issues might cover such matters as work rules and regulations, making policy changes that conform to enterprise conditions and capabilities, annual and long-term work plans and development objectives, the allocation of internal funds for capital spending purposes, the examination of annual financial statements, the approval of annual fitness reports on the performance of enterprise managers, the examination of reports submitted by management on a regular basis concerning the enterprise's performance and condition; rules and regulations governing work scheduling, boosting of labor discipline, improving the efficiency of technological processes, enhancing the quality of goods and services, the conservation of materials, and the protection and proper use of social property; activities aimed at fostering socialist interpersonal relations; the introduction of new work norms (norms that are technically feasible); and making provisions for greater discipline when entering into and carrying out contracts.

The scope of worker decisionmaking and codecisionmaking authority should embrace both the formulation of guidelines concerning matters related to the enforcement of collective bargaining agreements, work norms and wages, defining the rules that are to govern internal cooperation among various organizational units and the rules governing the internal clearing of accounts between different organizational units, the setting up of model shops, service infrastructures and scientific research departments, and the settlement of disputes between different organizational units and also matters related to cooperation and the payment of debts, the adoption of resolutions concerning threats to the fulfillment of plan tasks and

financial problems, the election of workers' representative bodies, the submitting of inquiries to management concerning the state of the enterprise, the fulfillment of the plan and other tasks, working conditions and the meeting of worker needs for social services and basic necessities, and the review of management replies to these inquiries.

--Control

The workers and the organs elected by them should exercise control [performance review] powers in matters related to the activities of their enterprise and its management personnel, especially so when it comes to insuring proper working conditions and meeting worker needs for social services and basic necessities, the fulfillment of plan tasks, questions of materials and financial management, the protection of social property, the enforcement of existing work and wage norms, the utilization of social, cultural, educational and athletic facilities and other facilities designed to promote the drive for greater production efficiency and the development of new products, the apportionment of work assignments among different organizational units and procedures governing the settlement of accounts among these organizational units, and the implementation by management of resolutions adopted by the workers and their elected organs.

--Participation in Management and Accountability

The organizational rules of public life demand that individuals and groups of individuals that hold public office should be held accountable for their actions. This is a subject that no one is talking about, and the questions that arise in this regard are numerous, e.g., how are we to define the accountability of individuals who become members of collective bodies, what is to be the nature of this accountability, i.e., are the persons held so accountable subject to civil, criminal, administrative or other penalities, should we be afraid that this kind of accountability might cause workers to shy away from participating in management, or what is the status of the manager who is responsible as an individual for the fate of the enterprise?

The Settlement of Disputes Between Workers and Their Organs and Management or Higher-Ranking Regulatory Bodies

Even in situations where workers and the management of a given enterprise are cooperating harmoniously it has to be expected that disputes may arise from time to time. It is therefore necessary to consider the question as to what kind of organ would be best suited to preside over the settlement of these disputes. Naturally, we are talking about an organ which would not violate the maxim "nemo iudex...." [nemo iudex idoneus in sua causa: no man is a proper judge of his own case]. Among the existing state organs the State Economic Arbitration Board would be most suitable for this purpose.

The problem of finding legal means to promote the constitutional principle of worker participation in the management of state enterprises should be opened up to a general public debate. The comments and views presented in this article are intended solely to call attention to certain aspects of this problem. This article was mainly concerned with enumerating the legal ramifications of this problem that must be taken into account in any such public debate.

11813
CSO: 2600

DRAFT PLAN FOR REFORM OF FINANCIAL SYSTEM OUTLINED

Zielona Gora GAZETA LUBUSKA in Polish 27 Aug 80 p 3

[Article by Roman Lencewicz: "The Bank As Partner of the Manufacturer"]

[Text] The Ministry of Finance has drafted a plan of measures for streamlining our economy's financial system. According to this plan, achievement of efficiency is to be forced primarily with the employment of financial instruments: credit, interest, taxes, and standards. Money should comprise a reflection of an unequivocal measure of performance efficiency on the part of enterprises and entire sectors of the economy. Plans call for such a state of affairs to be achieved as a result of adoption of the monetary unit as basic point of reference in planning and in figuring production performance both on a national scale and at the level of each enterprise. This of course means a radical reduction in the number of indicators prescribed by directive, imposed on enterprises, from more than 200 which currently apply in certain subbranches, to only a few. The state list of planning-clearing directives will contain a list of indices which cannot be arbitrarily enlarged. Value or quantity of production (sales), export and import (in a like interpretation), capital spending limit, production quantity on certain product items of key importance to the economy, wage fund share of sales value indicator, deductions to bonus fund, rate of depreciation and taxes -- these are essentially all central control instruments proposed for the present time.

Thus the aim is clearly to focus enterprises toward yielding a profit, and at the same time toward coordinating their activities with the requirements of the market and the entire economy. An income tax is to be introduced, with the aid of which the state budget will take away all undeserved profit, resulting, for example, from incorrect pricing or product mix manipulation. In order to provide manufacturers with incentive to achieve the most profitable performance, it is planned to make all enterprise funds -- bonus, development, technological advance -- dependent on production performance profitability.

Such a solution, which has long been demanded by many of our economists, requires first and foremost implementing cost accounting and standardizing the monetary unit, since at the present time the zloty given out in wages

possesses a different value from that spent on capital investment, not to mention changes in the foreign-exchange zloty. For this same purpose it is planned to eliminate all surcharges and subsidies (this does not apply to agricultural production), which are so numerous at the present time, with sale prices based on prime cost plus standardized profit, and even based on world prices in some subbranches. Maintaining financial regulations in force over a multi-year period is a natural means of providing incentive to managerial personnel and work forces to achieve improvement in production activities, achieving greater production efficiency and effectiveness. Therefore all financial standards and parameters will apply for a five-year period.

The proposals drafted at the Ministry of Finance have the following logical sequence: money (for wages, capital investment, development) will be able to be obtained only by working honestly and conscientiously. Thus the right to growth and development will depend on financial performance. All funds must be generated, but whoever has accumulated funds cannot lose them as a result of arbitrary administrative decisions. The purpose of this is to promote initiative, incentive, and efforts at economical management.

The role of banks will increase immeasurably in a reformed national financial system. These institutions, which at the present time distribute funds in a rather mechanical manner, will in the future become not only the absolute monitor of observance of the law and good management but also an economic partner of each manufacturer. Credit will be extended on a new basis for capital investment and for financing working capital: enterprises doing a good job will be offered a reduced interest rate on credit, average-performance enterprises will pay a higher interest rate, while those enterprises which produce a poor performance over an extended period of time will be refused credit. Such a credit refusal is a vote of no confidence for management. If this rule is adopted, we can expect the following results: an end to "pressure" on capital investment, since the bank will not simply grant loans. In practice it will become very difficult to exceed the payroll fund without additional production, since the bank will be monitoring an enterprise's current financial situation.

Of course what this entire document contains is draft decisions, the substance of which requires additional discussion and debate among experts. The most important elements -- and beyond debate -- are the basic premises: earnings and profits can be based only on socially useful labor, while efficiency must become a measurable, verifiable quantity. Only in this manner can both money and honest labor regain their value.

3024
CSO: 2600

FUEL, POWER SITUATION, OUTLOOK DISCUSSED

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 26-28 Jul 80 p 2

[Article by Radmila Jovanovic: "(Forced) Economizing Should Be Expected"]

[Text] The production and consumption of fuel are at serious variance with each other due to the fact that the plans of development are not being realized. More national consumption is needed on account of limited hard currency and the state of the world market which make impossible the purchase of much needed fuel.

The increasingly unchecked rise in the price of raw materials and oil on the world market has placed energy among the priorities during this medium-term period. The objective was quite clear: as the moving force of further economic development, energy has to lead the way.

In the 5-year period coal production was supposed to increase from 35 million to 55 million tons, electric power from 39.9 billion to between 65 and 70 billion kilowatt-hours, and the refining of oil (domestic and imported) from 12.5 million to 18.5 million tons. Planned coal production should have made possible the faster substitution of mazut as energy-producing fuel and in the refining of oil it should have brought about an increase of white derivatives over black derivatives.

Domestic production of natural gas was to increase from 1.6 billion to 3 billion cubic meters, and total consumption from 1.6 billion to 6 billion cubic meters. In this last year of the medium-term plan it can be stated that the production and the possibilities for importing fuel have never been so far from meeting consumer demands. The conclusion is very simple: if we want to get out of this situation permanently then everyone should do his best this year and in the next several years to increase production and commit himself to more rational consumption. This year, instead of producing at least 51.5 million tons of coal, we shall have 47 million tons at best. Thermoelectric power plants will have enough low caloric lignite, but industry and ordinary consumers will lack brown coal. Stepped-up development of coal mines, especially pit mines, is still only a promise. Although none has any accumulation of funds to invest in his own development, few energy users have pooled their funds to get higher production of coal. Neither banks nor consumer users have fully supported the recommendations of the Federal Executive Council [FEC] for faster development of coal mines.

Although they want to supply themselves in the summer months with coal and thus avoid the rush during the peak period of energy use, industry and consumers cannot do it. Already there is a coal shortage. The FEC has done its part, but others have not; banks and consumers also in this medium-term period have invested in needed and unneeded projects without certainity of a fuel supply.

It is estimated that industry and consumers will be short this year by several million tons of brown coal.

The 'Don't Worry' Attitude

The REIK "Kolubara" is ready to begin construction of a drying plant that would have a capacity of 850,000 tons of lignite, which has the average caloric value of brown coal, and which can therefore be used by industry and the general public as a substitute. Although the plant has been under construction for 2 years now, "Kolubara" is not making any progress with it since they themselves do not have enough money. This collective has all the necessary documentation for two more drying plants and for the production of enough semicoke to replace 30 percent of coke imported by ferrous metallurgy. The blueprints are "on ice", though, since there are no users who can think ahead and supply funds to realize these programs.

Had the banks a year ago understood the situation brown coal mines in Yugoslavia and had they, at the recommendation of the FEC, invested 7 billion [dinars] to develop the mines, this year they would have at least 1 million tons more of brown coal. The way it is now many coal mines work at reduced capacity since they have no funds even to import spare parts.

Many people do not renounce idleness even now when problems are obvious and when they are creating shortages in all sorts of things which directly affect the basic standard [of living]. For instance, railroad trains in these summer days, before the harvest season, still run an average of 4.5 km per hour from loading to unloading; what is more, with their disorganization they have made coal supply more difficult.

The availability of foreign exchange is so limited that it is certain we will be short 7 million tons of mazut, which is the amount consumed last year. There will probably be oil shortages even for the petrochemical industry. The petroleum industry and consumers act as if they were playing economics. In spite of the fact that the price of oil increased 3 times within the last 5 years they still rely mainly on mazut. This year it will be possible to obtain 15 million tons of oil at best, yet the capacity of refineries is 23.5 million tons where more black than white derivatives are still being produced.

One's Own Strength

It is estimated that there will not be mazut for thermoelectric power plants with a total generating capacity of 1,523 megawatts. There will not be enough heating oil for general consumers nor enough diesel fuel. Measures the FEC

took last year to prohibit construction of buildings which use mazut [for heating] and the expected reduction in the heating season for homes and public buildings will ease the situation. This, plus better economizing and more rational consumption, needs the support of all consumers.

Natural gas cannot substitute for the lack of fuels even though domestic production has been ready for some time now and a long-term foreign supply has been secured. Only about 4 billion cubic meters of gas will be consumed this year since construction of the gasline in Serbia proper has barely begun.

For a long time now the Association of the Yugoslav Electric Power Industry has warned that it will not be able to meet even average consumption needs, let alone make up for the decreased supply caused by shortages of coal and heating oil, as well as by inclement weather, if new electric power plants continue to be built so slowly and with so many interruptions.

Only 62.5 percent of the capacity planned for this medium-term period has been constructed so far. Only good weather conditions and an exceptionally good water situation have compensated for construction delays up to now. But reason cannot rely on luck any longer.

At least 61.7 billion kwh will be needed this year, but not more than 59.7 billion kwh will be produced.

It is easy to draw a lesson from this situation. Since there is no hard currency we must make do with what we have, spending rationally and only as much as we have to. Everyone must do his share of work not for the purpose of "getting under the blanket and pushing others out" but in order for all to share equally in the distribution of goods in short supply.

9630
CSO: 2800

NEWSPAPER CIRCULATION, FIRST HALF OF 1979, 1980

Belgrade NASA STAMPA in Serbo-Croatian Jul-Aug 80 p 8

[Text]

Socialist Republic of	Copies Printed 1979	Copies Printed 1980	Ind.	Copies Sold 1979	Copies Sold 1980	Ind.
Bosnia-Hercegovina						
OSLOBODENJE	85,214	95,082	112	72,043	80,630	112
SARAJEVSKE NOVINE	18,435	20,203	110	14,317	16,511	115
Montenegro						
POBJEDA	18,784	21,165	113	16,622	18,784	113
Croatia						
VJESNIK	90,903	97,618	107	72,528	80,136	110
VECERNJI LIST	282,486	293,456	104	250,104	260,662	104
SPORTSKE NOVOSTI	159,655	147,494	92	129,955	115,673	89
SLOBODNA DALMACIJA	67,242	71,765	107	60,613	62,973	104
N. LIST i GLAS ISTRE	64,848	69,899	108	57,779	60,984	106
GLAS SLAVONIJE	14,314	15,776	110	12,127	13,569	112
LA VOCE DEL POPOLO	3,444	4,218	122	2,435	3,144	129
Macedonia						
NOVA MAKEDONIJA	36,587	33,996	93	30,344	27,885	92
VECER	30,943	32,799	106	26,611	27,486	103
Slovenia						
DELO	97,625	103,062	106	92,620	97,154	105
DNEVNIK Ljublijana	57,554	54,751	95	55,115	52,090	95
VECER Maribor	58,696	60,485	103	55,425	57,020	103
Serbia						
BORBA	51,366	60,984	119	38,524	41,042	107
VECERNJE NOVOSTI	366,073	378,233	103	322,145	326,267	101
SPORT	118,019	116,104	98	96,775	85,791	89
POLITIKA	300,358	309,326	103	266,039	271,176	102
EKSPRES	272,477	269,240	99	244,244	233,216	95
PRIVREDNI PREGLED	14,939	16,957	114	14,939	16,957	114
NARODNE NOVINE	--	--	--	--	--	--
Kosovo						
RILINDJA	34,415	37,923	110	30,044	32,235	107
JEDINSTVO	8,879	10,312	116	7,557	8,086	107
Vojvodina						
DNEVNIK	30,383	32,560	107	25,671	26,446	103
MAGYAR SZO	32,271	32,261	100	28,637	27,810	97

CSO: 2800

CROATIAN ECONOMIC CHAMBER ALARMED OVER DETERIORATING SITUATION

Zagreb VJESNIK in Serbo-Croatian 17 Sep 80 pp 1, 14

[Excerpt] The economic policy measures, it is said in the Croatian Economic Chamber, in fact are threatening the effectiveness of the domestic economy.

Something must be done! This is the statement of business people in regard to the latest analysis of economic trends in the past 250 days...Is it a question of a possible crisis of concepts and of actual stabilization solutions, or of a crisis of economic policy or perhaps of outmoded development strategy which is being artifically kept alive with the help of a handful of administrative aids?

What is one to say after the meeting of the executive council of the Croatian Economic Chamber where very skeptical prognoses were heard about the economic trends to the end of this year throughout the country, as well as in this republic, if everything remains as it has been in the whole system of social reproduction? What is one to say, for instance, after the statement made by Milan Rukavina-Sain that this year is marked by a large increase in exports but that the effect of this on the economic and political position of associated work is almost negligible?

What is one to say after the assessment made by the president of the Chamber that the present economic system in the domestic market and the very measures of economic policy are seriously threatening the effectiveness of economic operation, in restricting the possibility and all interest for associating which is the basic postulate of the new economic system? What is one to say about the present situation in regard to the proclaimed unity of the Yugoslav market which in fact is largely dominated by the tested system of transferring one's own failures and problems to others through extortionist prices, speculation regarding supplies, fictitious pooling of hard currency, etc.

As someone said, if 99 percent of the agreements on pooling foreign exchange are nothing more than pure violations of law, doesn't this mean that something is wrong with the regulations? A similar logic could be transferred to the whole area of social reproduction where the main sources of instability also flow from the present method of forming and using capital accumulation, i.e., of financing investments. The administrative solution of economic difficulties has not essentially changed anything this year either.

Payments Deficit, Limit of Growth

Thus it is not especially surprising that priority economic branches are in the worst economic situation, that production is stagnating, for instance, in the large economic centers of Croatia, that prices are eating up all the positive effects of devaluation, that the standard of living is falling, that public and social service expenditures are being taken from the income of the economy, and finally that the self-management economic system, as Izak Druter says, does not have realistic conditions for functioning effectively.

The latest data from the Yugoslav market show that up to the end of August the increase in industrial production was below the plan, that exports were actually 12 percent more and imports 11 percent less, that the payments deficit in foreign trade was about $900 million more than planned for the first 8 months of this year. In Croatia the situation is similar if not even more difficult than in other republics, although exports increased by more than 15 percent, while imports declined by the same amount, the payments deficit was $135 million more than planned for the last 8-month period. Especially stressed in this are the questions of supplying the economy with imported and domestic producer goods, energy, consumer goods, etc.

Larger Area for Maneuver

Business people in the Republic Economic Chamber suggested that the most urgent measure to be taken now is to make it possible in the fourth quarter of the year for 5 percent more import applications for producer goods to be made at the National Bank above that permitted by payments possibilities, because otherwise all applications cannot be processed in this period. This would create a larger area for maneuver, i.e., enable an increase in imports and thus maintain industrial production and employment at the present level. The second demand is that through the end of the year the National Bank accept advance import applications for producer goods to be imported in the first part of next year so that production will not stagnate. Also sought is freer price formation, an analysis of costs everywhere, more flexible measures to protect the domestic market, and a consistent policy on a realistic rate of exchange for the dinar.

It nevertheless appears that economic organizations have been so oppressed by current economic difficulties that planning preparations for their development in the next 5-year period have taken a secondary place, however much it has been stressed that there can be no stabilization over the long term without long-term solutions contained in the new five-year plan for the country.

CSO: 2800

BRIEFS

YUGOSLAV ENTERPRISES IN ANGOLA--A Joint Economic Representation was recently founded in Angola composed of foreign trade and other work organizations from Yugoslavia which are operating in this friendly non-aligned African country. Those attending the founding meeting of the representation were delegates from the following foreign trade organizations: Astra (Zagreb), Brodokomerc (Rijeka), Geneks (Belgrade), Jugoeksport (Belgrade), Progres (Belgrade), as well as representatives from the Dunav-Tisa-Dunav work organization, (Novi Sad), The Belgrade Agricultural Combine, the "Splosna plovba" enterprise for international maritime transport (Piran), Energoprojekt, and other work organizations throughout Yugoslavia which offer technical assistance to Angolan state enterprises. [Text] [Sarajevo OSLOBODJENJE in Serbo-Croatian 7 Sep 80 p 5]

SMALL BUSINESS LOANS--The International Finance Corporation has granted a $32 million loan to a consortium of the eight largest banks of Yugoslavia as a contribution to a program for expanding small business. The International Trade Bank of Frankfurt, Germany, will contribute about $6 million to this credit. [Text] [Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 1 Sep 80 p 9]

KOSOVO AGRICULTURE--This fall Kosovo will plant 105,000 hectares in wheat, or 18,646 more than last year, as well as 5,000 hectares in sugar beets, or three times more than last year, which is expected to adequately meet the needs of the sugar mill in Pec. This year's fruit harvest, estimated at 5,700 carloads, or 144 percent more than last year, will enable successful use of processing capacities in the province. [Excerpt] [Belgrade BORBA in Serbo-Croatian 12 Sep 80 p 4]

BAKERS' STRIKE IN PEC--The court for legal violations of Pec Opstina has fined 19 private bakers in this opstina [10,000 dinars] for refusing to produce bread and thus causing a shortage. They had demanded from the opstina assembly that bread prices be increased beyond those stipulated in the existing decision; this demand was unrealistic and unacceptable. [Text] [Pristina JEDINSTVO in Serbo-Croatian 6 Sep 80 p 3]

ENERGY OUTLOOK--The latest report of the Yugoslav Electric Power Industry points to the high increase of 12.5 percent in electric power consumption in the first half of this year, to the fact that electric power facilities do not have needed reserves, and that only two new small thermoelectric power plants (Kostolac (210 megawatts) and Oslomej (110 megawatts)) went into operation, in this period. It says that certain mines will not be able to provide the amounts of coal needed for maximum production of power. This pertains especially to the Kosovo, Sostanj, Tuzla, and Kakanj mines which have obligations also to other consumers in the country. Thermoelectric power plants operating on liquid fuel and gas account for nearly 12 percent (1,523 megawatts) of total production capacities of the electric power industry. But their utilization is limited and uncertain because of problems in fuel supply, and there are no thermoelectric plants based on coal which could replace them on a more permanent basis. Oil imports and consumer demand have never been in greater disproportion than during this half-year period when 429,000 tons of mazut were imported, in addition to 165,000 tons of diesel fuel, and 172,500 tons of liquid gas, yet demand was not met, since 73 percent of oil derivative and gas producers were not able to satisfy demand. By the end of the year about 47 million tons of coal will be produced, or 12 percent more than last year but less than the 52 million tons planned. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 13-15 Sep 80 p 3]

ENERGY NEEDS--The Association of the Yugoslav Electric Power Industry reports that the disproportion between consumer needs and available capacities increased this year by about 500 megawatts. This will be felt particularly during the winter in Montenegro, Macedonia, Serbia and Slovenia, if consumption increases by the estimated 12 percent and water flow is below that which is needed. Reserves of fuel in electric power plants is not nearly enough to provide maximum uninterrupted operation on cold days. As of the beginning of September there were only 2,868,000 tons of coal in thermoelectric power plants which would not be enough for cold weather conditions. In order for thermoelectric powerplants to meet 48 percent of total electric power needs in the 1980-81 winter season they will have to produce 23 percent more power than last winter, but this means they will need 23 percent more coal than last year. In regard to hydroelectric power plants, they could, under very favorable conditions, meet 44 percent of consumer needs if they increased production 10 percent over last winter. But if we have 3 dry months, then these plants could satisfy only 31 percent of needs. The present decline in water flow and the using of water reserves at these plants is not very encouraging. Also needed in the coming period will be thermoelectric powerplants based on mazut for which preparations should begin now, so that they would be able to meet 9 percent of planned consumption. For the winter season, therefore, about 700,000 tons of mazut should be provided, or about twice that consumed in the first 8 months of this year. At present there are only 159,000 tons of liquid fuel in reserves of thermoelectric powerplants which is not enough for their increased use on a steady basis. It is certain that under unfavorable weather and water conditions it will not be possible to meet needs through imports of electric power from countries

with which we have agreements on this. Imports will be unavoidable, it is only a question of whether it is wiser to buy mazut now or to import electric power in time of need. The present electric power situation is balanced, although water reserves in storage lakes are being gradually spent. Thermoelectric plants based on solid fuel are now operating at full force. [Excerpts] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 23 Sep 80 p 2]

RIJEKA REFINERY BELOW PLAN--This year the oil refinery at Rijeka will process about 1 million tons less of oil than planned; 5.2 million tons of oil was planned but price increases and the oil crisis have necessitated a revision. When primary processing is reduced, secondary capacities are not adequately used, i.e., those capacities which produce the more valuable white derivatives such as paraffin, bitumen, and base oils. Rijeka produces about 92,000 tons of the approximately 250,000 tons of all base oils needs in the country; the remainder is imported. Last year 350,000 tons of bitumen was produced or 46 percent of Yugoslav production. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 23 Sep 80 p 1]

OIL AGREEMENTS--The INA-Naftaplin in Zagreb recently signed two important protocols on cooperation in gas and oil exploration and production. The protocols were signed by representatives of the AGIP Italian firm on exploration in our part and in the Italian part of the Adriatic Sea over a wide area. It includes cooperation on preventing pollution, work safety, and exchange of experiences in oil and gas exploration. Representatives of INA-Naftaplin and Naftagas in Novi Sad reached an agreement with an oil company in Angola on exploration in potential oil-producing areas of this African country comprising 4,000 square km where well-known companies from other countries will also participate. Our oil organizations will account for 10 percent of the value of the exploratory work on one of the blocs entrusted to them, since they are proving themselves in exploring for oil in Gabon (where they are working together with three German companies), in Vietnam where they are working with a German and an Italian firm, and in Iran where three of our drilling installations will soon begin operation. Work in Angola will be done in cooperation with an American and an Italian company. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 29 Aug 80 p 3]

KOSOVO WORKERS ABROAD--There are about 30,000 citizens from Kosovo working temporarily abroad. Most are from Metohija and the Pomoravlje areas in Kosovo. Last year 11,365 returned home. Of this number 973 received jobs in Pec, Prizren, Gnjilane, Urosevac, and other opstinas in Kosovo. [Excerpt] [Belgrade KOMUNIST in Serbo-Croatian 12 Sep 80 p 14]

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END

JPRS 76647

17 October 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2054

Czechoslovakia: Set of Measures

To Improve Management of the Economy

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CZECHOSLOVAKIA: SET OF MEASURES TO IMPROVE MANAGEMENT OF THE ECONOMY

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[Official text of "Set of Measures for Improving the Planned Management System of the National Economy After 1980," as approved by CSSR Government Resolution No 42, 31 January 1980]

[Text] The basic requirements for improving the planned management system of the national economy at the current stage of Czechoslovak economic development have been established by the 15th CPCZ Congress. In part, these requirements stem from the need to develop and reinforce those elements of the system that are making a positive contribution to the efficiency of social production. They also derive from the necessity of introducing new elements in accord with the demands of accelerated scientific and technological developments and with the need to intensify the integrating processes within the Czechoslovak economy and a broader integration within the international division of labor, especially in the form of socialist economic integration, which contributes significantly to improving the efficiency and quality of every kind of work. The 15th Congress also stressed the policy of availing ourselves of the experience of fraternal socialist countries, especially the wealth of experience accumulated by the Soviet Union.

These basic principles were intended to serve as an approach to, and a programmatic basis for, developing the management system of the national economy. Individual measures have been and are being prepared as an inseparable part of [the process of] insuring the success of the economic policy of the 15th Congress.

A number of measures were prepared and implemented during the Sixth Five-Year Plan. For instance, development programs provided the basis for a more comprehensive

approach to handling structural changes; the entire science and technology planning cycle from research to final development was redefined; and the planning of socialist economic integration was intensified. Efficiency and quality criteria were emphasized in the system of plan indicators and were also introduced into the area of enterprise and individual monetary incentives. The gross production index, which at times led to a bias in favor of material-intensive production, ceased to be a criterion of plan fulfillment. The comprehensive restructuring of wholesale prices of 1 January 1977 and the associated adjustment of taxes and levies were basic measures that assured more realistic price-cost relationships in the national economy. Important measures adopted in 1978 concerned improvements in the planned management of material flows, chiefly by improving the system of balances in materials management. The government adopted a set of measures intended to solve critical problems related to management of the fixed asset replacement in the areas of capital investment planning, providing labor for projects under construction, review by state-appointed experts, financing, pricing, etc.

Also, in accordance with the 15th Congress Directive, a comprehensive set of measures was drawn up to facilitate overcoming management problems on a qualitatively new basis appropriate to the conditions leading to developed socialism. To test the elements of the system before introducing them into general practice, we have undertaken a comprehensive experiment in efficiency and quality management incorporating previous results, practical experiences and theories, as well as the results of economic experiments in the USSR. A significant role in improving the management process has been played by suggestions and consultations concerning trends in improving management in other socialist states, especially those measures adopted to improve the economic mechanism in the USSR.

The Main Guidelines for Improving the Planned Management System of the National Economy After 1980 are based on these earlier efforts. The guidelines have been discussed and approved by the Presidium of the CPCZ Central Committee and by CSSR Government Resolution No 167/1979 as the basis for a set of specific measures. In accordance with this CSSR government resolution, the Government Committee on Problems of the Planned Management of the National Economy

organized studies in cooperation with representatives of all regional [intersectoral] and some selected branch organizations. The result of these efforts is the proposed Set of Measures for Improving the Planned Management System of the National Economy After 1980.

These measures constitute a program conceived as a unified whole that will be implemented in stages. Most of the measures will become applicable when the preparations for the Seventh Five-Year Plan begin. The remaining measures have been scheduled for introduction on the basis of their state of readiness and social importance.

As these measures increasingly take effect within the planned management system they are also expected to lead to a systematic increase in the quality of plans (particularly in terms of stabilization and efficiency) and high standards in other aspects of management mechanisms by developing and improving direct management and organization at all levels of management. The measures also derive from the fact that the planned management system, as a set of management tools and procedures in the organizations, must actively and effectively assist in creating all these specific prerequisites and conditions and, especially, in preparing a high-quality plan. With respect to these broader aspects, the development and, most importantly, the increased effectiveness of the management system are contingent upon:

a) Increasing the quality of decisionmaking with respect to particular problems at all levels of management through the use of systematic analysis, the utilization of information concerning domestic and foreign market fluctuations in every way possible, and the application of rational and effective decisionmaking methods;

b) Increasing the quality of management itself, assuring an approach based on initiative and an increased sense of responsibility to the society for carrying out the decisions received, for applying rigorous standards, for instituting a rational division of labor in the management and eliminating bureaucratization;

c) Increasing planning, economic and labor discipline and compliance with legal provisions in all areas and

at all levels of management. In accordance with these aims, it is necessary to tighten up the control system, to require personal accountability for task fulfillment, and to draw conclusions when tasks are not fulfilled.

Measures for improving the planned management of the national economy must, therefore, be understood and applied as a constituent part of improving the entire economic mechanism of the management of a socialist economy.

The effectiveness of management and, consequently, the effectiveness of the changes made in the system of planned management will depend to a decisive degree on subjective factors, especially the quality of work by industrial managers and supervisors. The dynamics of social development will objectively increase the demands made on management. The ability of management to meet these demands and to deal with the challenging task of building socialism thus becomes one of the key criteria for judging their political and professional competence. Therefore, it is becoming more and more important to assure that the quality of professional preparation corresponds to the difficulty of the tasks at a specific stage in the socio-economic development of the nation.

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I. IMPROVING THE QUALITY AND EFFECTIVENESS OF NATIONAL ECONOMIC PLANNING

Key approaches to improving planning at all levels of management will include reinforcing the long-term view in planning through utilizing to a significant extent goal-oriented program planning aimed at achieving the highest [possible] national economic performance, improving plan development and detailing methods, and increasing the effectiveness with which plan fulfillment is controlled and evaluated. The basic aim here remains to provide for balanced and efficient economic growth through a more effective integration of our economy into the international division of labor and, in particular, within the socialist economic integration. Attention must be focused on the key components of the replacement process, i.e., on the planned development and application of science and technology in the national economy, on the replacement of fixed assets [long-term asset replacement], on the replacement, allocation and utilization of labor, and on foreign economic relations.

A. Strengthening the Goal-Oriented Program Approach, Long-Range Views in Planning, and Ties Among Long-Term, Five-Year and Annual Plans

National economic planning must become a continuous process of developing and setting goals and tasks for the development of the national economy, gradually making these more specific, and then providing for and diligently controlling their realization. At every level of management the criterion to be used in making decisions is the extent to which scientific and technological advances contribute to the economy.

It is for this purpose that the State Planning Commission and the central agencies are directed to organize work on the long-term outlook and the five-year and annual plans according to the following principles:

1. Within the framework of the long-term outlook for national economic development, prepare the details for key sections of the long-term comprehensive programs aimed at establishing the main trends in structural and qualitative changes and selected goals in interdisciplinary and intersectoral relations. These goals are to be defined in terms of technical and economic parameters and the principal steps toward their accomplishment spelled out. The programs should encompass the entire cycle from scientific research to its development and application in practice.

In the five-year plans, develop and establish within the context of the long-term comprehensive programs and especially in the form of state goal-oriented programs, the key tasks intended to: significantly increase the export capability and reduce import requirements while maintaining effective foreign economic relations; establish the key research and development tasks and achieve a corresponding [high] technical-economic standard in production processes and the utility of these products; achieve efficient management of material resources; improvements in labor productivity; absolute manpower savings and the efficient utilization rates of capital assets.

State goal-oriented programs should be coordinated with tasks stemming from the long-term goal-oriented programs of the CEMA member countries. These programs must set goals for increasing efficiency which will bring it up to world standards; establish a volume of production and how it is to be used, and the key research and technological development tasks; at the same time, they must establish price limits and allocate the resources needed to implement the programs, as well as define tasks that will provide solutions to social, organizational, transportation and environmental problems. The tasks and the provisions for implementing the programs are to be clarified in appropriate sections, balance statements and indicators of the five-year and annual plans at all levels of management.

individual central agencies and, overall, the gestor [project-coordinating] central agency will be responsible for tasks assigned to them within the framework of approved programs. They will also assure follow-up and coordination of the specific programs.

Designated gestor central agencies will develop the proposed programs in coordination with the producer and consumer central agencies concerned.

Effective with the Seventh Five-Year Plan, key development programs and state rationalization programs are cancelled as planning categories and existing state programs for the conservation of fuel, energy and metals will be rewritten as state goal-oriented programs.

2. The work on the long-term outlook of economic and social development is to be started with the objective of laying the groundwork for a long-term economic-policy orientation and for the preparation of five-year plans. These efforts should be organized so that:

--During 1980, work on the long-term outlook is focused on insuring the foundations essential for preparing, developing and implementing the Seventh Five-Year Plan, as well as the bases for the main objectives for and trends in social development up to the year 2000 and for the fundamental technological and economic conditions necessary for their implementation;

--By 1983, long-term comprehensive programs and long-term development concepts for the major sectors will have been prepared;

--For the pre-1985 stage, efforts are concentrated on the final comprehensive formulation of the draft of the long-term outlook expressed in terms of five-year plans and on bilateral and multilateral coordination with CEMA countries;

--The preparation of the guidelines for the Eighth Five-Year Plan itself, and the implementation of long-term goal-oriented cooperation programs and the continued coordination of our national-economic plans with the CEMA member countries are directly incorporated into the work on the long-term outlook.

Work on the long-term prospects is to be further developed as a permanent activity at all levels of management; the five-year plans should be directly derived from these prospects, which are to be redefined in greater detail in the course of preparing the five-year plans.

The Czechoslovak Academy of Sciences and the Federal Ministry for Investment and Technological Development, in cooperation with the appropriate central agencies are enjoined to prepare, in the course of working on the long-term prospects, a prognosis of future research and technological developments in the CSSR and throughout the world.

The central branch agencies, in cooperation with the State Planning Commission, are enjoined to organize VHJ [economic production units] participation in the preparation of the long-term outlook; they are also to insure the necessary cooperation between the supplier and consumer VHJ's.

3. The five-year plan, subdivided into annual plans, is the basic planning form upon which economic activity is organized at all levels of management of the national economy. The plan establishes the basic objectives, defines the limits of resources necessary for their attainment, and determines the economic conditions, especially the incentive system standards. The use of five-year plan indicators is to encourage all levels of management to take advantage of advances in science and technology, to achieve high standards of social production and the efficient integration of the economy into the international division of labor.

All levels of management are to apply consistently, as a key criterion in plan development, the data for the efficiency indicators, which include the ratio between the fco [all charges paid] and the wholesale prices, prices per kilogram, profitability, standard material consumption, capital asset utilization rates, labor productivity, etc., and to do this while setting tasks for approaching the standard of other technologically and economically developed countries.

4. The choice of indicators is to be concentrated gradually on the decisive technical and economic processes in order to increase the efficiency of the system of binding plan indicators and, at the same time, to emphasize the following indicators:

Technological Development

--Binding technical and economic parameters and deadlines for completion of research and development projects;

--Price constraints on products manufactured on the basis of technological developments;

--Technological development tasks for the state goal-oriented or long-term comprehensive programs.

Production and Marketing

--Share of products of high technical-economic standard (technically advanced, 1st quality), fashionable, and luxury products;

--Deliveries for export according to the determinant sectors;

--Deliveries for domestic trade;

--Deliveries for capital construction according to determinant production sectors;

--Facility consignment and start-up deadlines as well as progress deadlines during their construction;

--Deliveries for construction designated by the state plan as a priority project;

--Deliveries for construction with budgeted costs of over Kcs 2 million;

--Deliveries to meet production requirements (deflated [indicator], i.e., outside the economic production unit);

--The tasks of increasing the comparative [price] indicator (relation of fco [all charges paid] and wholesale price);

--Increase in per-kilogram prices for selected export products (in the economic plans);

--Production (deliveries) of selected goods in physical units, including selected tasks aimed at fulfillment of state goal-oriented programs;

--Production tasks at selected new facilities;

--Production based on completed projects in scientific and technological development;

--Complete-plant export projects;

--Projects in fulfillment of obligations accepted in coordination with and in international agreements with CEMA countries.

Capital Replacement

--Construction designated as priority projects in the state plan;

--List of centralized construction projects having government approval to proceed;

--The most important binding technical-economic parameters for construction;

--Budgetary constraints on expenditures for other initiated construction budgeted at over Kcs 2 million contingent upon compliance with the balance of the budgeted expenses;

--Amount of work and volume of deliveries for other construction budgeted at over Kcs 2 million (for orientation purposes)*;

--Constraints on work and deliveries for construction under Kcs 2 million of budgeted expenditures and machinery and equipment not included in the budget**;

--Technical-economic criteria for arranging investments financed from the development fund;

--Capital asset modernization and rebuilding projects (including projects in selected population centers) and targets for the results they achieve;

--Plant and manufacturing facilities liquidation projects;

--Programs for scrapping machinery fixed assets.

Capital Goods Supplies and Consumption (MTZ)

--Balances and constraints on critical raw materials, materials, products, fuels and energy;

--Key technical-economic indicators (consumption and supply standards);

--Import constraints (by volume as well as on selected items).

Labor and Wages

--Increase in labor productivity (adjusted value added);

--Labor force constraints of which, for selected capital construction projects and increased shift-work, state goal-oriented programs and selected population centers will impose

--Limit on [number of] technical-managerial employees;

--Binding constraints on wages payable.

Financial Plan

--Return on production assets or, in substantiated and verified cases, return on production factors;

--Length of inventory turnover;

--Revolving fund capital tied up in inventories;

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* ** The sum of these two categories forms the so-called fixed-limit investments as defined in paragraph E2.

--Rules for fund formation (contributions from profits and depreciation to the development fund, contributions from profits to contingency fund, and contributions to the technical development fund);

--Levies on depreciation;

--Purpose of the levies;

—Constraints and rates for grants and subsidies;

--Share of total costs per Kcs 1.00 of production;

--Share of credits for investment.

The State Planning Commission is enjoined to develop a set of binding indicators (projects) for the Seventh Five-Year Plan in accordance with the above guidelines.

5. For the preparation of annual plans, the five-year plan is to establish a relationship between key projects and the incentive system rules. In cases where the VHJ's (enterprises) adopt a higher goal for their annual plan than established for the given year by the five-year plan:

a) Their planned basic component of wages payable will be increased in direct proportion to their adjusted value added, and the incentive wage component in proportion to return on production assets, production factors, or export efficiency (in distinctly export-oriented VHJ), and their contribution from profits to the development fund is determined by profits. This mandatory relation should thus make possible an increase in the level of average wages when higher goals for increasing labor productivity are accepted; in cases of nonfulfillment of the five-year plan tasks, linear reductions in pay are to be imposed;

b) Preferential treatment is to be authorized for the formation of the export incentive fund depending upon: the development of comparative [price] indicators (fco-VC [all charges paid-wholesale prices]) while meeting export tasks at wholesale prices; in case of failure to fulfill five-year plan objectives the fund formation is to be lowered. At the same time, incentives to earn foreign currency are to be implemented.

The State Planning Commission, the Federal Ministry of Finance and the Federal Ministry of Labor and Social Welfare are enjoined to develop rules for preferential treatment according to paragraph b) above.

6. The work on the five-year plan is to be organized as an effective system of verification, progressive redefinition, and itemization of the plan proposal at the individual levels of management; it is to insure a balanced proportion of the planned projects and a definition of linkages between the branch and sectoral aspects of the development to insure a

rational regional structure of the national economy. This work is to be based on the significant contribution of the national committees in planning by their sectors.

Accordingly, the central agencies are enjoined to involve the VHJ in the development of the five-year plan, especially in the sense that the VHJ's are to elaborate and submit substantiated data for the development of progressive plans. The central branch agencies are to insure that, under their coordination, the VHJ develop and implement systematically the technical-economic concepts of their development (sectoral development), including programs for modernizing and concentrating the industrial base and increasing the shift-work ratio. These concepts, together with the established directives, are to serve as the starting point for the VHJ in preparing their five-year plan proposal and will enable them to be in a more effective compliance with the approved five-year plan.

The central branch agencies and the VHJ are enjoined to develop and insure, in their economic plans and in their breakdown for subordinated organizations, compliance with constraints and economic conditions established by the state five-year plan, including its breakdown for individual years in the five-year plan. Economic plan and plan breakdown indicators are to be differentiated, both in substance and in methodology, according to the specific conditions and projects of the individual branches, VHJ, and enterprises. The success of branch, VHJ, and enterprise economic plans is to be insured through appropriate technical and organizational measures, including measures to be taken in management organization.

7. The fundamental objective of the annual plan is to provide for and organize the fulfillment of the critical tasks and goals of the five-year plan in a way that corresponds to the course and results of its implementation, even in situations where foreign and natural conditions in particular are significantly different from those foreseen by the five-year plan. In the event that these differences prove so extensive as to significantly affect the remaining years of the five-year plan, the national five-year economic plan will be adjusted. The task of the annual plan is also to respond to the current needs of the society and to take advantage of all possibilities for accelerating economic development, especially taking advantage of unforeseen scientific and technical discoveries and, from this perspective, to formulate the five-year plan objectives more precisely.

In order to maintain an active controlling role of the VHJ five-year plan and the economic conditions resulting from it in the process of implementing the plan, while creating conditions permitting the annual plans to fulfill their role even when there are deviations in the VHJ annual plans from the five-year plan without having to change the latter, the central agencies will allow the VHJ [economic production units] some flexibility in meeting selected five-year plan objectives and under given economic conditions. Only if it becomes necessary to limit this

flexibility in some VHJ through intervention by the central agency will the latter, together with the said VHJ, invoke the full five-year plan for the remaining years in all its binding relations and connections impacting on the current status of its implementation. Adjustments within the limits of flexibility are made by the central authorities without any changes in the current five-year plan and the economic conditions it established. Adjustments within the limits of flexibility may not affect in any way the linkages within the annual plan. These tolerances are to be used primarily for indicators delimiting the critical conditions for the VHJ's (basic raw materials, investment capital imports, numbers of employees, and standards establishing the basic economic conditions). Central branch agencies establish these flexibility limits differentially upon consultation with the appropriate planning commission, Ministry of Finance, and Ministry of Labor and Social Services.

The state plan is to establish these tolerances in similar cases, or only to set up standards that determine the key economic conditions for the branches.

The five-year plan is the basis for the preparation of the annual plans at all levels of management. Consequently, the current concept of formulating the annual plan is dispensed with the provision that the government will gear the annual plan preparations toward providing solutions to certain problems and determine the ways and means to achieve it; the central branch agencies will then break down these directives into specific instructions for the VHJ concerned.

These regulations will be the determining factor in the plan preparation by the VHJ and for organizing the participation of workers in the plan development in the form of a counter plan.

The attention of the workers in the counter-planning is to be directed especially at exceeding the qualitative five-year plan objectives while remaining within the limits of allocated resources. Increasing qualitative goals is to be consistently subordinated to the requirements and potentials of the national economy. In cases where counter plans require a higher consumption of raw materials, goods in process and [final] products, the requesting organizations and their superiors are to handle meeting these increased requirements with their suppliers during the negotiations of supplier-consumer relations in the process of plan preparation. The supplier, however, may not reduce the material deliveries to his other customers.

Central agencies and VHJ's are enjoined to create conditions that will assure the maximum contribution from counter-planning according to social needs and by means of counter-planning to enlist and involve in the process of annual plan preparation, in particular, socialist work brigades, expeditor teams, exceptional workers, inventors and innovators

and induce them to uncover and exploit the hidden potential for intensive growth in production, increased product quality, and for meeting the growing needs of the society.

The medium of monetary incentives in the counter-planning process will be above all a system of ties between its important objectives and the tools of the incentive system. The adoption of more demanding tasks in the annual plans than those established by the five-year plan is to be taken into account in any evaluation.

At all levels of management, the system of annual plan projects is to be derived from the system of five-year plan indicators and adjusted to correspond to the basic function of the annual plan--to insure and to implement the projects and objectives of the five-year plan in the specific conditions of the given branch, VHJ, or enterprise. From this point of view, the system of the annual plan indicators will basically contain the five-year plan indicators (without excessively repeating the projects established in adequate detail by the five-year plan and in accord with the development requirements in the planning year), it will supplement it [the five-year plan] by providing for additional tasks or giving concrete expression to the five-year plan and elaborate on it while remaining within the given constraints.

To insure these stated objectives, the State Planning Commission is enjoined to:

--Establish specific procedures for the development of annual plans, especially with a view to the possible necessity of more extensive interventions in the economy during the progress of the five-year plan implementation;

--Develop jointly with the Central Council of Trade Unions guidelines for the implementation of counter-planning in accordance with the stated principles.

The State Planning Commission and the central agencies are enjoined to apply the system of indicators of the plan projects in the annual plans in accordance with the above-mentioned principles.

8. Changes in projects, constraints, and economic conditions established by the plan may only be approved by the agency of the economic management which prepared them in the plan break-down. Shifts in tasks (reductions) and "softening" of conditions for badly managed organizations is not to be allowed. Changes in the plan are to be limited to making improvements in efficiency and preventing imbalances.

B. Insuring Consistent Plan Balances at all Management Levels

A consistent plan balance at all levels of management is to be insured primarily by a more efficient resource utilization. From this point of view, the data system of economic efficiency of production is to be continually developed. The balance of the plan is to be verified and secured through full justification and data on resource formation and consumption and by insuring that the factors of planned development are met, i.e., insuring meeting objectives and planned economic results of science and technology.

1. A complete balance between resources and requirements is to be insured by a comprehensive system of mutually interrelated proportionality expressed in terms of value (structural and marketing) and by a system of material resources and allocations. These material balances are to be developed as a means of verifying and insuring the structure of production and its balance with consumption and its structure.

Overall sales balances, expressed in monetary terms, are to determine not only the sales to meet final national economic needs, but also to meet production requirements outside the originating VHJ. This is to delimit and insure the overall production and marketing goals to meet the needs of the economy's national industrial distribution system.

A balanced relation of production to capital investment and exports is to be gradually developed and broken down into categories corresponding to the key production sectors.

Depending on the extent of state plan stabilization (in raw materials, goods in process, and final products which are of key importance in maintaining national economic balances), the production stabilization is to be commensurably expanded to other products at the central branch agency and VHJ levels; at the same time, a stabilization program in selected turn-key plant projects and the requisite component subdeliveries is to be established.

The role of [national] distribution system is to be expanded in such a way as to become an efficient tool in the development of products being assessed; an instrument in the prospective development of production in accordance with the growing consumption and its structure; an instrument for the management of structural changes, integration into the international division of labor, internal specialization and production cooperation; and an instrument in the formation of an industrial base through the implementation of an investment policy.

Agencies and organizations called upon to maintain balances in specific raw and processed materials, products, and energy are responsible for the overall balance of the plan's requirements in terms of resources

expressed in physical units; these agencies and organizations or the consumer agencies and organizations, are responsible for seeing to it that these established balances are reflected in other parts of the plan.

The appropriate agencies of industrial management are responsible for satisfying the needs of the national economy and of the population with an appropriate mix of goods in the required time and locations and in conformity with the material balances.

The State Planning Commission is enjoined to adopt uniform and binding procedures for stabilization at the level of central branch agencies and VHJ general management.

2. In cases where it is useful to concentrate the coordinating activity of the production sectors, or its elements, of several VHJ or branches at one location, the use of gesce [centrally coordinated management] is urged.

Import-marketing coordination management [gesce] is to be significantly expanded with the objective of effecting a more efficient expenditure of foreign currency and streamlining of marketing procedures; these [gesce] are to be organized especially in cases of regularly imported items for large numbers of domestic consumers including spare parts for imported engineering products.

In order that full advantage may be gained from the import-marketing gesce, the State Bank of Czechoslovakia, in conjunction with the State Planning Commission and the Federal Ministry of Foreign Trade, is enjoined to resolve foreign currency regulations in a way corresponding to characteristics (classification) of products which are subject to import-marketing gesce.

3. The system of negotiations and settlements in supplier-consumer relations during the planning process is to be strengthened.

Deliveries for scientific and technical development must be identified and secured by contract to cover periods of the basic stages in the science-technology--production-utilization cycle; deliveries for capital investments and export of turn-key plants for the entire period of such construction; and deliveries for the manufacture of products with a long production run for the entire period of the production phase. At the level of the annual plan, these supplier-consumer relations are only to be clarified.

The negotiation stage in supplier-consumer relations is to be expanded in the sectors concerned with export of complete plants, the subcontracting for machinery and equipment and other individual [capital goods] items and contractual responsibilities for deliveries needed for the final assembly of exported turn-key plants are to be resolved.

Disagreements in negotiating the supplier-consumer relations are to be completely cleared up at the appropriate management levels and within established deadlines. The disagreements are to be resolved after a thorough examination of both the resource and distribution sides, including explanations of individual requirements and a guaranteed implementation of the plan priority projects. The principle is to be gradually applied that supplier-consumer relations, crucial to the realization of the agency's or organizations' plans, must be agreed to at the stage of concluding and breaking down the plans.

The State Planning Commission and the CSSR State Arbiter are enjoined to develop, according to the stated principles, the provisions for establishing supplier-consumer relations during the planning process, including the five-year plan.

4. Those responsible for important production programs, state goal-oriented programs, implementation of key scientific-technical developments, and the construction ministries responsible for comprehensive residential construction programs are enjoined to formulate, together with proposals of measures as part of the plan recommendations and analysis of comprehensive safeguards to assure sufficient materials for their respective productions, taking into account quantities, product mix and delivery deadlines as well as the technological standards of the produced subassemblies.

The central branch agencies, VHJ and enterprises are enjoined to submit, within the framework of their five-year plan proposals, proposals for a timely prevention of bottlenecks in providing for their production needs together with the estimates of their funding requirements and of the overall effectiveness of the proposed measures.

The State Planning Commission is enjoined to specify and delimit these obligations within the unified methodological instructions for developing the appropriate plans.

5. All economic management agencies are enjoined to preplan readily available marketing reserves for the consolidation of the supplier-consumer relations even the cost of sales inventories. When appropriate, the inventories are to be centralized and used in operations to assure steady flow of supplies for development, production and capital construction.

Economic management agencies are enjoined to screen regularly any unused inventories and inform selected organizations which routinely sell those products to a wider range of customers about them. They are also to work on integrating the CSSR into the international exchange among the CEMA member countries. The State Planning Commission is assigned the responsibility for developing binding procedures for this purpose.

Central branch agencies are enjoined to secure and implement, within the framework of programs for improving the organization of management, increasing the efficiency of marketing and supply management (including intra-enterprise systems) and centralizing marketing and supply activities at the VHJ or central agencies as useful. In this sense they are to attain:

--Delivery flexibility, reliability, and readiness of the marketing and supply organizations to arrange for necessary inventories of the entire product mix they need for the purpose of reducing the order and delivery times and provide for a regular satisfaction of the customer needs. For this purpose they are to secure deliveries from the producers based on the timely negotiation of supplier-consumer relations and the conclusion of commercial contracts;

--Stabilizing the movement of goods and their unalterable destination. At the same time, they are to set a new minimum amount of purchases from production and the conditions for purchases from marketing organizations. They are also to insure that for the product mix delivered by the marketing organizations commercial-technical, advisory, and maintenance services are provided, as well as expansion of full service product mix deliveries according to the type of the selected circle of customers (so-called professional supplies).

6. A more consistent structuring of supplier-consumer relations in the process of plan formulation and insuring of the planned ratios of the objectives, and of securing material resources for their implementation as well as improving the efficiency of the contracting system, is needed.

The obligatory signing of long-term commercial contracts is to be expanded and, particularly, preliminary agreements concluded, at the level of economic management agencies on the basis of long-term planning schedules covering the entire five-year plan or the duration of the planned project, these are to become a binding basis for setting objectives for the preparation of the implementation plan, for the break-down of the annual plans, balance statements and assignment plans.

There is to be an expansion of mandatory commercial contracts on the basis of planning schedules which will contain at least the approximate scope and completion time and bring together the supplier and consumer organizations, especially on the basis of assessments and distribution plan schedules approved at the level of the central agencies and VHJ general directorates. In cases where the obligation to conclude a commercial agreement is established by law, it is to be extended to the deliveries and subdeliveries for securing the projects specifically established by the federal government for long-term contractual obligations and to deliveries of spare parts for the delivered products to the extent necessary to cover essential needs.

The fulfillment of the implementation plan requirements by means of commercial contracts is to be secured through effective incentives for the supplier production organizations in such a way that the planned scope of deliveries is covered by the commercial contracts concluded shortly after the expiration of the order and before the quarter the deliveries are due; cases and conditions under which the higher-level agencies will be empowered to authorize an exception are to be covered by legal provisions (for example, indispensable reserves, reasonable production for storage, cases of break-downs).

The CSSR State Arbiter, in cooperation with appropriate central agencies, is enjoined to develop appropriate directives according to these principles. At the same time, the effectiveness of the financial penalties for violations of contractual relations is to be increased specifically in that the penalties which have not been invoiced and paid on time will have to be paid into the federal treasury not only by the organization which did not assess and demand the payment of the penalty but by the organization which failed to fulfill the contract and was to have paid it as well. The effectiveness of the economic penalties is to be reexamined and they are to be used on the basis of a decision of the agency of the economic arbiter against the most serious antisocial behavior of organizations and agencies of economic management, for example, in cases of failure to fulfill obligations established for negotiating supplier-consumer relations and dispute mediation, deliberate setting of excessive requirements in the planning process, violations of legal obligations in changing production programs, etc.

Central branch agencies are enjoined to inspect for timely and consistent making of agreements and fulfillment of commercial contracts and draw appropriate conclusions for any violations.

Central branch agencies are enjoined to examine and, effective in 1981, shorten the terms of delivery so that they provide for only the time actually needed for the preparation, production, and delivery of the product.

The State Planning Commission and the CSSR State Arbiter are enjoined to develop the question of gradual transition to evaluating the activity of economic production units and enterprises on the basis of agreements arranged and compliance with the terms of contracts.

7. A system of standards serving to raise the quality of plan development, specifications, and monitoring of its implementation in terms of quality is to be gradually built up and systematically implemented.

These standards must express and insure the contributions of technological developments to each economic task, the experiences of inventors and innovators and socialist work brigades. A system of aggregate consumption standards is to be formulated for the use of higher management levels.

Activity directed at intensifying the influence of technical standardization of product quality and consolidation of production, especially in terms of conserving raw materials, parts and energy, must, above all, be focused on key sectors of the national economy.

As far as uniformity and accuracy of measuring and measuring devices used in metrology are concerned, the emphasis should be shifted to the production sphere, particularly in key industrial sectors.

The Federal Ministry for Investment and Technological Development, the State Planning Commission, and the Bureau of Standards and Measurements, as well as other central agencies, are enjoined to develop, in their respective areas of activity, long-term programs for developing a standards base, encouraging its consistent use and develop conditions for its use in the planning process; the programs are to insure that the work is oriented primarily toward standards in consumption of raw and processed materials, fuels and energy, inventory standards, standards of utilization of production facilities, state technical standards and development of a wider application of the system of technical-economic indicators for the planning and implementation of capital investment.

Explicit standards (in their aggregate) are to be established as plan objectives and responsible employees are to be encouraged, through monetary incentives, to implement them or to have punitive measures imposed for their failure to meet them.

8. The State Planning Commission and the central agencies are enjoined to develop, in drafting the plans for national economic development and economic plans for individual sectors, adequate material and financial resources to assure a smooth and balanced economic development in accordance with the basic objectives and tasks of the five-year plan. Unused capacity is to be exploited for a flexible adjustment of annual plans to routine (but not unusual) deviations from the five-year plan and for routine adjustments in external conditions; to support the acceleration of the five-year plan objectives and the implementation of new and unforeseen scientific and technical developments; to support more rapid development of the more progressive VHJ and production programs; and to take advantage of additional export and import possibilities.

The State Planning Commission is enjoined to develop, relative to the unresolved specific problems of development after 1980, the systemic and methodological aspect of the creation and utilization of our potential strengths with the necessary differentiation based on the conditions and needs of the individual levels of management.

9. The Federal Price Office is enjoined, in cooperation with the State Planning Commission, the Federal Ministry of Finance and other pertinent agencies, to further strengthen the concept of centrally planned price developments and conscientiously update the price system as one of the

prerequisites for economically correct decisionmaking in the process of planning and insuring the balance between the material and valuation processes. The price development plan is to be linked to the development concept of the Seventh Five-Year Plan and state goal-oriented programs.

Prices are to be used more effectively to support the tasks and objectives of the plan (the price incentive and motivation through structural changes in production and consumption, in innovation processes and in efficient alterations of product mix, product quality, foreign trade exchange effectiveness, etc.); to support economically justified profitability by taking advantage of operational changes in pricing and in setting prices for new products.

The State Planning Commission, the Federal Ministry of Finance, and the Federal Ministry for Investment and Technological Development are enjoined to improve the methods of projecting the price changes into the plans, construction budgets, and their implementation; at the same time:

--Based on the development of a system for utilizing financial instruments to cover the price differences resulting from price changes implemented in stages in the years 1981-1982, evaluate the effectiveness of using this system in future years;

--To the extent necessary, proceed in such a way that the adjustments in wholesale prices of fuels, energy, raw materials, materials, transportation, and other products and services contribute to exerting a more effective economic pressure on the level of conservation, production efficiency and consumption in that the consumer will be compensated for the increase in prices of these products and services from their profitability of production, and that, to a certain extent, it will represent a supplementary objective to the planned reduction in costs; for the purpose of reinforcing the effectiveness of prices, the process of the plan development of wholesale prices is to be consistently tied with the other parts of the plan at all stages of its development and at all levels of management.

The State Planning Commission, the Federal Ministry of Finance, the Federal Price Office, the Federal Statistical Office, and the central branch agencies are enjoined to evaluate the usefulness and feasibility of implementing in the VHJ five-year plan a classification of costs according to production sectors for the purpose of expanding the planning of costs and, especially, developing the basis for planning the price development.

The Federal Price Office, in cooperation with other competent central agencies, is enjoined to intensify the development of a long-term price outlook and budgetary projected prices in estimating the prospective

import purchase prices, evaluation of other production factors (production assets and labor), costs, etc.; this data is to be used especially when studying the levels of efficiency of work on a long-term outlook, in establishing plan objectives, parameters of the state goal-oriented programs, outputs of the technological development plans, production from newly installed capacities and their price constraints in the area of monetary incentives.

The Federal Statistical Office, together with the Federal Price Office, the Federal Ministry of Finance and the State Planning Commission are enjoined to develop a statistical and/or accounting system for following the fulfillment of the plan of price developments not projected by the national economic plans.

10. It will be necessary to construct a computerized system of planning estimates (ASPV) in order to enable, in addition to more consistent balancing and greater interdependency within the plan (especially at the central levels), an introduction to alternative planning; the ASPV is also to be tied in with the development of computerization of planning estimates in the USSR and other CEMA countries.

The State Planning Commission is enjoined to insure a methodical direction in the respective sections of the computerized planning management systems at the level of ministries and VHJ and the coordination of related information in the planning process among the State Planning Commission, central agencies, and industrial economic sector; it is to develop binding time schedules for the implementation of the ASPV.

C. Improving Quality in the Breakdown of State and Economic Plans, Quality Controls and Evaluation of the Plan Fulfillment

1. The quality of the plan detailing from the central agencies to the VHJ and from VHJ to individual plants and enterprises is to be improved, especially as to its consistently comprehensive nature, balance and coordination among organizations for which the plan is meant. The plan is to be detailed on the basis of an analysis of the development process factors of individual indicators and final results based on the standards and technical-economic indicators and in terms of such indicators as most precisely express the organization's tasks in relation to the national economy and its resulting contributions to the society. In the breakdown of the five-year plan, an effort should be made to establish long-term plan objectives and economic conditions for socialist organizations within the VHJ with the objective of detailing the plan for the entire 5 years taking into account the circumstances and objectives of individual organizations.

The introduction of the plan into internal enterprise subdivisions is to assure an efficient transformation of plan objectives into specifics which the respective subdivisions and collectives can use to assure the

development and mobilization of material resources and unused capacity to increase production and efficiency, coordination among intra-enterprise subdivisions and a more consistent, timely preparation of production and the corresponding orientation of labor initiative.

2. Qualitative and quantitative indicators, expressing the relation of the organizations to society, are to become the basic criteria for plan control, evaluation and incentives.

Control and evaluation of plan fulfillment should be based primarily on the fulfillment of the five-year plan from its beginning while the control and evaluation of the fulfillment of the annual plans are also maintained; monetary incentives for plan fulfillment are to be oriented in the same way.

Top priority in the controls and evaluation of plan fulfillment is to be assigned to a balanced fulfillment of objectives according to the planned directions of social utility, i.e., toward meeting the marketing objectives within the established structure while maintaining the planned efficiency, product quality, exportability and the future development targets of the given organizations, including the development of the basis for this development.

Crises management is to be eliminated at all levels of leadership and systematic and sufficiently frequent evaluations and controls including provisions for corrective adjustments and the consistent evaluation of how these are fulfilled, are to be implemented. Results of the plan fulfillment evaluations and controls and the implementation of the measures adopted are to be consistently taken into account in using the system of wage incentives; for the managers affected, the merit system is to be specifically and individually applied.

The analysis of economic results of the organizations are to be in [strict] accordance with the stated principles.

Within the framework of management organization, an effective division of control activities along the management axis is to be defined. Here the principle that the higher level (unit) of management controls primarily the fulfillment of the objectives it has established, the efficiency of the methods used to achieve it, and compliance with the measures it has prescribed for its subordinates, is to be strictly followed. Analytical activity and controls are to be tied to the evaluation of how the earlier accepted measures were implemented, and their nonfulfillment is to result in appropriate consequences; measures involving no substantive changes cannot be accepted.

A systematic verification of the effectiveness of the instruments of planned management, in their mutual relations and with respect to their effect on the fulfillment of the set objectives should be tied to the controls and evaluation of the plan fulfillment.

The State Planning Commission is enjoined to prepare:

--Together with the Federal Ministry of Finance, the Federal Ministry of Labor and Social Affairs, the Federal Ministry for Investment and Technological Development, the State Bank of Czechoslovakia, and the Federal Statistical Office an outline of rules for developing the plan at the level of central branch agencies for the VHJ and socialist organizations and for making changes within the VHJ;

--Together with the Federal Ministry of Finance, the Federal Ministry of Labor and Social Affairs, the Federal Ministry for Investment and Technological Development, the State Bank of Czechoslovakia, the Federal Statistical Office, and the Czechoslovak People's Control Committee an outline of rules for implementing the controls and evaluation of the plan fulfillment; all existing fragmentation in implementing these controls is to be eliminated.

Central branch agencies are enjoined to develop, on the basis of the above-stated rule outlines and after discussions with the State Planning Commission, issue directives on the detailed breakdown of plans and the implementation of controls of plan fulfillment in their sectors, for introduction of the plans into the intra-enterprise subdivisions and for making changes to the plan within the VHJ.

D. Increasing the Effectiveness of Research and Development Planning and Its Application in the National Economy

1. The five-year plan of a VHJ [economic production unit] should be conceived as a comprehensive plan, based on plans for development, increases in product quality, the introduction of new products and technologies, including their basic parameters, innovations in the existing production structure, the phasing out of obsolete products in connection with the standards of their technical-economic useful life, introduction of new production capacities, reducing the material-intensive nature [of products], etc. Its tasks are to be carefully interrelated with the supporting aspects of the plan and the results of technological developments integrated into the planned material and value indicators.

2. A system of coordinating technical development plans is to be included in the plans at all [organizational] levels; in addition to the basic utility parameters, the contributions of technological developments by both, producers and consumers, are to be expressed more consistently and are to be reflected in the indicators in all the related parts of the plan; attention must also be focused on conservation of fuel, energy, raw and processed materials, on relative and absolute savings in labor, increased labor productivity, a rise in the volume of production, increased profits, an increase in the volume of export and its effectiveness, the ability to compete on the world market product marketability, service and spare part availability, an improvement in

the relationship to foreign pricing, reduction in the volume of imports, license contributions, etc.

For planning and following up on the overall results of technological development and for evaluating this development in terms of its results, optimum conditions are to be created in record-keeping and accounting.

3. Suggested price and cost limits for new technology should be applied to all technical development objectives and the employees involved given a monetary incentive for remaining within these limits.

Any possibly unfavorable consequences resulting from the economically efficient implementation of the results of research of development are to be taken into consideration at as early a stage as the VHJ and enterprise level plans. In case these consequences could not be reflected in the plan, changes are to be made in it or they are to be taken into account during the control and evaluation of plan fulfillment.

4. The presumed key, final user, organizations are to be effectively included in the negotiations on the supplier-consumer relations affecting technological developments. Contracted and subcontracted deliveries for research and development and for the implementation of the results in production are to be given consistent priority.

5. In the course of plan fulfillment, necessary operational interventions to accelerate the expansion of the production of new, technologically advanced produces are to be made. Available facilities in enterprises and VHJ and other sectors are to be employed for these purposes to assure the needed shifts in and production-operational corrections to the plan.

Controls in the area of technological developments are to be prepared and implemented as a complete control system executed through the management chain and aimed at the research--development--production--utilization cycle; the existing control forms and instruments, such as the use of technical analysts, days of inspection, approving and evaluating activity, and systems of records and analysis conducted at or kept for different periods are also to continue in use as appropriate; the correlation of all these tools is to be assured and their comprehensive implementation effected.

The State Planning Commission, the Federal Ministry for Investment and Technological Development and the Federal Statistical Office are enjoined to amend or issue appropriate directions implementing the stated principles.

The Federal Ministry for Investment and Technological Development, the Office of Standards and Measurements, and central branch agencies are enjoined to complete the quality control and management system in enterprises, VHJ, and ministries, to enforce consistently personal

responsibility for maintaining and controlling product quality, to enforce expert federal supervision, and to insure the development of testing stations according to the needs of the national economy.

E. Increasing Effectiveness of Planned Long-Term Asset Replacement

1. The results of the technological developments and planned structural changes are to be uniformly assured through the long-term asset replacement plan; at the same time, the comprehensive investment requirements of the programs including related investments in other sectors are to be verified, evaluated and secured.

2. Procedures to classify investments are to be developed, basically, in two categories:

--The category of priority centralized construction, financed as part of capital formation;

--The category of fixed-limit investments including other construction of over Kcs 2 million in budget costs, construction of up to Kcs 2 million in budget costs, and machinery and equipment not included in the construction budget but financed from the development fund.

For the "other construction projects budgeted at over Kcs 2 million" the amount of unfinished construction is to be regulated by placing limits on construction starts for such projects with a conditional limit on the remainder of the budget costs.

The volume of work and deliveries, basically established in the state plan for other construction over Kcs 2 million of budget costs, and a binding limit on the volume of work and deliveries for construction under Kcs 2 million of budgeted costs and machinery and equipment not included in the budget should be broken down for the VHJ in the form of standards for the formation of the development fund; central branch organizations are obligated to insure that the limits of the volume set for them in the break-down of capital are not exceeded. At the same time the established standards set up technical-economic criteria for these investments and define the cases when these investments may be implemented only with their consent (for example, projects requiring an increase in the labor force, machinery imports, deliveries of centrally controlled products, projects connected with the state goal-oriented programs and with socialist economic integration).

3. Construction related to state goal-oriented programs requiring expenditures in excess of Kcs 10 million is to be evaluated and secured at the state plan level. Other construction and machinery and equipment not included in the construction budget are to be secured as expedient and on a priority basis for programs managed by a central agency gesce [project coordination management] within the framework of objectives and limitations established by the state plan.

Program capacity requirements are to be met primarily by increased utilization of existing facilities including (delimitations of production facilities), modernization and reconstruction.

Construction projects representing an implementation of state objectives in technological development with capital expenditures for machinery and equipment which are higher than Kcs 20 million are always to be secured in the form of centralized construction with the elimination of any possibility of shifting the capital to some other project.

An orientation toward progressive modernization and rapid return on investments is to be enforced; such investments should be included in the plan on a priority basis and given commercial advantages.

4. Central branch organizations, the State Planning Commission, the Federal Ministry for Investment and Technological Development, the Federal Ministry of Finance, the Czechoslovak State Bank and the Federal Ministry of Labor and Social Affairs are enjoined to raise considerably the criteria for the preparation and inclusion of construction projects in the plan and the beginning work on them; and priority is to be given to the following:

--The implementation of a technological development plan (research and development tasks) approved by the appropriate level of management in connection with coordination plans that, in their sum, assure the innovative development of a given branch or sector;

--The use of licenses either already purchased or approved for purchase;

--The modernization and reconstruction of existing facilities, especially those providing new production technology;

--The conservation of labor, fuel, energy and metals, a reduction of transportation requirements, costs, and achievement of production price (or wholesale price) limits at new production facilities such as to assure the desired up-dating of the price system, bringing it closer to the price levels in the demanding foreign markets;

--The utilization of existing, adaptable operations as two full-shift operations;

--An improvement in the balance of payments, especially through increased efficiency of production and, thereby, of foreign currency operations;

--The fairly high, or at least average, efficiency of long-term assets achieved in a given sector;

--The demonstrated availability of manpower for future operations without reducing the use of existing capacities by releasing the labor for such operations;

--Assurance of a gradual reduction in unused (vacant) work positions even when delimiting the volume of machinery and equipment not included in the construction budgets;

--Evidence that an objective cannot be reached in any other way than by capital investment.

Work positions and work opportunities statement is to be included in this evidence.

Further, it is to be insured that the issuance of investment intentions, approval of the background data, and selection of construction projects for the plan include alternative choices developed on the basis of sets of technical-economic indicators or successive comparisons. Construction projects where standard costs negatively effect the parameters established by the set of technical-economic indicators or costs of comparable projects (including construction in technically developed countries) and which do not guarantee the required production efficiency in the new facilities, are to be excluded from the plan.

In case of any disagreements concerning technical solutions, time limits for the construction, prices or budgeted costs, the established rules will be followed for their mediation; the agencies in charge will be empowered to make the decision.

5. The State Planning Commission is enjoined to coordinate the structure, location, and time limits of critical work and deliveries for construction specified in the state plan (mandatory objectives).

Central agencies and VHJ are directed to specify in the implementation plan details reconciling the investor's and supplier's positions and, at the same time specify, at the minimum, start up times of facility operations and construction completion deadlines, including intermediate deadlines, deliveries for construction specified by the state plan (mandatory objectives) and construction deliveries exceeding the established budgeted costs.

The amount of unfinished construction is to be regulated in such a way that the plan itself is to assure the conditions for completing the project within the established deadlines. The regulations are to be tied in with monetary incentives for supply organizations by, among other things, applying [the criterion of] profitability of production assets, including unfinished construction.

6. Priority is to be given to the design and construction of projects based on model or recurring structures and production facilities; these are to be announced in a binding register.

For the purpose of regulating product deliveries for model and recurring housing and public construction, a binding register of the product mix with appropriate plans is to insure the necessary production.

7. The system of prime contractor functions should be used more widely; an experimental system plan for "turn-key" project deliveries is to be prepared.

8. Throughout the entire process of planning and managing the capital asset replacement, the responsibility of the central branch agencies is to be reinforced and, by means of intensifying khozraschet interrelations, the economic accountability of VHJ's and enterprises for the following is to be increased:

--Decisionmaking regarding the preparation for and the actual construction;

--High efficiency tied to world standards and foreign currency, costs, and earnings;

--Adherence to planned (design) specifications approved at the previous stage and in preceding construction approval data;

--Timely investor, design and supplier preparations;

--Adherence to planned (contracted) deadlines.

9. A balance is to be assured between long-term asset and labor force replacement during a more intensive substitution of machinery for labor, without further increasing the capital intensiveness of economic development while proceeding with the effective centralization of the industrial base.

In planning and preparing the replacement and centralization of long-term production assets, the principle of uninterrupted or three-shift operation in technologically continuous, energy- and transportation-intensive production processes involving expensive high-technology is to be consistently applied; in industrial production areas, two full-shift operations in basic production should be used as a starting point.

To expand capacities for goal-oriented programs, priority objectives of increased utilization are to be established in selected operations by expanding shift-work based on transfer of workers from the operations being phased out. A long-term concept of economic structure and concentration of the industrial base and the increase in shift-work in selected industrial regions or localities should be developed.

Plans should provide a specific priority list of the factories and plants being phased out, financial penalties should be imposed for failure to release the planned number of workers freed by the phase-outs.

10. Efficiency criteria are to be expressly applied in the planning, preparation and implementation of construction projects. To this end, reviews by state-appointed experts should be gradually extended to all centralized construction projects and applied not only to design tasks, but also to the investment intentions for construction specifically included in the state plan; federal experts will also generalize selected investments and evaluate the influence of the construction on external economic relations.

11. Supplier-consumer relations negotiated at the project design stage are to be given, in case of state plan priority construction, the status of preliminary planning decisions for setting aside appropriate supplier and key subcontractor capacities for centralized construction projects with the condition of including them in the plan without binding time limitations; supplier-consumer relations negotiated at the stage of completion of the preliminary design and the inclusion of the construction project in the annual plan are to receive the status of a binding planning decision for securing the supplier and essential subcontractor capacities or individual items deliveries for the duration of the project.

The project completion deadlines are to be more generalized while, at the same time, the responsibility of the general developer for meeting them within the projected time schedules is to be increased.

12. A comprehensive capital investment system based on the stated principles that will focus in particular on meeting the criteria for preparation and scheduling the construction in the plan is to be developed and implemented, completeness of pre-design and project plan preparations, insuring that the construction has adequate construction and assembly materials and technology within the required structure and time constraints as well as adequate labor for future operations; further, for the progress and efficiency of capital construction, timely project completion, and introduction of the capacities into operation within the set technical-economic parameters, for appropriate pricing of contract work and deliveries, especially of nonstandard machinery and equipment and drawing on the capital resources. The principles are to be developed and division of labor delimited for a uniform, comprehensive application of these controls, primarily through the management chain and external control agencies.

The State Planning Commission, the Federal Ministry for Investment and Technological Development, the State Bank of Czechoslovakia, the CSSR State Arbiter and other appropriate central branch agencies are enjoined to insure the publication of appropriate directives or amendment for the implementation of the stated measures.

The State Planning Commission, the Federal Ministry for Investment and Technological Development and the Federal Ministry of Labor and Social Affairs are enjoined to develop a methodologically uniform system of verifying that the facilities under construction will be able to obtain an adequate supply of labor and that capacities are not being added without a regard as to whether or not labor is available with a resultant weakening in the capacity-utilization rates or when the product could be produced by better utilizing existing capacities.

F. Improving Planning of Labor Force Replacement and Utilization and Wage Fund Planning

1. The long-term resource balances and division of the labor force is to be extended to two five-year plans (i.e., the seventh and eighth five-year plans) as a precondition to better coordination of long-term asset and labor force replacement and labor classification.

2. An absolute limit on the number of workers (rather than setting an expected increase in the number of employees) is to be established in the five-year plan; it is also being urged that these limits not be reached in the annual plans while exceeding the limits is to be strictly penalized; wage developments based on merit are to be encouraged and insured through effective controls.

3. An undesirable drain of the labor force into certain organizations and administrative activities is to be prevented by providing that only the unified agricultural cooperatives and public services organizations will be exempted from the binding plan limits on the number of workers, while in regulating recruitment and assignment of workers only those organizations and state administration agencies which are regulated by other effective tools are granted relief; further exemption is provided only for the public services organizations.

In support of this objective, the plan is to set the number of technical-managerial personnel (in organizations managed by the central agencies and KNV [kraj national committees]) as a percentage of the total number of employees and expand the system to other organizations; gradually, a binding standard number of technical managerial personnel in selected activities and agencies is to be established.

4. The status as the basic link in the labor force management is to be strengthened through an overall evaluation of plan fulfillment regarding the number of employees based on the number of all VHJ subdivisions within a district or region.

5. An integrated priority system is to be created to assure precedence in assignment of labor to projects of national economic and social importance; for this purpose:

--The number of such priorities is to be limited, usually established for a 5-year period, particularly to insure structural and regional changes in the economy, and detailed and operationally expanded in the annual plans;

--Priorities are to be enforced and given preferential treatment in the plan details on the number of employees, in the plan on the placement of the younger generation and school graduates and by providing material security for apprentices, by transferring employees from specifically named liquidated plants or workshops and providing material security for such employees, by using nonstandard forms and by authorizing recruitment and recruitment bonuses, in plan details for stabilization of housing construction and its financing, by stabilization in wage preferentials, in plans for professional, personal and social development, and by systematic controls on plan fulfillment by middle management and kraj national committees in terms of the number of employees.

6. Investors are made responsible for furnishing their supervisory agency and the appropriate area planning agencies with a specific program for insuring the labor for building of additions to existing capacities, including a program providing for training, housing, and special services, including those administered by the national committees.

7. The numbers of pupils and students to be accepted into individual fields of study is to be established in accordance with the needs of the society; these numbers are to be regulated to increase them in shortage areas and cut them in overage sectors; the organizations are to be assigned specific assignment goals for shortage area study programs in their management plans.

8. Changes in the structure and technological level of our national economy and the corresponding job qualification requirements must be taken into consideration in any such plan providing for qualified personnel and vocational training programs; for this purpose:

--The five-year plan for training qualified personnel is to be tied to long-term outlook requirements;

--Provisions are to be made for establishing links between the prospective plans for qualified personnel requirements and the plan for labor replacement and to the other parts of the national economic plan, particularly state goal-oriented programs, technological development, and fixed assets replacement;

--The system of vocational training is to be consistently a part of the plan for training qualified personnel.

9. Central branch agencies, in cooperation with the Federal Ministry of Labor and Social Affairs, are enjoined to gradually improve the job streamlining management system and, specifically, to set objectives, and plan tasks and contribution of the job streamlining; to improve and expand the work standards, tending of machines, and [reduce] number of personnel in primary, auxiliary, service, managerial, and administrative activities; to carry out a one-time, overall revision of the use of labor standards (in connection with the program for increasing the economic effectiveness of the wage system), to provide for its future on-going review and to generalize the best practical experiences and knowledge gained from this streamlining and standard-developing practice and, together with the results of progressive research, implement them purposively in management practice.

10. Within the framework of economic plans, long-term 10-year programs, five-year and annual plans are to be drawn up for the professional, personal and social development of employee collectives in cooperation with the appropriate labor union organizations while advantageous centralizing of certain activities or combining them according to the regional principles and standards for availability of social services are to be established. In these plans the success of the detailed versions of the state and the economic plans must be consistently provided for and the limits therein established must be respected.

The criteria for the participation by organizations in socialist Red Banner competitions are to be made stricter; in particular, participation is to be made contingent upon meeting five-year plan goals and all indicators established as criteria for the routine evaluations of the fulfillment of the annual plan and further, upon indicators established by the higher agencies, by creating the conditions for the continued development of the organization, the technical-economic level of products and technologies, improving the results over the preceding year, and making deliveries within established deadlines. The competition is to be evaluated according to the qualitative economic results achieved (increases in export and in products of the highest quality, conservation of fuels, energy, gasoline, metals, and other raw materials and labor).

11. The wage regulating system must be made more effective by the consistent enforcement of the principle of compensation according to merit in such a way that the social and economic standing of each worker is completely dependent on his contribution to society. Significant wage differentials based on merit are to guarantee that wage developments are proportional to the social productivity of labor. From this point of view, the plan is to mandatorily limit VHJ's as to the volume (the size) of the wages payable over the five-year plan period by a standard in breakdown into individual years and two types of entries (basic and incentive). Organizations of cultural and health administration and cultural and educational support organizations are to be exempt from

this breakdown. The extent of the VHJ wages payable is to be clarified in the annual plans over the course of the five-year plan, while complying with the constraints established in advance in the current five-year plan; for the organizations within the VHJ, the plan is to set binding constraints as to the volume (size) of the wages payable in terms of the two wage components (basic and incentive) by means of the instruments (indicators) expressing as accurately as possible, first, the labor intensity of the production (preferably indicators of production in constant wage or work units) and, second, the organization efforts at increasing efficiency and quality of work within the entire VHJ.

The State Planning Commission and the Federal Ministry of Labor and Social Affairs, in cooperation with other central agencies and the Central Council of Trade Unions are enjoined to take the necessary steps to implement the stated measures, and for this purpose to amend or publish appropriate directives and instructions. They are to work out the problems involved in the system of regulating the development of the wages payable at the state plan level.

G. Improving Effectiveness of Planning in the Area of Foreign Economic Relations

1. Relative domestic and foreign price developments are to be taken as the basic criterion of efficiency for foreign economic relations.

2. The planned foreign currency requirements for the state goal-oriented programs are to be quantified in the five-year and annual plans and provide for complete foreign exchange recoverability of capital imports (including antiimports [items produced locally in lieu of imports]) over the long term. Important investment projects are to be handled in the same way.

3. A significant limit is to be set on the number of priority import projects in area of the so-called selected items of nationally criticial raw materials (especially energy raw materials, basic ores and metals, and raw agricultural products).

The capital type imports for the production sectors within the five-year plan and in the annual plans are to be closely checked but, at the same time, the principle of maximum possible return on foreign currency (such as refundable foreign currency credits) with the possibility of transferring fixed-limit foreign currency within the 5-year time period is to be applied. In connection with this, a transfer of fixed-koruna-limit capital investment plans is also to be resolved.

4. To insure consistent fulfillment of obligations stemming from intergovernmental agreements within the framework of socialist economic integration, the planning of corresponding tasks, both in the relevant branch sectors and in terms of total exports and imports at the level of

the Ministry of Foreign Trade is to be initiated; at the same time, the accepted methodology of the long-term plan for multilateral integration measures among the CEMA member countries for 1981-1985 must be adhered to.

5. Efficiency in planning and making provisions for the export of turn-key plants is to be increased; the state plan is to provide specifically for the export volume in selected sectors for such projects which are to be included in the product list of the foreign trade plan. The export of complete plants is to be resolved and assured by using a single, main contractor. At the same time, contracts for the export of turn-key plants are to be established as state plan priority objectives of the foreign trade organizations and all participating suppliers, with the manufacturers concerned being held responsible for the priority delivery of subassemblies to the principal contractor within time limits corresponding to the scheduled progress or construction of the turn-key project, or delivery deadlines deriving from a contract with a foreign customer; such subassembly deliveries are to be contractually secured in a manner corresponding to these requirements.

6. Delivery commitments between production and foreign trade are to be planned in more detail with particular attention to the expansion in the volume of specific numbers of export deliveries. The state and economic plans of the engineering industry exports must be prepared in a more detailed classification according to sector.

7. Territorial planning is to be intensified to an economically advantageous degree.

8. Annual export and import plans and the trade and payment balances are to be worked out mainly in wholesale prices that will be effective in the year being planned for. In trade with the socialist countries in contract prices, [this will mean] prices that will be known for the plan year at the stage of annual plan preparation (with the condition that any possible changes will be subsequently reflected in the plan), and in trade with nonsocialist states in forecast foreign prices.

9. The five-year foreign trade plan for the years 1981-1985 is to be drawn up mainly in constant wholesale prices and constant fco prices. Objectives of the five-year plan are to be considered as binding minimum targets for actual export and increase in efficiency; export and import objectives are to be implemented by annual plans based on current developments and forecasts of changes in foreign prices.

10. Agencies and organizations which are accepting obligations, or will be under an obligation in the area of international specialization and cooperation agreements, will take the following steps:

--They will compile technical-economic studies on the alternative possibilities for the maximum utilization of advanced forms of participating

in the international division of labor (including licensing), and will substantiate their effectiveness in terms of insuring and exceeding the five-year plan objectives and implementing the state goal-oriented programs;

--They will enter into consultations with the foreign partners only on the basis of discussions of these alternative possibilities with authorities competent to approve such agreements on specialization and cooperation; during the consultations, the question of partner selection in the form of alternative offers, processed by the foreign trade organizations, will also be addressed;

--They will enter into binding negotiations with their foreign partners only after a decision about the most effective alternative has been made and approval given by the competent authorities.

11. Both the positive and the negative results of implementing international specialization and cooperation agreements will be reflected in the economic results of the parties to the agreement; any consequences of implementing the agreement may have for other organizations, in particular, questions of prices related to imports of products manufactured under specialization and cooperation [agreements], are to be dealt with at the stage of contract negotiation (in the area of domestic prices and economic tools, including by invoicing the gestor responsibility for efficiently supplying the domestic market).

12. Foreign trade organizations are responsible for seeing that the economically justified ratios of the foreign prices being negotiated on imported and exported goods are adhered to in the individual agreements on international specialization and cooperation; the system of wage incentives and penalties applicable to the employees responsible for doing this will be adjusted accordingly.

The State Planning Commission, the Ministry of Foreign Trade, the Federal Ministry of Finance, the State Bank of Czechoslovakia, the CSSR State Arbiter, and the Federal Price Office are enjoined to insure the implementation of the stated measures.

II. DEVELOPING KHOZRASCHET, MONETARY INCENTIVES AND UTILIZATION OF ECONOMIC TOOLS FOR EFFICIENCY AND QUALITY IMPROVEMENTS

A. Developing Khozraschet [Cost-Accounting System]

Together with improving planning, khozraschet is to be used in all industrial organizations as a management tool and as a method of planned management of the social production process directed at achieving maximum labor efficiency and quality.

Khozraschet improvements cannot be assured in isolation from planning improvements. The plan and khozraschet must act in unison. The basic condition for the development and effective application of khozraschet is an internally balanced and consistent plan or a system of national economic plans within which the role and influence of plans drawn up in monetary terms (the financial plan, the state budget, the currency plan) are increased, a high-quality medium-term plan being of key importance here.

Khozraschet is to be developed at all levels as an integrated system of relations of cost accountability between the enterprise-economic sphere and the society and, also mutually between the individual VHJ's and enterprises, and within the VHJ's and the enterprises. The VHJ khozraschet is to be developed as a new factor while simultaneously improving khozraschet effectiveness in the enterprises and organizations comprising the VHJ.

To create a comprehensive system for correlated khozraschet functioning at all levels of management in the enterprise-management sphere, all central agencies are directed to take the following steps:

1. Management ties between central branch agencies and the VHJ's are to be strengthened and the prerequisites and conditions necessary for introducing VHJ khozraschet management principles are to be created, in particular those necessary to increase the khozraschet accountability of the VHJ as the basic link in management; also to be strengthened are the ties between the VHJ and its enterprises, to insure the effectiveness of VHJ and intraenterprise khozraschet. It is to be kept in mind that khozraschet management of the VHJ as a whole and of the organizations within it is based on plan objectives as worked out in detail differentially and in a balanced fashion.

On the basis of the incentives established for the VHJ as a whole, incentives for counterplanning are to be established for managed organizations with precisely defined objectives to motivate them to fulfill their own plan and that of the VHJ as a whole.

An active interest on the part of the individual VHJ enterprises in positive results to be achieved by their own internal management and by the management of the VHJ as a whole is to be strongly encouraged. The conditions set for the VHJ should determine the degree of this involvement. These conditions are to be established by setting plan objectives and by utilizing the evaluation and incentive system. The initiative and contributions of the best enterprises and work teams should also be recognized.

2. The basic principles of enterprise khozraschet are to be modified in accordance with the measures set forth in the various sections of this document (these concern, in particular: the regulations for enterprise

capital formation and the redistribution of financial resources among the individual enterprises; the plan specifications and changes thereto in the enterprise-economic area on the basis of established objectives; the conditions governing the development of a sound standards base; rules for the budgeting and methods of cost accounting and worker compensation according to achieved khozraschet results). The particular system of khozraschet management within each VHJ is established by the VHJ general manager within the framework of these regulations.

3. The khozraschet principles and measures, applied at the enterprise level, are to be expanded also to intraenterprise activities. Khozraschet management within the enterprise is to be oriented toward systematically improving the setting of standards, carrying the actual plans through to the management centers; ascertaining the responsibility for accruing costs; the periodic evaluation of achieved results in comparison with the budget; and establishing monetary incentives based on these results. Central management accounting, costing and budgetary procedures, as well as the full use of operating standards for past labor input and value added are to be consistently applied.

To contribute to the development of khozraschet, the prerequisites for and a more effective system of economic tools operating through incentives and economic pressures, particularly in the areas of finance and credit, wages and prices are to be created.

B. Improving the Financial and Credit System

To increase the dynamic effect of finance and credit on the VHJ and enterprise khozraschet development, the Federal Ministry of Finance and the Czechoslovak State Bank, in cooperation with the central agencies concerned, are enjoined to apply the following basic principles within the finance and credit system:

--Effective incentives and economic pressures toward fulfilling the plan and achieving positive results in financial management are to be developed;

--VHJ requirements are to be financed, to a decisive degree, out of their own internal financial resources and from bank credits, and only in exceptional instances from state budget subsidies. In this regard, a study should be made of the state budget tax levels, with particular emphasis on the profits tax and the possibility of a greater degree of tax differentiation;

--All the consequences (negative as well as positive) of VHJ activity in all areas, including long-term asset replacement, technical development, and foreign trade are to be fully reflected in the economic incentive system and financing of requirements in order to insure that differences between well and poorly managed organizations, which will thus arise, act

as incentive for the well managed units as well as force units with poor performance to implement effective measures with the objective of eliminating shortcomings and achieving a turnaround in their economic performance; the necessary principles and rules to determine the extent of incidence are also to be provided.

These fundamental principles are to be implemented as follows:

1. In the System of Financial Management, Financing and Credit:

a) Establish that the coverage of planned VHJ requirements will depend primarily on profits and capital depreciation, with an additional source being the use of credit in the areas of operations and investment which, however, will not automatically make up for a lack of internal resources. Subsidies from the state budget will be used according to special rules approved by the CSSR Government; first, to achieve a planned effect in the value relations in the national economy (noninvestment subsidies) and second as a planned source of financing (investment subsidies); in exceptional cases, as defined by the CSSR government resolution;

b) In connection with the change in the VHJ status as the basic link of management in the enterprise-management sphere, the financial relations in the VHJ's (without regard to their legal form) are to be adjusted accordingly. The effectiveness of khozraschet under the new conditions is to be insured, and within the framework of khozraschet, also that of the financial management systems of individual VHJ organizations. During the transition period of developing centrally managed VHJ's, a temporary adjustment is to be allowed, particularly for arranging the financial relations between the VHJ and the enterprises and between enterprises and the federal budget, etc.; according to the extent of centralization of decisionmaking in a given VHJ;

c) Above all, the role of profit is to be increased, including increasing its share and volume in resources for financing, so as to strengthen the khozraschet system of financing requirements and wage incentives;

d) With the objective of increasing VHJ (and enterprise) responsibility for their economic performance, a modification in profit distribution priorities within VHJ's (and enterprises) is to be accomplished so that after the payment of levies and taxes to the state budget (by VHJ enterprises, after VHJ payments have been made), allocations are to be made first of all to the VHJ and enterprise funds that provide for the financing of projected requirements and, only thereafter for the VHJ and enterprise incentive funds;

e) As an additional substantial source of financing VHJ requirements, a percentage of depreciation is to be allocated which is to remain at the disposal of the VHJ;

f) Redistribution of financial resources among the VHJ's at the level of central branch authorities will in principle be carried out only for long-term asset write-offs; profit redistribution among VHJ is to be authorized only in very exceptional circumstances;

g) The redistribution of financial resources within the VHJ is to be insured in a form that will completely support the effectiveness of the enterprise khozraschet; in case of profits it is to be done strictly in the form of levies on profits established differentially for individual enterprises according to principles established by legal provisions. In case of enterprise levies on profit paid to the VHJ, for example, it is to be established that this levy is set by the VHJ at differentiated percentage rates and for extended periods of time with the proviso that when they have exceeded the planned profit, the enterprises will be able to retain a uniform percentage for financing their requirement as a resource that is transferable between the individual years. In VHJ's where the levies to the federal budget will temporarily be made directly by the enterprises, the redistribution within the VHJ is to be conducted as at present.

2. In the System of Payments to the State Budget:

a) Beginning in 1981, the current system of levies on profits going to the state budget is to be modified to increase the share of internal financial resources of the industrial organizations used to finance their own requirements. The payment adjustments are to be carried out in 1981 and 1982 on the basis of balancing the resources against the requirements in the five-year plan differentially [based on the type of production] either by granting reductions on profit taxes or through a combination of such reductions and a lowering of the [effective] rate governing the profit tax, or a reduction in the total amount.

It is to be established that the basic types of levies paid to the state budget are to be made for the VHJ as a unit, with the exception of VHJ's where the levies will be made directly by the enterprises on the basis of an exception granted by the appropriate ministry of finance at the request of the appropriate central branch agency; these exceptions will be granted [only] in cases when, during the transition period, managerial activity has not yet been completely integrated at the VHJ level. Levies to the state budget directly from the enterprises in VHJ's managed by the central agencies of the republics, with enterprises located on the territories of both republics, must also be treated as an exemption.

To increase the effects property taxes exert on more efficient utilization of machinery assets, regulations are to be introduced to increase or decrease the property taxes on such assets by as much as 30 percent, depending on the capital equipment utilization efficiency indicators;

b) Beginning in 1983, the above profit tax rate modifications are to be incorporated as amendments to the tax laws. In drafting these laws,

various alternative rates and structures of profit taxes are to be evaluated, with the possibility in mind of increasing the economic effectiveness of the individual types of taxes; the possibility of a more objective assessment of production factors in the interest of encouraging the replacement of labor by capital is to be explored. In profit taxes paid by the VHJ as a whole, the liability of a minimum (guaranteed) profit tax at the VHJ level is to be established and recommendations developed for simplifying the system of levies to the state budget. To increase the economic pressure for elimination of worn out capital assets, introduction of a supplemental levy to the state budget is to be considered.

3. In the Budgetary Fund System:

a) At the VHJ level and in enterprises directly controlled by the central agencies, a comprehensive system of budgetary funds, including economic incentive funds, is to be designed. In the VHJ enterprises, budgetary funds based on the degree of centralization of management within the VHJ are to be developed; in all enterprises, cultural and social services funds and, in most cases, a revolving fund are to be maintained;

b) The economic effectiveness of all special purpose funds related to VHJ and enterprise management is to be increased. Basically, according to existing VHJ arrangements, the following funds are to be established:

--A capital investment fund for financing important VHJ projects (mandatory and centralized construction);

--A revolving fund to be used as working capital (only in the case of centrally controlled working capital at the VHJ level).

The function of the remaining VHJ special purpose funds is to be made more effective according to the following principles:

--VHJ contingency funds are to be established as an important monetary reserve for covering any fluctuations in the financial management of the VHJ as a unit. This fund is to be formed by an allocation from VHJ profit, by a transfer from the excess of profit distribution and by an allocation from the export incentive fund for making contributions to the monetary incentive funds; for example, to cover shortages resulting from profit distribution (as, for example, those resulting from nonfulfillment of the planned profit, exceeding the use of the profits or, possibly, wholesale price adjustments, additional expenses incurred by innovations, etc.). The sectoral contingency funds may be used for granting limited, temporary financial aid for subordinate enterprises for the operations and investment areas. A limit on the maximum balance of the reserve fund is to be set. Organizations subordinate to a VHJ should not expect to [be authorized to] form a contingency fund;

--A VHJ technical development fund is to be established as the basic source for financing sectoral tasks and enterprise tasks where an enterprise technical development fund is not to be established; this fund is to be replenished primarily from contributions by subordinate enterprises at their cost (according to a long-term standard or an absolute figure tied to the five-year plan of scientific and technological development); income from this fund obtained for results of solving tasks financed from it may also be used to pay for innovation expenses at the stage of their implementation. A maximum limit to be retained in the sectoral technical development fund is to be set. Amounts exceeding this limit are to be used at the end of each year according to a predetermined manner. The reserve for financing technological development costs is to be discontinued.

4. In Economic Incentive Funds:

a) Their motivational effects on production efficiency and quality in relation to the five-year plan objectives are to be reinforced. These funds are to be developed from an allocation from profits and based on the fulfillment of qualifying indicators and, in some instances, on other sources; the amount of the allocation is to be determined on the basis of meeting these indicators as determined by the expanding aggregates effective in 1981. In specific cases, the size of the allocation is to be dependent on the degree of fulfillment of qualifying indicators; the profits used to calculate the indicators that determine allocations to the incentive fund are to be reduced by an amount reflecting losses due to low quality products. In cases where the VHJ sets up funds in the subordinate enterprises, it will also establish qualifying indicators tied to the enterprise activity and the fund contributions are then made according to their compliance [with the indicators]. Part of the contribution to the enterprise fund may be tied by the VHJ to the condition of compliance with qualifying indicators for the VHJ funds as a whole;

b) In cultural and social services funds (FKSP):

--A new maximum limit of the overall FKSP allotment is to be set at 2.8 percent of the annual amount of wages payable; the basic allocation is to remain constant at the current level, i.e., at 0.8 percent of the annual amount of wage payable;

--The following are to be established as qualifying indicators for supplementary allocations: profit (in some cases, a share of the total costs of the adjusted output), labor productivity measured by the value added and task accomplishment in the structure of deliveries; for meeting each one of these indicators, an allocation of 0.4 percent of the annual wages payable is established; a supplementary allocation to the FKSP of a VHJ may also be increased from additional sources such as the export incentive fund, by an amount dependent on the price advantages gained from technically advanced, latest style, top quality products, and by an

allocation based on the fulfillment of indicators governing the use of fixed assets in accordance with principles established by the CSSR government; the allocation under each of the above conditions may reach a maximum of 0.4 percent of the annual VHJ wages payable. The FKSP allocation is to be reduced by a portion of (the amount of) any penalty for obsolescence and low product quality; the reduction is not to exceed 0.4 percent of the annual VHJ wages payable however;

--At the VHJ level, the FKSP is to be set at the level of the supplementary contribution dependent on compliance with appropriate indicators established for the VHJ as a whole. At the enterprise level, the FKSP is to be set at the level of the basic contribution plus the supplementary contribution in accordance with the conditions established by the VHJ, basically as follows: the enterprise sets the supplementary contribution at the level of a contribution for 3 qualifying indicators established for the enterprise from those designated for the VHJ even in those cases when the enterprise is in compliance while the VHJ as a whole is not. Other possible contributions to the enterprise FKSP according to other qualifying indicators are then tied to the compliance by the VHJ as a whole;

--The legal regulations on the use of the FKSP are to be simplified, and VHJ and enterprise legal authority expanded;

c) For the development funds:

--A VHJ development fund is to be created as a financial source for the funding of the so-called fixed-limit investments, the volume of which is governed by the resources of this fund; a binding dependency between this fund and VHJ profits is to be established so that it serves to generate an interest in creating profits and [increasing] investment efficiency;

--For the formation of this fund, a norm for the depreciation of fixed assets, depending on the actual wear and tear (usually no more than 40 percent of the monetary requirements to finance fixed-limit investments) and a standard contribution from profit (at least 30 percent of the monetary requirements to finance the fixed-limit investments) are to be established; in setting the standards of the share from depreciation and for contributions from profit, amounts necessary to meet bank credit payments must be taken into consideration;

--One half of the contributions to the development fund from the profits is to be dependent on fulfilling the [indicator for] return on production assets (i.e., machinery and equipment profitability), and the other half on meeting the planned delivery patterns (or trends in deliveries);

--It is to be established that the development fund is also to receive above-standard allocations related to the price advantages for technically advanced, late model, quality products as well as to the export

incentive fund, and to reductions in inventories as reflected by a [faster] inventory turnover; the total amount of the contribution from these other sources, with the exception of the contribution from the reduced revolving fund, may come, however, to no more than 25 percent of the overall planned contribution from profit according to the standards established for the development fund;

--The development fund is to be reduced by a portion of the amount of any penalty for obsolescence and low product quality;

--The development fund assets are to be used in accordance with the VHJ (enterprise) plan and, within the framework of the five-year plan, an acceleration of asset accumulation in the development fund is to serve as a reserve for future construction during the five-year plan;

d) The special compensations fund is to be developed and used according to the principles established for regulating the wages payable;

e) The export incentive fund is to be developed and used to stimulate more effective exports according to the principles established to encourage foreign trade.

5. For Ministry Funds of the Central Branch Agencies:

a) Ministry technological development funds, ministry reserve funds, ministry capital investment funds and possibly other special purpose funds are to be established and used according to existing legal procedures;

b) A ministry contingency fund is to be designated for consolidating unused profits over the plan for transfer of amounts exceeding the authorized maximum of VHJ contingency funds;

c) Maximum limits are to be set for ministry technological development and for the ministry contingency funds. Amounts exceeding the limit are to be used in the prescribed manner.

6. In the Area of Bank Credit:

a) Credit categories are to be established in accordance with the planning and financing changes; qualitative criteria for granting credits, tied to currency plan criteria and long-term standards are to be established;

b) Differentiated credit rating procedures for organizations are to be used, taking into consideration the expanded role of internal resources, performance since the start of the five-year plan, and the fulfillment of efficiency criteria; at the same time it is to be assured that credits are used primarily for carrying out specifically established state plan

objectives and for supporting the development of the more progressive VHJ's so that stagnating or lagging VHJ do not use credit to automatically make up for insufficient internal asset formation;

c) VHJ falling behind are to be granted consolidation loans outside the usual credit system under particularly strict conditions (consolidation program), insuring the elimination of negative tendencies of VHJ management, and with direct ministry participation in implementing the consolidation program;

d) In general, credit relations are to be organized between the bank and the VHJ, taking into consideration the degree of centralization of authority at the VHJ as established by its statutes and the rationality of the credit relations;

e) In connection with the changed economic role of credit, the role of interest is also to be increased. The effectiveness of interest penalties and incentives is to be reinforced by tying them more closely to personal and collective incentives. The payment of a portion of the interest penalties to the compensation fund is to continue as at present, and a review of the influence of interest penalties and incentives on the formation of internal capital funds earmarked for financing VHJ operations and investment needs (together with the changes in levies to the state budget beginning in 1983) is to be made.

7. In the Area of Financing the Reproduction of Fixed Assets:

a) Investments are to be financed, in principle, from internal VHJ assets and from bank credits through two funds, the capital investment fund and the development fund.

In the event of shortfalls in the planned internal capital formation, as required by the five-year plan, the annual implementation plan will include investments only to the extent to which the organization earned the financial assets to pay for them as compared with the five-year plan;

b) Centralized construction projects (all capital construction projects except fixed-limit investments), including repayments of credits for these investments and of credits granted before the period of validity of these measures, are to be financed from the capital investment funds. The sources for these investments are VHJ profits and depreciation, bank credits, subsidies from the principal central agencies and, as an exception, subsidies from the state budget, subject to CSSR government approval, and other sources (contributions from other investors, receipts from the sales of liquidated fixed assets, etc.). Financial requirements deriving from shortcomings in obtaining investments financed from the capital investment fund (not meeting construction deadlines, exceeding budgeted costs) are to be covered fully or partially from the development fund.

The planned and designed technical-economic parameters are to be the basic criterion for investment financing from the capital investment funds. Therefore, neither credits nor subsidies may be used to finance investment projects which do not meet these requirements. Increases in budgeted costs are to be covered from internal assets of the investor or by bank credit at punitive [higher] interest rates;

c) Subsidies from the federal budget will be granted only in exceptional cases for construction financed from a capital investment fund, and only after their approval by the CSSR government, chiefly in cases where it is not possible to provide for long-term financing of planned investments from in-house resources. The provisions for making grants should be based strictly on the established criteria of investment efficiency, observance of planned parameters and the fulfillment of other indicators. In case of a failure to adhere to budgeted costs, deadlines, or techno-economic parameters, where grants have been obtained for the construction, the consequences are to be paid for from the investor's capital and, in part, from the development fund;

d) The development fund is to be used to finance fixed-limit investments [i.e., basically, construction costing less than Kcs 2 million and machinery not included in the construction budget] and the repayment of bank loans for fixed-limit investments. This fund is to be used primarily for improvement and modernization investments. The source for financing fixed-limit investments is a standard share of profits and capital depreciation determined by the degree of wear of fixed assets together with bank loans and, in certain instances, other sources (e.g., contributions by other investors, etc.). Central branch agencies will insure that the limits of such projects, as established in the state plan, are not exceeded during the period of plan implementation;

e) Investment financing from the development fund is not to be permitted in cases where internal financial assets are available but meeting the established investment efficiency criteria has not been assured in advance. The investment efficiency criteria for the subordinate VHJ fixed-limited investments are established by the appropriate central branch agency in accordance with instructions issued by the Federal Ministry for Investment and Technological Development in cooperation with the State Planning Commission, the Federal Ministry of Finance and the State Bank of Czechoslovakia. These criteria include mainly: the degree of increase in return on machinery and equipment, an increase in shift work, the share of gradual improvements, modernization of complete assembly lines and elimination of obsolete machinery and equipment;

f) Deliveries for capital construction are to be billed by the building and operation units. A mandatory performance bond is to be posted and is to be refunded only after the elimination of all incomplete and faulty work; the costs for the elimination of incomplete and faulty work is to be charged as a penalty for poor performance according to applicable

statutes. The supplier's operational requirements during the construction of buildings and operation units are to be covered by monthly payments. The conditions for making monthly payments for whole units and quality-inspected work are to be tightened. When the government-established deadlines have not been met, the investor will cease payments and the operational needs of the construction work and technology suppliers will have to be covered by credit at a higher rate of interest;

g) The Federal Ministry for Investment and Technological Development, the State Planning Commission, the Federal Ministry of Finance, the Federal Statistical Office, the Czechoslovak State Bank, and the supplier ministries are enjoined to deal rapidly with the necessary methodological and organizational requirements for planning, accounting, detailed reporting, evaluation, and incentive as projects are completed, in such a way that it becomes possible to try out the system during the next few years and implement it during the Seventh Five-Year Plan;

h) To increase the effectiveness of the investment efficiency and the incentive and penalty system, the following are instructed:

aa) The Federal Ministry for Investment and Technological Development, the State Planning Commission, the Federal Ministry of Finance and the Federal Ministry of Labor and Social Affairs, in cooperation with other central agencies:

--To implement the monetary incentive system in the investor, design and supplier organizations as follows:

--in construction specifically included in the state plan, it is to aim at deadlines for developing background data and at deadlines for project completions and putting the facilities into operation, including intermediate deadlines, and at volume of work and deliveries;

--in all construction, at not exceeding (but rather reducing) the budgeted costs;

--at observing the technical-economic parameters of the investments, including price limits on production from new investments which was used as a basis for approving the investment;

--at keeping schedules for scrapping [obsolete] capital assets.

--To make it possible for supplier organizations to increase the amount (volume) of wages payable when they better the planned indicator levels of fulfillment of construction work and deliveries according to deadlines set for projects specifically designated by the state plan.

--To make it possible to use as a source for financial incentives a part of the reserves saved in the construction budgets when the budget

expenses were not exceeded, deadlines for construction were shortened, quality of work and deliveries were adhered to, or technical-economic indicators and price limits on products from new investments were adhered to or bested.

--Investors are authorized to negotiate special awards from their operating capital for any reduction in standard construction time limits which had been trimmed by 10 percent with contractors who stay within the construction schedule specified in the state plan while fulfilling their contractual obligations on the other construction. For projects established as priority construction, special project completion and wage supplements may be granted. For a more marked encouragement of due date compliance in capital construction, alternative solutions are to be developed as follows:

--for early opening of facilities for operations and reduction of the standard construction deadlines by a minimum of 10 percent, the contractors for centralized construction projects may be granted 50 percent of the expected investor profit for the period by which the completion time was reduced;

--for any violations of the deadlines, the contractors are to be penalized and, at the same time, action is to be taken against investors and designers for design and territorial preparation laxity;

--price surcharges on modernization and reconstruction projects are to be examined to insure that they reflect only realistic cost overruns related to the project implementation by the contractors.

--In the interest of increasing the effectiveness of budgeted constructions and budgetary tools, a system of technical-economic indicators in the production and nonproduction spheres is to be established and given the character of fixed-limit budgetary expenditures, and its supplementation and currency is to be insured; for this purpose a binding program is to be developed;

bb) The Federal Ministry of Finance and the Czechoslovak State Bank, in cooperation with other central agencies, are to:

--Introduce penalties for organizations in which imported machinery and equipment are not assembled (installed) on time;

--To support the priority of capital asset construction and modernization projects, with respect to new construction, financing is to continue being provided to the predetermined extent from operating capital under the heading of repairs, modernization and reconstruction carried out together with repairs;

--The justification for financing repairs on long-term assets from the repair fund, formed at the cost of expenditures on the basis of the long-term standard, is to be carefully weighed and the formation of this fund made possible on the basis of central branch agencies proposals.

i) To increase the effectiveness of investment credit, the Czechoslovak State Bank is enjoined to take the following measures:

--Investment credit will be granted according to the principle of recoverability from internal assets and dependent on the return from credit investments. The credit policy is to be differentiated according to the criteria of effective use and expected repayment of credits, with a priority given to insuring the completion of priority tasks of the state plan, to supporting the development of progressive sectors (especially the export efficiency of export oriented VHJ), and to supporting a progressive concept of capital investment, especially with respect to the share of modernization investment projects and investments in machinery in the total investment volume. The credit and interest rate differentiation is to be aimed at enforcing the schedules and specifications established by the state plan. The compensation (credit repayment, full or partial) for the consequences of failing to adhere to construction schedules, budgeted costs and the design parameters of the investment projects for which credit was granted (of projects financed from the capital investment fund) is to be made, either in full or in part, from the development funds (repayment of the loan or a portion of it);

--An overall credit structure is to be established for investment credits for the five-year plan period. During the individual years, this framework is to be adjusted in a differentiated form according to the results achieved by the VHJ from the start of the five-year plan in its overall management and resource formation efficiency and its growth in labor productivity and utilization of long-term assets, on the principle of providing credit support for progressive VHJ's. Credit priority is to be given, within the scope of the credit, for modernization and fast return on investments with easier interest rates.

--Credits from the koruna and foreign currency reserves of the monetary plan are to be provided primarily for accelerating the development of highly efficient export production while fulfilling the established and particularly demanding criteria to ensure a rapid return of koruna and foreign exchange assets. The foreign exchange backflow credit is to be used to the maximum extent for machinery and equipment imports.

8. In the Area of Financing Technological Development

The Federal Ministry of Finance, in cooperation with other central agencies, is enjoined to insure that the financing function exert stronger pressures on the effectiveness of technological development by implementing the following basic measures:

a) The basic sources for financing technological development tasks are to be the branch and VHJ technological development funds along with the planned use of state budget resources for the financing of state projects. Funding to finance the technological development tasks may also be released on the basis of a statement by the contractor that the plan objectives for a scientific and technological development are technically and economically feasible and, in the cases specified, will be integrated into their own financial plans; or, else [the funds may be released] on the basis of a preliminary cost and expenditure projections and commercial agreements between planners and implementors, insofar as they are being accomplished within the framework of supplier-consumer relations. [Provisions for the] broader application of the share financing of state objectives financed from the state budget from the financial resources of the enterprise sphere are to be prepared;

b) Efficiency indicators for technological developments, which will be used in some cases as qualifying indicators for allocations to the economic incentive funds and for rewarding supervisory personnel responsible for technological development results and, in some cases, for adjusting the amount of allocations to the technological development funds, are to be established. The shares from profits allocated to cultural and social services funds and to the development funds of industrial organizations in the scientific research base are also to be dependent on the indicators of technological development efficiency;

c) Schedules of technical-economic product useful life, as an objective factor for closing down obsolete plants, are to be set up; these schedules are to be either shortened or lengthened on the basis of results of the individual evaluation of the technological level as compared to similar foreign products and considering the views of the user;

d) To reinforce the VHJ monetary incentives, the use of economizing is to be developed in the formation and use of technological development funds to reduce the technological development fund formation in the future periods, for financing investments by transfers to the development fund, for implementing investments arising in the course of working out the objectives of the technological development funds or transfers to the reserve fund;

e) Cultural and educational support organizations of the scientific research base are to be transferred to industrial organizations in all justifiable cases.

9. In the Area of Financing Working Capital, the following is established:

a) Working capital is to be financed differentially, according to its classification, from the revolving fund, standing liabilities, operational credits, and other sources. Standing liabilities are to be included more intensively in inventory financing at as early a stage as

at the formulation of the financial plan. Changes in inventory are to be regulated (planned and controlled) by an indicator of inventory turnover measured in days. The volume of regulated inventories is to be strictly defined;

b) The inventory turnover in terms of days is to be used as a binding indicator for regulating the inventories. The binding indicator of inventory turnover in days is to be the qualifying indicator for rewarding supervisory personnel responsible for inventory development;

c) The internal revolving fund is to be used for inventory financing on the basis of the fund participation rate in the inventories. This is also to regulate the financing participation rate from internal assets relative to bank credit;

d) Under certain conditions, a reduction in the revolving fund, arising from a long-term reduction in inventory levels, may be transferred to the development fund. If the inventory turnover days increase against the plan then, at the bank's request, a sum, corresponding to the requirement for the increase in the revolving fund, must be transferred from the development fund to the revolving fund. Fifty percent of the losses due to the physical liquidation of unnecessary inventories may be covered from the reserve fund;

e) Credit use efficiency criteria will be used for granting operating credits and for applying credit and interest differentiation. The criterion expressing the dynamics of export efficiency will subordinate all other efficiency criteria when evaluating a VHJ. Meeting the credit use efficiency criteria is decisive in determining the amount and type of credit to be provided for progressive, for stagnating and for failing VHJ.

10. In the Area of Financial Control

The Federal Ministry of Finance, in cooperation with the finance ministries of the republics, is enjoined to increase its effectiveness in implementing the following measures:

a) The organization of the financial report preparation as well as the aims, methods, and forms of financial controls used by the finance administrations and financial departments of the national committees are to be adapted to the type of management tools and to the difficulty of meeting the nation's economic objectives during the Seventh Five-Year Plan but especially to the fact that the VHJ is the basic management link in the enterprise-economic sphere;

b) Financial controls within the jurisdiction of the finance ministries are to be aimed primarily at:

--Consistent insurance of administration and control of the state incomes, maintenance of economic and financial discipline, and routine controls of the fulfillment of the most important qualitative plan indicators which effect the relations to the state budget;

--The enforcement of economic policy intentions, objectives and tasks in the area of finance while intensifying economic controls aimed primarily at the standards of management, efficiency, cost consciousness, and financing of the entire reproduction process;

--Systematic follow-up on and evaluation of the operation and effectiveness of the system of planned management of the national economy, particularly in the area of financial-economic tools;

--An uncompromising drawing of conclusions for violations of economic and financial discipline and implementation of effective measures to eliminate uncovered shortcomings and prevent their recurrence, as well as maintaining consistent control over their implementation.

11. In the Area of Bank Controls

Their effectiveness in the everyday contact with the organizations is to be increased and aimed at the effectiveness of the entire reproduction process. To this end, the Czechoslovak State Bank is enjoined:

a) To reinforce the controlling activity of the bank by increasing the role of credit while taking advantage of all banking functions in the economy, particularly of financial, credit, and accounting relations to accord with the expansion of the enterprise financial base and the development of khozraschet [cost accounting] principles in the full VHJ and enterprise management system;

b) In the period of developing the plan proposals, the bank controls are to aim at insuring detailing of state plan objectives into organization economic plans, including the resources to finance them. The bank controls are to be based on the higher medium-term plan objectives and, again, to a greater extent oriented to the VHJ as the basic link in the management chain;

c) In the area of wages, bank controls are to be aimed at adhering to the binding constraints on wages payable, particularly indicators used to delimit the amount of the basic and incentive elements, including consequences for low quality production;

d) The fulfillment of the social-control functions of the bank in the area of capital investment is to be based on all phases of fixed asset replacement. In accordance with the intents already being implemented, that means further intensification and emphasis on the social-control function at the stage of preparing new investments and at the point of

completion of the construction projects while maintaining the existing proven forms of economic controls during the course of construction;

e) While controlling the standards of inventory management, the bank is to increase the pressure to insure fulfillment of the binding tasks of the financial plans, a greater emphasis is to be placed on tying inventory credits to control of selected type of inventories which are of key importance in efficient inventory management;

f) As a part of its responsibility for implementing foreign currency monopoly, and in the role of an agency of social-control in the trade sphere of the foreign currency management, the bank will intensify the effectiveness of the foreign currency oversight intended for increasing foreign currency discipline, the achievement of optimum payment conditions in the operation of foreign economic relations, promptness in collecting foreign currency receivables, activation of any reserves and their mobilization in favor of the state's central foreign currency fund. The bank will exercise more intensive controls to insure prompt introduction of imported machinery and equipment into operations, insuring construction preparedness and related technological conditions and assembly work, and greater economy in the import of machine components and spare parts.

C. Economic Tools in the Area of Foreign Relations

are to be aimed at supporting the improvements in export and import efficiency, for the development of the overall international division of labor and, particularly, for specialization and cooperation. For this purpose the State Planning Commission, the Federal Ministry of Finance, the Federal Price Office, the Czechoslovak State Bank, the Federal Ministry of Foreign Trade and other central agencies are enjoined to implement these measures in their individual sectors:

1. Increasing Effectiveness of the Exchange Policy

The exchange policy must be implemented in such way as to contribute more expressly to the more effective development of foreign relations.

2. Strengthening Relations Between Domestic and Foreign Prices in the Export Sector

--The current system linking production and foreign trade by means of purchase prices (the foreign price, fco [freight prepaid]) to the Czechoslovak border, converted to Kcs and adjusted by the amount of commercial markup of the foreign trade organization is to be retained for evaluating export efficiency; fco prices are to be adjusted by the amount of interest on long-term credits, i.e., essentially to the price level corresponding to spot payments;

--Export efficiency criteria, i.e., foreign prices and technological and qualitative parameters of competing top quality products, are to be used in evaluating the quality and technological level or, conversely, the obsolescence of products which already are, or may become objects of foreign trade. The results of these evaluations are to be incorporated into the positive and negative wholesale price adjustments. The same export efficiency criteria are to be used in setting wholesale price limits, in setting of prices for new products and products from recently completed investment projects, as well as in arriving at decisions on wholesale price changes;

--During 1980, the price incentive system is to be verified at selected VHJ (sectors) according to the achieved standards of export efficiency as determined by fco prices [charges prepaid] to Czechoslovak border;

--The direct participation of industrial organizations in negotiations of foreign price adjustments, especially in cases of high technology products, and the participation of foreign trade consumer organizations in the wholesale pricing of new products intended primarily for export, are to be expanded. For the purpose of making use of foreign-price criteria in setting the domestic prices, providing the requisite data concerning attained prices, price and payment conditions in foreign markets, and development of forecasts of [anticipated] changes in foreign import and export prices is to be insured.

3. Strengthening Relations Between Domestic and Foreign Import Prices

In the current system of appraising imports on the basis of purchase prices, measures leading to fundamentally greater economy in the processing of imported raw and processed materials are to be implemented.

Longer-term trends in the development of foreign price relations are to be incorporated into the domestic wholesale prices, especially through the plan for price developments.

4. Financial and Economic Instruments in the Foreign Trade Area

The system of financial and economic tools is to be designed to tie in with the system of export and import price planning and taking into consideration the necessity of assuring an increase in actual exports coupled with the desired improvement in their effectiveness. The motivating function is, therefore, to be aimed at increasing exports at foreign prices, freight prepaid to the Czechoslovak border, achieved both through faster increase in foreign prices (expressed by a rise in comparative price indicators), and by increasing the overall volume of exports expressed in wholesale prices.

A foreign trade incentive plan is to be established according to the degree of efficiency as measured by the level of the comparative price

indicator (the ratio of the freight prepaid price at the Czechoslovak border to the wholesale price), and according to the intent of regulating the export structure with a pronounced preference for exporting products manufactured primarily from domestic raw materials and finished products with a large share of domestic labor input, those with a high share of exports relative to their production volume or, alternatively, in the machine tool industry, according to the increases in per kilogram prices. When setting the size of the incentives, the improvements in efficiency as well as, to a useful extent, the results of foreign exchange costing or other criteria are to be considered. At the same time, the minimum level of the comparative price indicator at which the export incentives still may be paid, is to be set. This minimum level will gradually go up with the increases in foreign market prices.

The VHJ will be entitled to the full amount of the incentive when it insures the fulfillment of planned objectives both in wholesale prices and in the increase of the comparative price indicator.

The basic incentive level is to increase progressively, as long as the VHJ accepts a higher annual plan objective than established by the five-year plan and fulfills this higher target. The incentives will be smaller in cases where exceeding the annual plan in comparison with the five-year plan was not anticipated.

If the VHJ does not meet the annual objectives set by the five-year plan (whether in terms of wholesale prices or in the increase of the comparative price indicator), the basic incentive will, on the contrary, be progressively reduced, with the size of cuts determined by any achieved increases in exports and efficiency; it will be completely eliminated in cases of gross underfulfillment.

Incentive funds will be a source of the fund for export incentives which will have a direct effect on the special compensation funds, cultural and social services and development funds and the reserve fund.

In the interest of increasing the incentives for meeting the overall five-year plan objectives, part of the incentive is to be tied to the fulfillment of the entire five-year plan. For not meeting the annual export plan, the overall incentive is to be reduced by an amount corresponding to the size of the shortfall. When the shortfalls are considerable, an additional penalty is to be imposed in that the VHJ will be unable to use the export incentive funds to supplement the [regular] incentive fund. The entire missed incentive allocation may be returned to the VHJ in later years, provided that the shortfalls from the previous periods are made up.

An export incentive fund is to be established at the level of the VHJ which will use this tool to encourage export plan fulfillments in the individual enterprises; in the details of the export plan objectives,

the VHJ will provide for grants to the enterprise incentive funds dependent on the difficulty of the tasks and the achieved dynamism and efficiency of the exports according to the principles established by the central agencies for the VHJ. The use of the export incentive fund is to be adjusted so as to allow grants in excess of the standard incentive funds (for special compensation funds and the fund of cultural and social services), contingency fund (especially for covering losses and risks in foreign exchange) and the development fund; the export incentive fund is not to be used as a source for capital formation.

In cases where subdeliveries contribute a significant share to the final export goods, the VHJ negotiates with its subcontractors (VHJ) an agreement on transferring [to them] a corresponding amount of export incentives. In these cases, the VHJ subcontractors form an export incentive fund in the same way as the final goods supplier, and its use will be governed by the same rules.

In addition to the established system of penalties for low quality production, other measures are to be developed [to penalize] for losses due to low quality production arising in deliveries for export in which these losses:

--Will cause the industrial organization a reduction in export deliveries in wholesale prices and fco prices at Czechoslovak border in terms of marketing;

--Fall completely within the financial management of the industrial organizations and their relation to the state budget will not be adjusted by that amount (reductions in levies and increases in grants);

--Will not be reflected in financial plan proposals for the planning year;

--Will be covered to a greater extent than heretofore from the export incentive fund.

5. Foreign Exchange Incentives in the Area of Exports and Imports for VHJ and OZO [foreign trade organizations]

will be expanded on the basis of the demonstrated level of efficiency in foreign currency transactions.

6. Economic Incentives for Foreign Trade Organizations and Financing Activities of the Foreign Trade Organizations

a) In the Area of Economic Incentives

The mutual participation of VHJ and OZO in the export results is to be eliminated and independent incentives for foreign trade organizations

introduced. The foreign trade organization incentives, just as those for VHJ, are to aim at increasing export dynamism as measured in fco prices, which is to be achieved both through an increase in foreign prices as well as an increase in the overall volume of exports:

--In establishing the incentive levels, the same principles will be followed by OZO as by VHJ, considering, however, the specificity given by the distinct character of the foreign trade organizations' activities;

--The source for foreign trade organization incentives will be the savings on direct export costs (or, possibly, profits from price differences in the export trade). Should this export profit be insufficient to cover the entitlements for foreign trade organization incentives, an agreement may be reached with the Federal Ministry of Finance and the Federal Ministry of Foreign Trade to use the same source arising from imports;

--A special export incentive fund which will not be a part of the binding profit indicator in foreign trade organizations and which will not be subject to profit taxes is to be created. The export incentive fund will be the source, to be used according to the directives of the foreign trade organization general manager, for transfers to the special compensation fund and for higher than standard allocations to the cultural and social services fund as well as capital formation and trade-loss compensation funds or, with the approval of the Czechoslovak Commercial Bank, for a higher than plan allocation into the revolving fund;

--Unused resources of the export incentive funds may be transferred to other years if, in the judgment of the foreign trade organizations and after discussions with the Federal Ministry of Foreign Trade, it is determined to be the most effective use for those funds;

--The general manager may use the resources of this fund to encourage export plan fulfillment within the framework of enterprise and personal monetary incentives depending on the difficulty of the tasks, the dynamics achieved and export efficiency in accordance with the principles established by the Federal Ministry of Foreign Trade concerning the foreign trade organizations;

--Foreign trade organizations exporting complete plants (when the general rules are not applicable for the foreign trade organization economic incentives) are to receive the incentives on an individual basis, according to specific conditions, similar to the VHJ deliveries of complete plants for export.

b) In the Area of Financing

--In the restructuring of commercial surcharges and discounts by the foreign trade organization effective 1 January 1981:

--the principles of the comprehensive restructuring of wholesale prices of 1 January 1977 are applicable;

--a useful generalization of the commercial surcharges and discounts is to be developed;

--the profitability among the foreign trade organizations is to be made more equitable while maintaining the existing level of commercial surcharges and discounts.

--Generally valid principles for financing foreign trade organizations are to be adjusted with regard to the specific conditions of foreign trade.

--The system of the trade-loss compensation funds is to be adjusted so that:

--the main source of this fund is the profit from savings achieved on direct foreign commercial costs and, possibly, profit from price differences and fund transfers from the special economic incentive funds;

--the size of the foreign trade organization risk funds will be limited;

--this fund will be used to cover risks involved in foreign trade, including exchange rate differences;

--exchange rate differences will be charged directly to the trade-loss compensation fund (assets or liabilities);

--the Federal Ministry of Foreign Trade will be empowered to make the redistributions;

--tax liabilities of the foreign trade organizations exceeding the limits of the trade-loss fund and, further, the amounts of the tax liabilities arising from profits obtained as savings on foreign direct trade costs and price differences will be used as allocations to the ministry trade-loss compensation fund.

D. Increasing Wage Policy Effectiveness

A fundamental reorientation of the motivational effect of wages must be achieved through the consistent enforcement of the merit principle in such a way that the social and economic standing of every worker is fully dependent on his contribution to society. Monetary incentives must be linked to financial accountability and penalties. Through a significant wage differentiation according to merit, we must assure the proportional development of wages and social productivity of labor. In order to insure that this happens, the Federal Ministry of Labor and

Social Affairs, the State Planning Commission and other central agencies are enjoined to implement the following measures:

1. In the Area of Regulating the Wage Developments

a) The basic component of the wages payable must be used to exert pressure toward effective management of human labor. The size (extent) of the labor force must constrain the VHJ either relatively (proportionately), according to adjusted value added content, or according to another indicator which better expresses labor intensity of the particular activity and the need for the task, or in terms of numbers of workers.

b) In the course of plan fulfillment, the share of the basic component of wages payable for the overfulfillment of adjusted value added or other indicators is to be significantly reduced (by an average of 50 percent). While absolutely delimiting basic components, direct relation between labor productivity and average wages is to be maintained by reducing the basic component in direct proportion to the nonfulfillment of adjusted value added or other indicators; the VHJ interest in absolute savings on labor is to be intensified in selected VHJ by minor cuts or, in some cases no cuts at all [in the wages payable].

c) Motivation to increase overall efficiency is to be achieved by tying the amount (size) of the incentive component to profitability levels of production assets (factors of production) established by the five-year plan and, to export efficiency of the VHJ which make a significant contribution to export. Other than a profitability or comparability indicator may be used if it better reflects the satisfaction of the needs of the society.

d) In accepting a higher level of profitability or another indicator as part of the annual plan, the size of the incentive element is to increase in direct proportion. For exceeding the planned levels of an indicator, the size of the incentive element is to increase at a declining rate.

e) The failure to achieve profitability levels or other plan indicators and in cases of underfulfillment, the size of the incentive element is to be reduced in three steps, specifically:

--In the first step (up to 3 percent), linearly;

--In the next two steps, progressively, so that the entitlement to the incentive component (averaging 20 percent of the wages payable) is forfeited when the indicator level declines by 15 percent (the reduction in the incentive component averages 8.1 percent for every 1 percent drop in the indicator level).

f) Economic accountability and penalties for inadequately satisfying the needs of society are to be applied as follows:

--Amounts representing losses caused by low quality production (activity) are to be deducted from the actual amount of the adjusted value added and profit, used to calculate profitability. Similar steps are taken when some other indicator is used;

--The possibility of increasing the amount (size) of the basic and incentive components of the wages payable, when plan targets are exceeded, is to be contingent upon maintaining the planned sales structure.

g) The implementation of the results of technological development, innovation activity, and increases in export efficiency are to be encouraged by modifications (increases and reductions [as appropriate]) in allocations to profit sharing funds depending on the technical levels and quality of products and services (including preferential treatment for fashion novelties and de-luxe products) and on the interest rate incentives and penalties and transfers from the export incentive funds. The maximum extent of the increase, including transfers, is to be limited to a specific percentage of the available wage fund resources established by the government.

h) The function of the special compensations fund is to be altered and it is to be reestablished as a special source which could be used within the framework of the five-year period as a bond between the results of the individual years. The volume (size) of this fund is, therefore, not to be established directly and in obligatory manner but formed from allocations from profits up to the amount of realized savings relative to the available amount of wages payable. Additional allocations into the fund may be made as stated in the preceding paragraph. The special compensations fund is to be used to defray shares in the economic performance and bonuses and awards for results specified in the above special purpose allocations.

i) The possibility of increasing the available amount (volume) of the wages payable in the course of plan fulfillment, regardless of achieved results, is to be eliminated to insure a positive incentive wage development. The claims on the wage fund arising from implementation of a program's wage policy measures, from exceptionally severe natural disasters and from campaign and seasonal work are to be defrayed from reserves established at the time of the plan preparation.

j) The measures against exceeding the planned growth rate of average wages are to be cancelled and the deviations from the planned rate which correspond to results achieved are to be recognized; the deadline for rescinding them will be established at a later date. It is to be insured that an increase in average wage due to increased labor productivity be clearly reflected in a differentiation of the wages of individual employees according to merit.

k) The system of socially regulated wage developments is to be applied according to uniform principles at the level of central branch agencies and down to the level of the VHJ (or organizations under the control of VHJ). The basic links of management [VHJ's] establish rules, within their own jurisdiction, for subordinate organizations and subdivisions for the five-year period which will correspond to the principles and intentions of socially regulated wage developments.

2. In the Area of Special Compensations

a) There is to be a significant increase in the motivating effect of the incentive component of wages, with the objective of assuring a close dependence of earnings on the results achieved in the fulfillment of planned tasks and, thereby, a significant differentiation in wages.

b) Mandatory plan objectives, and the derived technical-economic indicators and norms which are used as the criteria of intrasectoral and intraenterprise planning and khozraschet [cost accounting], are to be established as the criteria (indicators, conditions) for awarding incentive components of wages (especially bonuses and special compensations). The critical objectives of increased efficiency and quality are to be given priority and an intensive stimulation, especially, the increased effectiveness of foreign currency transactions (increased per kilogram prices, the comparison of our product specifications with foreign ones, the foreign exchange demands on exports, etc.), the production and economic use of heating oils, energy, fuels, and other raw and processed materials in short supply, technological development, improving product quality, more efficient use of the manpower by making it profitable, in fixed assets and inventories, in the implementation of key investment projects in terms of deadlines, technical-economic parameters and cost consciousness.

c) The criteria for granting the incentive components of wages for collectives and specific individuals based on quality of work (its effect on the results) and responsibility are to be determined in such a way that the system of monetary incentives is interrelated and encourages the fulfillment of key plan objectives and secures a balance between the allocations to wages payable and the size of individual wages. To assure this balance, it is necessary to:

--Reduce significantly the incentive elements of wages (bonuses and special compensations) for all employee groups (supervisory, other technical-managerial employees and workers) in the event of underfulfillment of an established indicator, and to eliminate them completely at a certain level of underfulfillment;

--Link the annual bonuses of supervisory personnel to the results achieved cumulatively from the beginning of the five-year plan;

--Reduce the bonuses and special payments to supervisory personnel (including those of managers of enterprise subdivisions) for exceeding the obligated limits of wages payable;

--Increase the average planned level of sharing in the economic performance with the provision that a reduced formation of the planned wages payable will result in either reduced share pay outs or no payments at all.

d) The system for the use of the incentive component of wages as an integral part of intrasector and intraenterprise management and khozraschet is to be refined. The system of technical-economic standards and indicators which will make possible the individualization of monetary incentives and the linkage of wages, within the framework of khozraschet improvements, to the performances of particular intraenterprise departments is to be worked out.

e) Production workers and foreign trade personnel are to attain a substantive stake in the fulfillment of exceptional export objectives and in achieving import reductions through the use of goal-achievement bonuses from the fund of the Ministry of Foreign Trade.

f) In order to carry out the above incentive objectives, the entire system of wage schedules is to be centrally regulated in such a way as to support:

--Individual worker efficiency as measured by individualized indicators in a system of hourly wages, piece-work and composite and share-related wages, bonuses and efficiency incentives;

--The long-term development of personal proficiency through personal evaluations;

--A substantive stake for collectives in the overall efficiency and quality of work through sharing in economic performance;

--Strengthening of the binding nature of central management directives which determine the application of economic incentives for key personnel and the basic rules for using wage forms.

g) Adjustments in the system of wage rates are to be prepared with the objective of strengthening the incentives for increasing individual qualifications in accordance with the requirements of structural changes, technological development and the performance of more complex, and more responsible tasks under difficult working conditions, and to applying the following criteria, in particular:

--More clear-cut show of appreciation of the work of creative technical personnel, who consistently achieve outstanding work results, both in

terms of wage rate classification schedules and in the wider utilization of individual wages; also, take into account the possibility of further qualification and earnings increases for those workers who perform the most complex tasks requiring a completed secondary level professional education (maturita);

--Intensify the pressure to meet professional standards; especially [by requiring] college education, in the interest of raising the quality of management and professional work;

--Formulate and apply a method of providing for a more objective appraisal of the difficulty of working conditions, in order to be able to differentiate worker wage rates;

--Differentiation in the wage evaluation of work in multishift and continuous operations in order to stimulate a more efficient use of capital assets, should be increased;

--Awarding premiums, in cases of consolidation of professions, in completion of a standard amount of work (output) with fewer personnel, for instance, up to 30 to 50 percent of wages (given a demonstrated saving in the number of personnel) and the possibility of special lump-sum payments to workers for the introduction and consolidation of technically substantiated work norms, to be made from achieved savings in wages, are to be considered;

--Worker relocation according to the needs of economic development is to be more effectively encouraged and for this purpose concentrate the existing methods used to support stability and increase the intensity of their motivational effect.

3. In the Area of Wage Controls

a) The execution of the wage policy at every level of management is to be linked with the systematic evaluation of wage development and with control over the effectiveness and compliance with the wage regulations. Controls are to be exercised through the management chain so that it would take place at every level at least once every 3 years. It is to be considered obligatory:

--By the industrial production units and organizations, to follow the wage developments and evaluate compliance with the binding limitations on the wages payable, control the effectiveness of the wage system, to comply with wage regulations and maintain balance between the distribution and formation of the wages payable, take steps to correct discovered shortcomings and inspect for compliance, and to keep the higher authorities informed about the results of the controlling activities;

--By higher authorities, to fulfill the same obligations with respect to the VHJ and organizations, to regulate and coordinate the control activities, evaluate their results and inform the Ministry of Labor and Social Affairs about the enforcement and results of the control activities.

The Federal Ministry of Labor and Social Affairs is responsible for the regulation, coordination, systematic management, and specific objectives of control in the area of wage policy; it checks for effectiveness and correctness of the procedures in the implementation of the wage policy within the area of responsibility of the federal central agencies and the SBCS [Czechoslovak State Bank], including the administrations of these agencies; similar responsibilities are applicable to the ministries of labor and social affairs of the CSR and the SSR within the jurisdiction of the republics.

b) The pressure for compliance with the wage and other work related to legal provisions is to be increased and the central agencies of the federal administration granted full powers to penalize (fine) organizations and individuals who violate the directives. To implement these measures, appropriate legal provisions are to be proposed.

E. Increasing the Effect of Prices

The improvements in the price system, the setting of prices for new products, price constraints and price incentives are to be directed at achieving a greater production efficiency and higher product quality and, in conjunction with these objectives, promoting the khozraschet development.

To this end, the Federal Price Office, in cooperation with the State Planning Commission, the Federal Ministry of Finance, the Federal Ministry of Foreign Trade, the Federal Ministry for Investment and Technological Development, and other central agencies, are directed to carry out the following measures:

1. In the Area of Price System Streamlining

a) In the first half of the Seventh Five-Year Plan, the wholesale prices of fuel and energy resources, certain raw materials and sectors approved by the CSSR government* are to be increased by means of a one-time wholesale price adjustment in 1981-1982 combined with gradual annual increases in the wholesale prices of fuel and energy resources from 1980 to 1985; these adjustments are to insure minimal price increases by compensating for these price effects at the expense of profitability and by establishing a gradual 2 percent increase in the wholesale prices of fuel and energy resources within the established limits as a supplementary objective in the planned reduction of consumer costs.

* CSSR Government Decree No 71/1979

b) Additional price system rationalization in the Seventh Five-Year Plan is to be aimed at:

--A two-fold application of demanding technical-economic parameters from the foreign economic relations to the domestic system of wholesale prices with the attendant consequences on profits so that differences in profitability are attuned to the level of prices achieved in the foreign markets;

--Exertion of pressure to expand effective innovation activity, particularly by enabling the effects of price increases for fuels, energy, raw materials and other material inputs on the costs of the final product to be reflected in the prices according to the set conditions only in conjunction with an effective innovation in production (in setting prices for new products); wholesale prices for products with excessive profitability will be reduced but the wholesale prices of products which do not achieve the desired effectiveness [profitability] on foreign markets, as well as obsolete or low quality products, will not be increased;

--Price supports in the area of state goal-oriented programs and stimulation of effective production structure.

c) Partial and individual price changes are to be made in the course of routine operations according to their urgency and within the limits and powers granted by CSSR Government Decree No 142/1979.

2. In the Area of Wholesale Price Setting and Price Constraints

a) Price limits are to be more broadly used as economic instruments for affecting the efficiency of innovative processes in the preproduction stages; these policies are based on the measures approved by CSSR Government Resolutions Nos 214/1977 and 33/1979.

In setting price limits, their derivation from the ratio of prices in the mature foreign markets is to be insured.

b) In setting new product prices:

--The use of efficiency indicators resulting from the international division of labor to differentiate profitability rates of price incentives, and price comparison by sectors and product groups that significantly influence the effectiveness of foreign economic relations, is to be introduced;

--Generally at 2-year intervals, in justified cases, the rate tables used for setting of prices for new products, corresponding to substantiated developments in costs, profits and capital intensity and efficiency criteria, are to be updated, while maintaining appropriate price levels in individual organizations;

--In setting prices for new machinery and equipment, the maintenance of economically justified relations between the prices and the key technological (technical-economic) parameters with the objective of reducing the cost per specification is to be insured;

--The ministry and VHJ programs for implementing the methods of pricing and expansion of specification and standardization forms for setting prices for the Seventh Five-Year Plan period are to be updated.

3. In the Area of Price Incentives and Evaluation of Technological Levels and Quality of Products

a) Regarding price incentives, the Federal Price Office will insure that:

--The maximum rates for price subsidies and penalties are maintained, and price subsidies and imposts for products being exported are set primarily to correspond to the price levels in foreign markets;

--Price subsidies and imposts in selected, specifically designated production sectors, producing primarily for export but where the system of product evaluation is not yet implemented widely enough, are applied on the basis of export prices without an evaluation; to this end, a new category of price incentives relating to the efficiency of exports is to be introduced;

--Price subsidies and imposts are to be expanded to products evaluated by the ministerial testing stations according to the state testing station standards;

--Price subsidies and imposts are to be applied in the form of price surcharges and discounts on the basic price.

b) Regarding the evaluation of levels of technological sophistication and quality, the Federal Ministry for Investment and Technological Development will insure that:

--The number of evaluated products is increased so that all new products announced for mandatory evaluation under CSSR Law No 30/1968 will be evaluated at the pre-production stages; for other products, the technological level of new products manufactured on the basis of state plans for technological development will be evaluated (the feasibility and usefulness of the extension of mandatory evaluations of technological levels of new products manufactured on the basis of ministerial and sectoral technological development plans are also to be verified); the scope of the evaluations is to be further expanded with the incorporation of ministerial testing stations into the product evaluation process according to the principles applicable to state testing [procedures];

--In the process of determining the classification of a given product by degree of quality and technical development, the economic criteria are emphasized (for instance, the comparative export price indicators, lowering of the standard costs per unit of a key parameter) and conditions for the two-prong application of price subsidies and penalties, and for the effects of incentive funds, are created;

--The stringency of evaluations and a consistent penalization of obsolete products is to be increased. In addition to useful life, individual decisions on obsolescence of products being manufactured are to be made by use of technical analysis for technical development tasks rejecting economically undesirable products, particularly those whose production is energy-intensive or those that have a low energy efficiency, and products of low export effectiveness.

c) During the development and evaluation of the national economic plan, the State Planning Commission and the Federal Ministry of Finance will insure the use of such procedures whereby price subsidies for technically advanced and high quality products will not be included in the value indicators (tasks) of the five-year plan but will be included in the draft annual plan and its fulfillment; the price subsidies are to be included in the value indicators of the five-year plan for fashionable novelties and de-luxe products to the extent they were used at the starting period.

4. In the Area of Construction Budgeting and Evaluation of Deliveries in Capital Investment

In setting prices for capital construction, the Federal Price Office in cooperation with the Federal Ministry for Investment and Technological Development and the appropriate central branch agencies, will insure that the following measures are taken:

--In wholesale price adjustments for construction materials and work effective 1 January 1982, the price relations are to be rationalized so as to encourage efficient construction;

--Aggregate pricing is to be further expanded, so that it becomes applicable for all prototype construction projects, for structures and production lines being built under a recurring design and, further, for all successively advertised prototype production complexes;

--Conditions enabling the suppliers to negotiate with the investors, with the participation of general developers, are to be established;

--Aggregate prices including trade-loss compensation surcharges based on the budgets for construction projects or production systems for the first [construction] phase are to be used, provided they were not evaluated on the basis of a supplier bid;

--A modification in the procedures for setting prices for nonstandard machinery and equipment so that they may be set at the earliest possible phase of design preparation and so that a constant rate of profit may be estimated in designated organizations, taking into consideration the applicable plan indicators;

--Definitive constraints on wholesale prices and limits on purchase prices established by contracting organizations are used for:

--nonstandard machinery and equipment specified in preliminary designs, as long as their volume on individual production lines exceeds the established amount;

--imported machinery and equipment, the volume of which, in individual production systems exceeds the established amount.

5. In the Area of Price Controls

Price agencies and all those involved in price controls are enjoined:

a) To concentrate price control on the main areas of price policy--the operation and evaluation of the effectiveness of price policy measures; for this purpose, price control coordination is to be increased, particularly in implementing the controls at the intermediate management levels;

b) In the course of price controls conducted by the price agencies, measures are to be taken to increase their effectiveness not only with respect to compliance with current price regulations but also, in cooperation with the specialized control agencies (testing stations, surveys), the reasons for inadequate implementation of criteria and incentive functions in improving efficiency and product quality are to be evaluated; background data and recommendations are to be provided for the purpose of improving the price-setting procedures and personal penalties and right of recovery is to be invoked against responsible personnel;

c) Comprehensive price controls, in accordance with objectives established by CSSR Government Resolution No 23/1978, are to be insured; particularly at the stage of price-setting in the pre-production stages, in individual price-setting, and for compliance with price constraints and price relations; for this purpose, jurisdictions and accountability are to be defined not only for price staff units in developing background material for price-setting, but for all professional staffs participating in developing the background data for the price-setting process.

III. IMPROVING MANAGEMENT ORGANIZATION AND METHODS

A. Management Organization and the Division of Labor Between Individual Management Levels

The necessity of fully applying technological progress and of improving efficiency and quality, the increasing scope and complexity of economic developments, the ongoing processes of specialization in and centralization of production, and the pressing need to concentrate efforts on critical innovations--all this requires a redistribution of jurisdiction and accountability in social production management, the creation of an improved organization for the management of industrial complexes and their constituent units, the mastery of the processes of organizational integration and intersectoral management, and the application of management methods to national economic programs.

It is, therefore, essential:

That in the future, branch ministries focus greater attention on the formulation of proposals concerning the prospects and objectives of long-term development, directions in the international division of labor and socialist economic integration, structural changes and innovative processes in the relevant ministries. The management functions [of the branch ministries] in the area of technological development, foreign economic relations, fixed asset replacement, overall industrial efficiency and the responsibility for meeting national economic needs with production from within their own area of responsibility, is to be emphasized. They must recognize and work out the specific peculiarities of the individual sectors and differentiate their management and organizational structures. Simultaneously, it is necessary to assure that the ministries use their authority to enforce efficient, high-quality fulfillment of established tasks.

Economic production units are to be developed as the basic management link* in the enterprise sphere which, as a unit of comprehensive management, is a legal entity; it is a vehicle for carrying out plan and budget objectives and subject of interaction with the state budget. They must resolve and implement technical tasks and production and economic development concepts of their constituent subdivisions.

Their basic purpose in consonance with the plan is to satisfy the needs of national economy in the areas of their competence, to accelerate technological progress, to insure continued improvements in efficiency and, by merging the interests of the individual with those of the society, secure a planned social development of the entire collective, motivate the enterprises and all VHJ employees, to achieve the mutual

* These problems will of course be dealt with for VHJ supervised by agencies of the republics that have enterprises located in both republics.

and societywide objectives, and to insure the effective application of the khozraschet principles at all levels so that their results contribute to the increased efficiency of the entire VHJ.

That plants and enterprises be differentially equipped with the requisite authority and responsibilities in situations which are directly related, above all, to the fulfillment of their production technology, social, and khozraschet functions. An intraenterprise management system needs to be developed, especially in the area of operational planning, to secure the creative transference of plant objectives down to the individual workplaces and to intensify the khozraschet effectiveness as tools for increasing production efficiency and quality and to motivate employee initiative.

The current legal and organizational forms of the sectoral enterprise and concern are suitable for implementing these objectives; it is useful to apply them wherever the necessary conditions for them have been created. The existing trust of enterprises structure does not fully correspond to the status of basic management link in the enterprise management sphere.

* * *

For the purpose of a comprehensive transition of VHJ to the status of a basic management link, the competent agencies are enjoined to take a number of measures, among them:

1. Insure that the VHJ of the trust type become, as a unit, state industrial organizations with a full legal status prior to 1 January 1981, with the provision that the status of individual trust enterprises as legal entities will not change during this phase.

2. Facilitate the gradual creation of conditions for an effective degree of integration of management activities in trust type VHJ. The competent central agencies will differentiate according to the conditions of specific economic production units when granting exceptions from the above-mentioned Set of Measures during the period until 31 December 1982.

3. The management systems and internal relations within the VHJ will be designed according to the conditions at the individual VHJ, by a statute approved by the appropriate minister; the appropriate regional central agencies will modify, by means of binding provisions, the basic conditions and relations in the areas of planning, financial management, etc. between the general directorate and the [individual] enterprises which must be reflected in the statutes of the VHJ.

4. Branch ministries will develop and, together with the summary background data for the Seventh Five-Year Plan, submit to the State Planning

Commission a concept for the organization of its production technology and research bases for the Seventh Five-Year Plan period. The concept will incorporate the objectives aimed at speeding up the process of concentration and specialization of research, development and production. The principles of production-technological and territorial organization are to be implemented differentially according to specific conditions.

5. Prior to 30 June 1981, the branch ministries, economic production units, and enterprises will prepare, in their respective areas, comprehensive programs of management development which they will implement in order to ensure achievement of the objectives of the Seventh Five-Year Plan and a continued development of branches, VHJ, and enterprises based on the requirements of this Set of Measures -- particularly those concerning the VHJ status as the basic link in management -- and they will primarily provide for:

--Restructuring of the industrial and research base organization;

--Division of management functions among individual management levels and systems;

--Utilization of computer technology and introduction of computerized management systems; and

--Uniform functioning of socio-political and economic incentives.

With the objective that, to the maximum extent possible, individual management levels become capable of handling their tasks independently and under streamlined conditions, with an effective reduction in the number of plants managed, and in a most efficient manner.

6. The State Planing Commission and the CSSR State Arbiter, in coordination with the appropriate central agencies, will propose:

--A partial modification of CSSR Government Directive No. 91/1974 in the sense of paragraph 1. above;

--Overall revision of the legal and organizational form of the industrial and research base so as to become effective on 1 January 1983.

B. Increasing Accountability and Improving Work Methods of Management Personnel

Management effectiveness, and thus the effectiveness of the proposed measures in the management system, will be dependent to a decisive degree on subjective factors, especially at the level of supervisory

personnel. If the demands made on the functioning of the economic mechanism increase, then demands on the standard and quality of work of every worker and supervisor also logically increase, in particular, because their activity has a decisive influence on the results of the work of the collective as a whole. Professional qualifications, understood as a complex of political, professional and moral qualities, play an ever increasing role in improving the style and methodology of management, in intensifying conceptualization in managerial activity, and in upgrading the quality of decisionmaking. Supervisory personnel, as representatives of socialist society in the area of their activity, must serve as examples of initiative, discipline and adherence to principle; they must bear full responsibility for meeting the objectives of the subdivisions they manage and for enforcing society's interests; they may not avoid conflict situations in decisionmaking, they must be critical of shortcomings and at the same time accept and deal with critical comments. All problems related to the interests of the workers they must discuss with the appropriate trade union representatives.

In order to increase responsibility and improve the work of managerial personnel, the competent directing agencies, in cooperation with party and trade union bodies, are to insure:

1. That a closer link between methods of economic management and professional personnel management is forged so that, on the one hand, measures originating with the management system create the necessary conditions for the effective work of supervisory personnel and, on the other hand, that professional, personnel and social work is based on the needs for improving management effectiveness.

2. That a significant increase in responsibility and authority of managerial personnel result from the full functioning of the principle of a single accountable manager. To this end, a rationally structured division of labor between the line and the staff components of the management system is to be established.

3. That a strict delineation of jurisdictions and responsibilities at all management levels and down to the individual workplace be made. As one aspect of this, regulations and job descriptions are to be developed to show the ultimate responsibility and jurisdiction of supervisors.

4. That all available monetary and professional consequences be consistently invoked at all levels of management to enforce and control the fulfillment of obligations arising from the personal responsibilities of the supervisory personnel for the results of organization and subdivision activities which they direct.

5. A coordinated operation of moral, political and economic incentive factors on the decisionmaking and actions of the managers with respect to asserting the needs and interests of the entire society.

6. That goal-oriented programs management be actually implemented in the work of managers and work collectives.

7. That a systematic analysis of the standards of management methods and effectiveness and a [possible] reduction in administrative work be made so that professionals are used more efficiently to perform the management function.

8. That planning professional, personal, and social services will be introduced in accordance with the following principles:

a) The basic method of managing the development of professional, personal, and social services is in the form of "Programs," "Five-Year Plans" and "Implementation Plans."

--Programs for professional, personal and social development are to insure comprehensively that objectives and tasks established by the policy of the Communist Party of Czechoslovakia in a given area are carried out. These programs will serve the function of about 10 to 15-year forecasts.

--The five-year plans for the preparation of professional, personal and social development contain specific tasks and measures which, for the given period, are responsive to objectives established by the programs and provide means for their implementation.

--The annual implementation plans for the preparation of professional, personal and social development insure the realization of specific tasks resulting from the five-year plan.

b) Programs and plans insure the following objectives in particular:

--Raising the political-professional standards, capability and ability of supervisory personnel and the preparation of professional reserves;

--Insuring a coordinated procedure for implementing the personnel recruitment plan and the management of the adaptation process;

--Creating the prerequisites for the selection, assignment and stabilization of personnel and for evaluation according to the results of their work;

--Application of comradely relations at work locations;

--Indoctrination and education of employees;

--The development of the personal qualifications of employees, reinforcement of social responsibility, legal awareness and socialist determinism, reinforcement of socialist labor discipline, development of social involvement and strengthening the socialist way of life;

--The improvement of the working environment, and a reduction of the physical and psychological stress on the employees;

--Improvements in living conditions and housing, boarding and employee recreation and in facilities for their cultural, sport, athletic and special interest activities.

C. General Directions in Establishing Computerized Management Systems

The use of computer technology and econometrics is becoming one of the tools for streamlining the development of the system of planned management and increasing the efficiency of the national economy. The basic objective of applying these tools and the introduction of computerized management systems is to insure a substantial increase in the efficiency and a reduction of the administrative load on management, which must become the basic criterion for the use of computers in management.

To increase the effectiveness with which computers are used in management of the national economy, the appropriate agencies and organizations will insure that orientation is provided for taking advantage of computer technology in the following areas:

1. Instituting computerized system of planning budgets in accordance with the measures for improving the effectiveness of national economic planning;

2. The comprehensive use of computers in management of supplier-consumer relations throughout the entire national economy with the objective of improving the equilibrium and making possible the control of commercial agreements and a smooth flow of supplies. This area is to be clarified and implemented by the gestor supplier VHJ [acting as coordinating managers] under a systematic direction of the appropriate central agencies;

3. The establishment of computerized information systems which will make it possible to follow and evaluate the effectiveness of the replacement process as a whole.

In other areas, the installation of computerized systems of management is to be based on the tasks established by the measures in [the area of] the organization of management and the division of labor among the individual levels of management. At the same time, provisions are to be made for:

4. The computerized systems of enterprise management and computerized systems of technological processes to be carefully coordinated.

5. The building up of a unified data base and the development and use of standard solutions for intersectoral activities enabling the

integration of the individual levels of computerized systems of management.

6. The major prerequisites for the use of computers in the said areas are to be:

a) The reinforcement of the coordinating functions of the computerized management systems of the highest level organizations of a regional character and their tasks in installation of computerized management systems for the branch agencies;

b) An increase in the systematic, centrally influenced process of the installation of computerized management systems;

c) An orientation of research on computerized management systems toward clarifying the status of computerization in improving the system of planned management and toward developing long-term forecasts for installation of computerized management systems.

D. Improving the Information Systems

For the purpose of securing the tasks deriving from the Set of Measures for Improving the Planned Management System and to improve the information system, the Federal Statistical Office, in cooperation with the competent agencies and organizations, is enjoined to:

1. Intensify the analytical activity aimed at a more thorough clarification of the causes of social-economic phenomena; for this purpose, the data inputs in all information systems are to be improved to enable a systematic analysis of the individual factors affecting increases in efficiency and effectiveness of the replacement process as a whole; systematic comparison with international developments is also to be insured.

2. Insure [the availability of] information in the form of statements only to the extent required for compilation and control of the state plan, keeping the development of the economy and the society under review, and for the [functioning of economic tools]; the system of social-economic information should also be adapted to reflect changes deriving from the main directions of improving the management system in individual sectors; the controls on plan fulfillment are also to be improved in this respect to provide for evaluation on the basis of multiple factors. Other information required for understanding social and economic developments is to be provided by other forms of statistical monitoring, particularly selective surveys which would bring about a reduction of administrative requirements throughout the national economy.

3. The system of social-economic information is to be screened and updated with information necessary for solving pressing new problems in

the area of social-economic development; at the same time, redundant information should be eliminated, primarily through selectivity, and should be sorted so that it is received only by the management levels having an actual need for the information; accordingly, the current extent of statements and reporting is to be modified at all levels and a streamlined system for reporting in the Seventh Five-Year Plan developed; the information system of the VHJ, as the basic management link, is to be insured.

4. The ministerial information systems projects developed in 1975 in compliance with CSSR Government Resolution No 20/1973 and supplemental CSR and SSR government resolutions are to be up-dated; streamlining measures insuring a reduction in administrative load are to be implemented and tied to the introduction of a computerized management system.

5. Analytical and publication activities are to be analyzed in terms of the needs of the individual levels of management, particularly when evaluating the effects of management tools and primarily in the key areas of technological development, foreign trade, capital investment, and the efficiency, quality and economy of production.

6. In statistics, in addition to operational controls for annual plan fulfillment, introduce a cumulative evaluation of the five-year plan.

7. A plan for creating a territorial net of computer centers for the state administration in accordance with the principles and requirements for the installation of computerized management systems is to be developed and implemented.

8. The procedures to be followed in decisionmaking involving the regional information systems, establishment of data bases and standardized special purpose data banks are to be coordinated; for this purpose, the subject contents of the indicators in planning, statistics and accounting are to be systematically consolidated; the unit sets are to be uniformly defined and existing unjustified exceptions eliminated; the uniform statewide codes and classifications are to be strictly followed.

9. In the area of data collection, transfer, processing and distribution standardized, regulated and unified data banks and data flows are to be introduced and standardized program elements used; a progressive change to a selective data distribution according to the user needs is to be made.

10. In the system of scientific, technical and economic information the consistent introduction of factual and documented information and its practical use in managing all aspects of the replacement process, in particular that of the technological development, at all levels of management is to be insured.

E. Improving the Control System in the National Economy

In order to improve the effectiveness of control at all management levels, the competent agencies and organizations will insure that during the study of the decision and its implementation, the controls provide the management and supervisory personnel with objective information concerning the fulfillment of tasks, reasons for any departures from them and the use and effectiveness of established direct and indirect management tools, in order to effect the application of lasting remedies to any shortcomings and to enforce following the principles of efficiency in the process of formation and use of resources increasing the quality of all work and responsibility, discipline and order.

To achieve this goal:

1. In the area of controls, carried out by the management and the supervisory personnel within the organization, and in relation to subordinate organizations [the following measures are to be carried out]:

--Both personal controls and those exercised by subordinate units are to be directed at the key problems of efficiency, quality, conservation of resources and at uncovering and utilizing in-house resources and reserves;

--The realization of accepted tasks is to be assured through the effective exercise of controls according to the delimitation of rights and responsibilities, and consistent implementation of the division of labor and enforcement of the resulting responsibilities;

--It is to be insured that the findings and results of the control inspections, especially concerning causes and infractions, are used to correct problems in carrying out the established tasks, to make rigorous evaluations and improvements in the quality of work of the subordinates, managed units, and organizations, and to draw strict consequences for not meeting the specified requirements, including the timely assertion of demands for damage compensation and the use of property sanctions and other financial penalties;

--Make it a duty of all management personnel to cooperate actively with the control agencies in ascertaining the reasons for shortcomings and the persons responsible. Make the supervisors personally accountable for any shortcomings determined by the control agencies.

2. For the rational functioning of the improved system of management of our national economy, it is desirable that specialized departments, particularly in the area of the use of planned management tools, financial and khozraschet relations, wage and price policy, technological development, innovation and quality production as well as fixed asset

replacement, act effectively on the basis of information feedback on the use of management tools; for this purpose, their control activity is to concentrate on:

--The systematic and meticulous comparison of achieved results with the established objectives, tasks and manner of their fulfillment along the entire management chain, elimination of undesirable deficiencies and correcting problems;

--The thorough investigation and analysis of the reasons for differences between the prospering and lagging enterprises and sectors with the objective of using the favorable results and experiences to improve management and increase labor efficiency in the lagging enterprises;

--In the central agencies, on tasks of a conceptual nature and on the functioning of management tools in their implementation according to specific conditions of the branches and sectors;

--Improvement of periodic management reviews; in this sense, the CSSR People's Control Committee and the Federal Ministry of Finance, in cooperation with competent agencies, will develop effective plans.

3. Improve the control system within each organization so that it functions objectively and efficiently and so that the activity of individual controllers is uniformly administered so that their conclusions may be applied by the organization manager to reinforce the integrity of the decisionmaking, executory and control phases of the management process and for a consistent and effective enforcement of order, responsibility, and discipline. For this purpose, the status and activity of the control units is to be modified and directed at:

--Checking the implementation of important decisions and directives of the organization manager and at meeting the main objectives which are of a critical importance in the branch or sector, for the development of the national economy;

--Organizing controls, carried out by the specialized units in the organization and subordinate organizations, and aimed at basic problems of enforcing conservation and efficiency, taking advantage of technological developments, increasing product quality, improvement and utilization of all types of standards and constraints, and other tools and incentives serving to strengthen khozraschet relations;

--Making the necessary coordination in the preparation and realization of the plans of the control activity of all subdivisions within the organization and subordinate organizations and external control agencies and organizing the preparation of comprehensive assessments of the reasons for differences between the well-functioning and lagging VHJ or enterprises;

--Providing the organization managers with recommendations on measures needed to eliminate any disclosed deficiencies and to foster assumption of responsibility by the appropriate organization or subordinate organization personnel;

--Increasing the effectiveness of all controls in the organization and subordinate organizations and applying demanding criteria in their work. Evaluation of information concerning the internal control system and external controls and submission of necessary recommendations to solve specific problems and improve the control activities.

4. To underline the significance of the effects of controls by external agencies, objectives for this purpose will have to be established in the following areas:

--Intersectoral central agencies will examine, systematically and in coordination with each other, the key and the critical areas of the management system as well as the systems of direct and indirect [management] tools and objectively evaluate their practical application, especially in the areas of planning, finance, technological development, prices, wages, interest rates and credits, and their effectiveness in fulfilling the development objectives of the national economy; they will insure that shortcomings are corrected, that they act on the mobilization of internal resources and potential and, as an objective government agency, present the government with a program of measures to be taken;

--Specialized control agencies will check up on and objectively evaluate the quality of products and services, the efficient consumption of energy and raw materials, the quality of living and working environments, and the effective implementation of these tasks, etc., and will apply high technical and, depending on the conditions set for the job, economic criteria facilitating a comparison with advanced Czechoslovak standards but, above all, with those set by the world markets;

--To achieve greater effectiveness in their controls, these agencies will generalize their findings and communicate them to their own supervisory agencies and agencies managing the inspected organizations and act to insure that corrective action is taken in respect to the discovered shortcomings.

5. The CSSR People's Control Committee, as a central agency of the state administration in the area of controls and an objective government audit agency, will insure that the system of people's controls and the entire audit system have a positive effect on the timely and efficient accomplishment of established objectives, on the solution of problems which arise and on the behavior of agencies and organizations under their control from the view of using the tools of effective management system, to maintain order and discipline and safeguard the interests of society.

The specific work of the people's control committees is to focus on the key questions of the development of national economy, selected tasks of the state plan, at a more efficient valorization of raw materials, fuels, and energy, full use of long-term assets, growth in labor productivity, a more efficient assignment and utilization of the labor force, acceleration of technological progress, providing domestic and foreign markets with the needed goods of required quality and assortment, and at the economical and high-quality accomplishment of tasks in the tertiary sphere [services].

In upholding the interests of the society and tightening management, order, and discipline, the people's control agencies:

--Will proceed systematically and uniformly, particularly in enforcing permanent corrections and will make use of and increase the participation of the workers in the controls;

--Will orient the activity of the other control agencies and units at the basic questions of the development of the national economy and of the whole society and at enforcing efficiency and the fulfillment of key tasks in the individual branches and sectors;

--Will insure, within the area of their competence, the mandatory coordination of specialized control activity with the other control agencies and units, integrate their procedures in controlling the fulfillment of significant objectives established by the government and other relevant measures and jointly organize the control activities.

The main directions of the control activity and the basic control tasks of national economic significance for the people's control agencies as well as for the ministries and other control agencies will be established by the government on a recommendation of the competent people's control committees.

The people's control committees are enforcing highly demanding criteria in the work of all elements of the control system so that the main and fundamental causes of shortcomings and the persons responsible are determined during the controls and that lasting corrections of undesirable conditions are made, and the results of the control findings are used to improve management. The people's control committees further review the individual elements of the control system, apply the controls in accordance with the interests of the society and the needs of the improved system of planned management of the national economy, evaluate the effectiveness and efficiency of their work and make other necessary arrangements to eliminate weaknesses and shortcomings in the control system.

F. Further Intensification and Improvement of the Quality of Worker Participation in Production Management

An inseparable component in improving the system of planned management must be the continued intensification and increase in the quality of worker participation in the enterprise and VHJ management, in improving the organization of work, reinforcing the incentive system, and in utilizing resources earmarked for the economic, social and cultural development of the collective. This presumes a systematic improvement in the principles of democratic participation of workers in management. In this way, the share of the workers in the implementation of CPCZ economic policy will be increased.

Under the leadership of the Czechoslovak Communist Party, together with the Revolutionary Trade Union Movement and in cooperation with the Union of Socialist Youth and other social organizations, will take advantage of all possibilities and approaches which motivate worker initiative and intensify their participation in management.

There must be a systematic increase in the responsibility of industrial leadership to utilize worker suggestions and recommendations. Above all, the quality of production consultations must be improved and additional approaches for worker participation in management developed. The authors of justified complaints and suggestions must be protected from being discriminated against by those being criticized and those who favor obsolete labor procedures and methods.

Worker initiative must be developed, organized and directed toward the qualitative plan indicators, increase in product quality and exportability, conservation, and a higher valorization of raw materials, energy and materials in process.

The role of collective contracts and specific agreements between the industrial leadership and worker collectives, aimed at maximum resource formation and its distribution according to socialist principles is to be increased in order to improve working and environmental conditions for an all-round development of individuals.

Worker participation in management is to be developed primarily along the following lines:

1. Worker Participation in Plan Preparation

A fundamental reorientation in organizing worker participation in the preparation of five-year and annual implementation plans is to be achieved. Workers are to be persuaded to take an active role in counter-planning during the formulation of the annual plan proposals based on objectives, constraints, and economic conditions with the goal of raising the five-year plan targets for a given year through the use

of intensive production growth factors and meeting the growing requirements of the society.

Over the entire period of preparations of the plan proposal it is especially important:

--To use more efficiently the period prescribed for the formulation of plan proposals, to acquaint work collectives and individuals with the objectives of enterprises, plants and plant shops, to assure the widest possible worker participation in discussions of the annual plan proposals. Specifically to instruct competing collectives, socialist work brigades, expeditor teams, inventors and innovators and outstanding workers (holders of national and branch awards) who distinguished themselves by uncovering potential internal reserves and in the search for methods to insure more ambitious objectives;

--To negotiate with the competent union representative the plan proposal and his views on it which form an inseparable component of the plan proposal submitted to a higher management level. The competent management body is, in turn, required to inform the union representative of the extent of implementation of his views;

--Simultaneously with the preparation of a plan proposal, a proposal for the new collective contract is also to be prepared. The results of public semi-annual control surveys of plan fulfillment, collective contracts, and socialist pledges in particular are to be used;

--Along with the plan proposal, prepare and negotiate with the union representative the main directions of worker initiative development for a given period, including the assignments of socialist work brigades, comprehensive rationalization brigades, the inventor and innovator movements, and provide for their breakdown in terms of the specific conditions of the plant shops, collectives and work sites. The conditions for their implementation are to be systematically developed.

2. Worker Participation in the Implementation and Control of Economic Plan Fulfillment

All forms of worker participation in production management and work and inventive initiatives must be consistently taken advantage of in the implementation of economic plans, specifically:

--In close cooperation with the Revolutionary Trade Union Movement, the organization of production consultations in terms of their preparation, processing and implementation of worker suggestions and comments is to be improved. The program of production consultations should be systematically oriented toward critical production tasks. The production consultations are to be well planned and organized according to their purpose;

--Additional approaches to worker participation in solving the key tasks and problems related to the plant and enterprise are to be developed. In particular, they are to be organized with the participation of professional personnel unions;

--Informal socialist competitions in high efficiency and quality of all work are to be organized.

Competition between individuals, factories and enterprises must be developed on the basis of comparable indicators. For this purpose, specific conditions for the competition, the controls, evaluation and winner appraisal must be established:

--Requirements for the socialist pledges of individuals, collectives, plants and enterprises are to be raised so that they reflect the share these groups have in meeting the plan objectives, in implementing counter-plans and tasks undertaken in addition to the plan. Enterprise-wide (or plantwide) pledges must be based on individual and collective pledges;

--Higher standards are to be set and greater responsibility for meeting the objectives of the national economic plan are to be established when making joint socialist pledges in the area of capital investment, linkage of science with production, satisfying the requirements of the foreign and domestic markets, and in insuring a high quality of finished products;

--International socialist competition for the support of the comprehensive program of the CEMA member countries, for the fulfillment of objectives for socialist countries which derive from the mutual division of labor and cooperation, competition between enterprises and institutions which produce the same or closely related products, carry out cooperative construction projects, and cooperate in investment, design, research and other projects, is to be developed in enterprises, plants and organizations;

--The all-round development and an increase in the quality of the socialist work brigade movement, comprehensive rationalization brigades, innovator and inventor activities, and individual and collective suggestion programs by technical engineering, scientific and management personnel, is to be carried out;

--Advanced experience and work methods and their exploitation in daily operation are to be purposefully studied, publicized and implemented.

Broad worker participation in controlling plan fulfillment and their active cooperation in the elimination of existing shortcomings must be insured. In addition to the experience of the workers, economic analyses, statistical data and information furnished by the Czechoslovak State Bank must be used in these individual controls. In this way,

conditions are to be created for increased worker influence over the objective evaluation of achieved results. To this end:

--Direct worker participation in systematic controls of the fulfillment of the plan and collective contracts, the evaluation and the appraisal of achieved results is to be consistently encouraged as an inseparable component of management activity;

--As provided for in the law on ROH [Revolutionary Trade Union Movement], workers involvement in the process of applying the forms of social controls are to be discussed with the appropriate union representatives in addition to the forms of mutual cooperation. Controls must be oriented primarily toward uncovering potential resources for increases in labor productivity and the efficiency and quality of production. The rights of the unions contained in the resolution of the Fourth All-Union Congress and other legal provisions are to be consistently recognized, persistent attention devoted to the controls of the plan for professional preparation and personal and social development;

--Public controls of adherence to socialist legality, labor and technological discipline and of the utilization of important machinery and equipment must be carried out. Increased attention must be devoted to questions relating to the work environment, safety and health maintenance on the job;

--Statistical procedures related to the development and results of work initiatives must be improved.

3. Worker Participation in the Evaluation of Achieved Results

There must be a consistent application of socialist principles of compensation and the creation of conditions for a permanent increase in effectiveness of financial and moral work incentives and for strengthening their dependence on the achieved work results of collectives and individual workers. In relation to this:

--Approaches to mutual cooperation as well as specific forms of broad worker participation in the preparation and implementation of all basic wage-related political measures must be worked out with the appropriate union representatives. Increased attention must be devoted primarily to their participation in the elaboration of more precise work standards and criteria as the essential conditions for a justified wage differentiation;

--The effectiveness of financial and moral incentives must be publicly evaluated. The consequences of fulfilling or failing to fulfill planned objectives in terms of volume, quality and product mix under the personal and collective incentive system must be explained to the workers;

--The incorporation of the effects of incentives and penalties, especially for work quality, into a specific incentive system must be insured, thus producing a direct dependence of financial incentives to pertinent work collectives and individuals;

--The role of the moral appraisal of the work performance of individuals and work collectives must be significantly increased. In this regard, the value of work appraisals of worker collectives in terms of Red Banners must be increased;

--There must also be a gradual introduction of evaluations for management personnel according to the results in their development and in the contributions made by the creative initiative of the workers.

The CSSR government, in cooperation with the Central Council of the Trade Unions, in the spirit of the principles for improving the system of planned management of the national economy after 1980, will evaluate the background data received earlier and will adjust them according to the changed conditions.

At the same time, it will discuss the recommendations on new measures for intensifying worker participation in management and for further developing the worker initiative.

G. Adjustments to and Improvements in the Economic Provisions of Law

As a part of improving the planned management system of the national economy, an immediate comparison of measures established in the earlier parts of this document with the currently applicable regulations will be made and the necessary changes in legal provisions gradually introduced so that the law will not only be responsive to national economic changes deriving from these measures, but also act forcefully to effect their implementation and thus foster continued positive development of our society.

The responsible agencies are enjoined particularly:

1. To prepare on time recommendations for the updating of the commercial code and the law on national economic planning to become effective no later than 1 January 1983 in order to improve the efficiency of planning, accounting, the contract system and the system of contract penalties and legal adjustments of commercial agreements, particularly in the area of import and export, research and development and the resolution of some questions falling into the area of the organization and management of the industrial technological base.

2. For implementing the new elements of the system in the area of planning, accounting, and negotiation of supplier-consumer relations in the planning process and the contracting system, a new directive on

accounting and the negotiation of contractor-consumer relations in the planning process which would supersede the current State Planning Commission and State Arbiter Decree No 33/1975 of the Collection of Laws is to be published.

3. Systematically and purposefully, we must simplify legal procedures and reduce the number of legal provisions, provide a clear view, coordination, comprehensibility, and relative stability. Legal provisions are to assign specific duties, and delimit more consistently the jurisdiction and responsibility of the individual levels of management, agencies, and organizations for honest and timely fulfillment of planned tasks.

4. By no later than the end of 1981, insure the publication of a ministerial or a branch collection of the generally binding legal provisions applicable within their scope of activity as well as to the needs of professionals in the agencies of the federal administration and economic management. These journals are to be updated annually.

5. Effective with the beginning of 1982, provide for systematic analyses of the currency and effectiveness of the legal provisions published within its area of activity with the objective of eliminating obsolete and out-of-date legal provisions and to improve the system of legal procedures in economic relations.

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END

JPRS 76655

20 October 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2055

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20 October 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2055

CONTENTS

INTERNATIONAL AFFAIRS

USSR-Yugoslav Trade Results, Prospects Assessed
(Obrad Ignjatovic; PRIVREDNI PREGLED, 12 Sep 80)..... 1

BULGARIA

Acute Shortage of Building Materials Depicted
(Petko Ivanov; RABOTNICHESKO DELO, 30 Aug 80)..... 4

CZECHOSLOVAKIA

Briefs
Fire Damage Report 7

HUNGARY

Role of Price Policy in Attaining Economic Goals Discussed
(Bela Csikos-Nagy; KOZGAZDASAGI SZEMLE, Jul-Aug 80)... 8

Role of Railroad in International Shipments Described
(Bela Szabo; KOZLEKEDESI KOZLONY, 17 Aug 80)..... 21

YUGOSLAVIA

Progress, Problems of Self-Management Enterprises
(Ranka Adum Cicak; VJESNIK, 15 Sep 80)..... 36

Advantages of Self-Employment Discussed
(Editorial; EKONOMSKA POLITIKA, 28 Jul, 18 Aug 80).... 39

Foreign Trade Data for Mid-August 1980 Given
(Simona Jankovic; PRIVREDNI PREGLED, 12 Sep 80)..... 49

Statistics Bureau Releases Employment Figures for April
(EKONOMSKA POLITIKA, 25 Aug 80)..... 52

Organization of Private Farmers Lagging
(Mirko Sajler; VJESNIK, 27 Aug 80)..... 53

Average Private Farm Income, Expenditures in 1979
(EKONOMSKA POLITIKA, 1 Sep 80)..... 56

Croatian, National Outlook for Edible Oil Production
(Tomislav Kapetanic; PRIVREDNI PREGLED, 16 Sep 80).... 57

Other Republics Said To Earn Hard Currency From Croatian Goods
(Lazo Drljan Interview; VJESNIK, 13 Sep 80)..... 60

Slowdown in Slovenian Production, Employment
(EKONOMSKA POLITIKA, 8 Sep 80)..... 68

Slovenian Wheat Consumption, Production
(A. Jovanovic; PRIVREDNI PREGLED, 9 Sep 80)..... 69

Agricultural Problems, Fall Planting in Croatia
(Milivoj Stipanicic; VJESNIK, 18 Sep 80)..... 72

Private, Socialized Agriculture in Serbia, Kosovo
(EKONOMSKA POLITIKA, 18, 25 Aug 80)..... 75

Agriculture in Serbia Proper
Agriculture in Kosovo

Power Potential of Trebisnjica River To Be Tapped
(Vlado Mrkic; OSLOBODJENJE, 9 Sep 80)..... 77

Briefs
Builders in Iraq 81
Improved Bank Liquidity 81
Slovenia-Vojvodina Cooperation 81

USSR-YUGOSLAV TRADE RESULTS, PROSPECTS ASSESSED

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 12 Sep 80 p 3

[Article by Obrad Ignjatovic: "Every Effort Will Bring Improvement"]

[Text] Yugoslav-Soviet economic cooperation is steadily expanding and becoming more solid. In the current 5-year planning period it has become more diverse and there is a stronger orientation toward longer-range transactions, above all in the fields of machinebuilding and power machinebuilding, shipbuilding, production of transportation equipment, fuel and energy projects and other sectors. This has also helped to broaden the volume of cooperation appreciably and to find new products for exchange and new forms of cooperation. The results achieved are important and constitute the best confirmation that there are opportunities for both sides and also an interest in further expansion of cooperation. This judgment was expressed at the last meeting of the joint intergovernmental committee for economic and scientific-technical cooperation, and it is confirmed by the datum that the value of trade will not be $14.5 billion, which was agreed on for the current 5-year period, but about $17 billion. This success is the result of the needs of the economies of the two countries, but also of the activity of business executives and government institutions, who were very interested in the further advancement and expansion of cooperation in the period to come, a period for which the framework of cooperation is being prepared, and this particularly applies to the long-range forms of cooperation.

Good Prospects for Augmented Cooperation

In the current 5-year planning period Yugoslav machinebuilding and power machinebuilding developed their capacities, and in the coming 5-year period they will be able to deliver to Soviet trading partners twice as many products as in this period. But in the current 5-year period $400 million worth of metallurgical, coking and other equipment were exported from Yugoslavia to the Soviet Union. This means that this value could be doubled, and therefore activity of business executives of the two countries is oriented toward finding products in which there is a mutual interest.

The export of equipment for fuel and power projects, construction and shipbuilding, construction, transportation and other sectors also offer good opportunities for augmenting trade.

The Belgrade export-import organization Centrotekstil is the largest exporter of textiles, leather products and products of other materials. During a visit to Moscow our correspondent recently visited the branch office of this organization and talked to the director Aleksandar Vidanovic about the volume of trade and future possibilities.

"The volume of trade has been growing steadily. Last year we delivered $390 million worth of goods to Soviet customers from Yugoslavia, and this year deliveries worth $500 million have been contracted for. We are exporting to the Soviet Union men's and women's street shoes, sewn garments and knitwear, and articles made of leather, artificial leather and other materials. These are, then, consumer goods, and in this way we are making a substantial contribution to equalizing the trade balance. We are importing from the Soviet Union considerably less than that, mostly cotton, raw cattle hides and fur. The volume of these exports can best be seen if we mention that we will deliver to Soviet customers this year 11 million pairs of footwear. Even by these larger exports we have not altogether utilized all our opportunities," director Vidanovic said, supporting this as follows:

"Our export of footwear, though large, has a share of only 17 percent in total imports of the Soviet Union, the share of our knitwear is 10 percent, and the share of our garments only 4 percent. The Soviet market's needs for these products are large, and in coming years we can supply it more abundantly, provided, of course, that we organize ourselves better and are competitive, which is rather difficult to achieve. When I say that we will be better organized, I have in mind the attempts of certain of our organizations to disrupt the unified and organized effort on this large market."

The Success of the Youngest Exporter

The Pristina export-import organization Eximkos has had the shortest experience on the Soviet market. Though the representative office has been in existence for only 2 years, its director Hilmija Hasanagic says that favorable experience has been gained in cooperation, though there are also problems. Nevertheless, there are ever fewer problems, and business is improving.

"We have gotten to know our trading partners and the market, at a time, to be sure, when difficulties are arising because of our country's pronounced trade deficit. We are exporting nonferrous metals and storage batteries to the Soviet market. The volume of trade is steadily growing, but our imports from the Soviet Union are larger than exports, and therefore our first task is to improve their position in foreign trade. This will not be easy, of course, since our organization is also an importer of equipment and complete plants for the province of Kosovo," director Hasanagic pointed

out and explained in more detail that metal fabrications and equipment for mines and the ferronickel smeltery are being imported for a project being done in cooperation with specialists from the Soviet Union and with credit from that country.

In the Eximkos office we also met Milosav Mojsilovic, commercial director of Trepca for many years, who is representing in the USSR that large firm, along with others, at a shorter distance.

"Trepca's products are storage batteries, industrial batteries and a wide range of other products of nonferrous metals; they are in ever greater demand, and we are striving to increase our exports of finished products or semifinished products and to reduce our deliveries of metal. In recent years the Trepca combine has built large manufacturing capacities. It is our intention, then, to sell the largest possible amounts of products in a higher phase of manufacturing," Mojsilovic indicated, emphasizing that all the conditions exist for delivering $80-100 million of Trepca's products to the Soviet market in coming years. Talks about expanding cooperation, especially with the automobile industry and industrial enterprises, are under way and it is right now in fact that the framework is being examined and established for trade over the coming 5-year period.

Complete Projects

Kosovo's needs are also great as to imports of raw materials, equipment, technology and fuel and power facilities and construction of mines and complete industrial plants.

Hilmija Hasanagic, director of the Eximkos representative office, says that Soviet specialists are the designers of the program of the smeltery for making ferronickel. They will provide the technology and train specialized personnel to work in this facility, which should make a new contribution to faster development of Kosovo. Under the agreement they will be responsible for running in not only the Soviet part of the equipment and technology, but also the equipment purchased from three western countries.

"This project is a good example of cooperation between Yugoslav and Soviet specialists with respect to finding and providing the most appropriate equipment and technology. It actually involves a combination of Soviet advances and advances of the advanced western countries," director Hasanagic said.

Representatives of other Yugoslav manufacturing and import-export organizations are also making efforts to find projects in which there is mutual benefit and for which there is a demand in order to create conditions for further expansion of cooperation and to augment the volume of trade. There are quite a few ideas, suggestions and possibilities, and all of this is now under consideration. Taking advantage of them should result in restoring the equilibrium in the balance of payments, which now, because of Yugoslavia's deficit, is causing quite a few difficulties. That is why every new export effort makes things easier, and is at the same time a contribution to fulfilling the ambitious plan for cooperation.

ACUTE SHORTAGE OF BUILDING MATERIALS DEPICTED

Sofia RABOTNICHESKO DELO in Bulgarian 30 Aug 80 p 2

[Letter to the editor by Tetko Ivanov: "Black Worries for White Lime"]

[Text] I needed lime and sand to make some repairs to my home. I went shopping from store to store. It took me several days just to find out where to buy what I needed. It turned out that the lime kilns in some of the storehouses were empty; in others, they were full but one had to wait for the lime to set and they were going to sell it in 2 or 3 days. When I went there on the exact day, what do you think I saw: crowds, cars, wagons. The customers had already taken up position at the break of day. They were scooping the lime out, filling kettles, nylon bags, buckets, transporting it in Ladas, Moskoviches, wagons, dump trucks and what not.

I inquired at the Georgi Kirkov taxi service but it turned out that dump trucks were available only with a permit in advance. And by the end of the day the lime kiln was cleaned out and I remained empty-handed but at least I knew what to do from there on.

I made my own investigation which day they were going to have lime again and ordered a car for that day. But this time again fate was against me since they had opened the kiln 1 day in advance.

Customers Racing Against Each Other

There was no lime, no sand. I asked for assistance at the "Fuel" city enterprise. They suggested that I buy ready-mixed mortar. Wonderful! Nothing better than that! I was enchanted that the leadership had taken measures to ease the lot of the citizens. Early in the morning of the following day I went to Oborishte storehouse to get the permit. It turned out that I had overslept. It was only 0700 and it was already late.

Whoever needs a permit must be there early in the morning and the people arrive at midnight. Dressed warmly, they bring their blankets and spend the entire night in front of the door. At about 0730 they are ready and get set in front of the door. The custodian opens the door and a very

unusual race takes place. Young and old, women and men race as fast as they can to the window where permits are issued. You cannot imagine the humiliating picture, you get sick at heart.

But, first come first served. You need strong legs and, in the small corridor next to the window, strong elbows as well.

This painful experience is quite often useless. Useless because the news coming from the window is usually bad: "The machine is out of order, we are not giving any mortar today." "We have not received any sand." "The freight car with the bricks has not arrived yet."

Anyway, it took me 2 weeks to get the permit which gave me the right to buy some mortar. With the permit tucked in my pocket, I went to Slatina concrete center. Again waiting. Waiting is a way of life. The driver of the taxi I had obtained went in the morning so-to-say somewhere nearby and was supposed to be back right away but by noon he was still not back. Who knows where he disappeared to.

The mechanic only worked till noon. The shaft was clogged, he said, there was nobody to clean it. He took his hat and left. And what could we do but go home as well. Well, tomorrow was another day.

I arrived early the following day. Work had started but the machine was again out of order. The shaft was not cleaned either. We took the shovels to help and spared no muscle so that the work could go on and not waste one more day. But, it turned out that our permits were not valid. They were valid only for Friday. That day the orders of some other people were to be filled. And what about ours?

"You have lost your right but you will receive your money back and will have to start from the beginning, in line again."

"But it's not our fault," we argued with the center manager, Comrade Genchev.

"It doesn't matter. That's the order."

Once again wasting time, once again sleepless nights and racing and pushing in front of the permit window.

A Strange Way To Dip Into the Customers' Pockets

According to the rules we had to go to the automobile depot in Malashevtsi to get our money back for the invalidated permits. But this was not easy either. We again waited in line at two windows to obtain three signatures so that the teller could give us the money. But not all of the money.

"Why?" I asked one of the employees.

"That's how the instruction reads. You did not show up on time. The driver had to wait, the enterprise lost money because of you."

"You are wrong."

As a proof the employee showed me a piece of paper with some scribbles on it, supposedly the signatures of two witnesses certifying that I had been late at the concrete center. Neither the names of the witnesses nor their addresses were legible. And this they call a document! I wonder how the managers of the automobile depot accept such forgeries which are the basis on which the customers are robbed.

Citizen Mísho Takov had 10 leva deducted from his receipt even without any document because the driver had made a trip to the concrete center. The driver, however, had not driven to the concrete center specially for him. Until noon the driver apparently had transported mortar for other people. And second, was it the fault of the customer that the machine was out of order and that work had to stop. The "Fuel" enterprise should bear the responsibility for it. And if damages were incurred the enterprise should be liable. Why do they skin the customer for everything? In this case the customer had incurred damages. He had wasted days and days, spent nights at the stores, had not received the building materials, had not been able to transport it and, to top it off, they dip into his pocket.

The party and the government try to improve the services of the people. This was stressed in the decision of this year's 30 July Plenum of the BCP Central Committee. The ministeries, departments, okrug people's councils and economic organizations have the duty to fulfill the tasks stipulated in the report of Comrade Todor Zhivkov made in Ruse on 20 May of this year.

It is obvious from these incidents that some departments do not work yet according to the new requirements. Many working people spend their vacations in the warehouses, miss work, violate the set discipline and waste precious time in seeking building materials. Are you aware of this, Comrade Kuncho Dedev, chief of the Fuel and Building Materials Economic Directorate, and you, Comrade Teodosi Petrov, chief of the Fuel and Building Materials City Enterprise? Why are services so poor? Isn't there a way to resolve this problem? It cannot go on like this. A great part of the housing fund of the country consists of houses belonging to the citizens and these houses should be kept in good condition, should be nice and warm, and cozy, and our towns and villages should be beautiful. But for this we need building materials.

Nature has given us plenty of stone, lime, and sand. One needs only organization, initiative and efficiency to supply the people with building materials. And this must be done as fast as possible since fall is coming soon and winter is right behind it.

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BRIEFS

FIRE DAMAGE REPORT--During this year's harvest in Slovakia there were 53 fires, which caused damages of more than kcs 1 million. This is 13 fires and kcs 200,000 more than last year. The fires destroyed 47,000 quintals of straw and 2.5 hectares of unharvested grain. During the harvesting and storage of fodder, the fires caused damage worth more than kcs 2.5 million, and 23,000 quintals of dry bulk fodder were burnt. [AU221743 Bratislava PRAVDA in Slovak 19 Sep 80 p4 AU]

CSO: 2020

ROLE OF PRICE POLICY IN ATTAINING ECONOMIC GOALS DISCUSSED

Budapest KOZGAZDASAGI SZEMLE in Hungarian No 7-8, Jul-Aug 80 pp 831-841

[Article by Bela Csikos-Nagy, chairman of National Material and Price Office]

[Text] The role of price policy in the planned development of the socialist economy may be defined in a number of ways. The way in which this question is resolved also determines the means used to coordinate the plan with the market, since the price function is an organic part of the market mechanism. Socialist production is possible when the state relies on the market in the management of the economy; it is also possible when state policy aims to narrow the market. Within the framework of socialist property relationships, the choice of methods is largely a matter of government deliberation. This is one of the factors in determining the extent to which the economy can develop at an optimal pace.

Defining the role of price policy raises a number of complicated questions. This is the result of the hierarchical system of autonomous goals of economic policy. The various phases of various production sectors and the relationships among them are specific instances of the relationship between ends and means. Social production is a single integrated process in which every product is an end from the standpoint of the preceding production phase and a means for the next phase. At the same time, all products are means of future and present consumption. The question is: what should be the organizing principle that regulates the structure of production? Reference to state planning alone does not provide an answer to the question. In this case, a further question must be answered: what are the criteria governing state planning? These may be quantitative or qualitative. In the former case, they ensure the equilibrium of the system of product balances with a view toward technical relationships. In the latter case, balance is achieved with a production structure associated with economic efficiency. In the former case, price serves the structure; in the latter, it provides guidance for it.

Until 1956, our economic policy followed the former direction; after 1956, the latter. The turning point was founded on a new economic policy. In agriculture, compulsory planting plans and product deliveries were eliminated

in 1957. This meant that the purchase price turned from a structural adaptive mechanism into a structure forming mechanism by relying on financial processes. In non-agricultural sectors, the activation of a price function was indicated in 1957 by the introduction of enterprise wage management and profit sharing. The fundamental change occurred in 1968 with the economic reform that abolished fixed product turnover, expanded self-financing of enterprises and changed the system of fixed prices to a mixed price mechanism. This trend was reinforced by the 1980 changes in economic regulators.

The Origins and Aims of the 1980 Price Reform

The MSZMP Political Committee established working committees in 1976 to analyze a number of topical economic policy issues. A reexamination of economic policy was made necessary by the changes in the conditions of the international division of labor and, in particular, the increasingly difficult conditions for economic growth. The party adopted, in the wake of the proposals of the working committees

--a resolution in 1977 on long range foreign trade policy and an efficient transformation of the production structure;

--a resolution, in 1979, on the guidelines for the long range development of the price system.

The party resolution outlined the long range development directions of the price system in five points. Briefly, they were as follows:

a) Establishing an organic connection between domestic and world market (foreign trade) prices in order to place heavy costs, promote above average development of efficient production activities and the resulting change toward a more efficient production structure for our national economy.

b) Restoration of a two-tier price system; to this end, the creation of a price system where a substantial portion of net social income is generated through turnover taxes on consumer goods.

c) Changing the net income structure of producer prices in conjunction with the establishment of a two-tier price system; elimination of the charge on assets, reduction of wage taxes calculated in producer prices as well as reduction of the general level of asset-related profits derived from producer prices.

d) Long range development of the consumer price system in a direction conducive to the emergence of a socially advantageous consumption structure and a more stable equilibrium between supply and demand, by providing a suitable basis for the development of production.

e) Increasing the flexibility of the price system in order to ensure that prices reflect changes in foreign trade prices and the judgment of the domestic marketplace.

Those who agreed with the guidelines of long range development of the price system also emphasized, in general, that these principles must be utilized to the maximum extent in the course of the 1980 price reorganization. The 1977 party resolution on the guidelines for foreign trade policy and development of the production structure also pointed to the urgency of a price reorganization to ensure that prices play a suitable role in governing rational economic decisionmaking. Its timing was set for 1980 by the party resolution regarding the price reorganization due to the amount of work necessary for preparations.

The 1980 price reorganization and the simultaneous introduction of a new price mechanism took place in order to provide the foundations for the strategic goals of the Sixth Five-Year Plan.

Accordingly, our price policy for the 1981-1985 period must ensure that prices

--act to rationalize the structure of consumption, primarily by following producer prices in a more consistent manner;

--enforce conservation of energy and raw materials and encourage activities aimed at the exploration of domestic natural resources, including secondary raw materials;

--provide maximum incentive for economic operations that are considered efficient in foreign markets, for improving foreign trade prices and the terms of trade; contribute to the growth of economic exports and rational capitalist import substitution within the total system of direction and regulation;

--provide guidelines for economic decisions and structural transformation, not just on the day of price reorganization but in the process of price information.

These requirements can only be met if prices can flexibly adapt to world market price relationships. We must be able to accomplish such an adaptation while being mindful of our policy on living standards and relative price stability.

We are now in a position to put such stringent requirements on the price function because price policy is increasingly becoming an organic part of a consistent economic direction that is based on the laws of production. Price policy had a favorable beginning because the outflow of domestic purchasing power began to be restricted in recent years. An effort to prevent overheating of demand will continue to be one of the basic features of economic policy.

From the standpoint of the operational capability of the new price mechanism one very important fact is that, in addition to strengthening the equilibrium of purchasing power and the supply of goods, we are adopting organizational measures to encourage healthy economic competition. We are also strengthening normative income regulation by reducing individual discrimination. In a few years we hope to see conditions that will permit the introduction of a unique currency exchange rate.

The introduction of prices proportional to value was regarded as an important task as long ago as the 1960's. In 1967 the Central Committee stated that the price relationships to be created in the course of two or three five-year plans must be such that, aside from some well-defined exceptions, the price paid by the consumer for goods and services is equal to the socially necessary cost of producing those goods and services.

The price policy guidelines of the Fourth Five-Year Plan, encompassing the period from 1971 to 1975, contained the first stage of the transition of prices proportional to value. With the exception of the meat price increases, they have been fully implemented. Raising the consumer price of meat had to wait until 1976. The second stage of the transition to prices corresponding to value was defined in the first draft of the price plan of the Fifth Five-Year Plan. This had to be taken off the agenda as a result of the world market oil price explosion.

In the new world market situation, the discrepancy between consumer price relationships and cost of production has increased; on the other hand, the order of priorities has changed. On the one hand, there seemed to be no basis for a full-scale transition to prices defined by value during the 1976 to 1980 period, although there was an agreement on the necessity to make substantial progress in this area. On the other, it seemed urgent to partially or fully eliminate certain budget price supports and thereby influence the consumption structure in accordance with our foreign trade interests. This change in the order of priorities seemed important because, as a result of the world market oil price explosion, the terms of trade shifted against us. This made it necessary to use foreign loans to ensure uninterrupted operation of our national economy.

The 1973 oil price explosion shifted the focus of attention to questions of prudent material and energy management. Relatively more expensive materials and energy meant that there is a narrower range of finished and semifinished goods requiring imported materials and energy that can still be exported at a profit. The profits themselves have also declined, that supply enough information in this regard and provide incentives for rational materials management, including the utilization of secondary materials and scrap materials.

Competitive Price Formation

In view of these conditions, it seemed important to put the domestic value of basic materials and energy resources on the basis of the maximum cost (nonruble import price). It may be argued that at least 70 percent of the material and energy requirements of our national economy are satisfied from domestic production or from CEMA imports. Yet, it was necessary to consider two factors. One is that contract prices used in trade among CEMA countries are calculated on the basis of capitalist world market prices. The other is the impossibility, in general, of increasing the volume of material and energy imports within CEMA during the 1980's, with the exception of free currency arrangements based on existing world market prices. This means that all additional material and energy requirements for expanding domestic production must be supplied at world market prices; therefore, it is sensible to create incentives for import substitution on this basis.

Another new feature of the 1980 price reorganization is that it provided the foundations for competitive price formation in the processing industry. We call this type of price formation competitive because:

--the domestic value of natural resources (energy and raw materials) is governed by world market (nonruble) import prices;

--the domestic price calculation of finished goods is governed by world market (nonruble) export prices.

In our trade-sensitive national economy, productive investment can be considered efficient if it contributes to exports or substitutes for imports. Consequently, economic efficiency is closely related to international competitiveness and the governing function of prices depends on our ability to regulate the results of enterprises on this basis.

In this system of price formation, price is an objective quantity defined by world market conditions as they apply to the Hungarian People's Republic and our ability to stand our own in that marketplace. Under such a price system this ability is the yardstick of production structure because only those sectors and enterprises will be able to operate profitably that are capable of paying the world market price for materials and energy while keeping the production costs of their export products under the level of the export prices they can charge. This is precisely the way in which foreign trade prices put pressure on production costs by eliminating the irrational situation within the production cost price system that allows extra costs to be passed on automatically to the customer. In this regard, competitive price formation will generate a trend toward efficient production structure while at the same time it enforces material and energy conservation.

This is in our fundamental interest to employ prices calculated on the basis of export prices in a wide area. However, this was possible only in industry, and even there there are exceptions. In agriculture it was necessary to

refrain from introducing competitive price formation because the world market price level of agricultural products conforms to the production conditions in regions outside Europe. This price level is so low that in Europe it is not possible to develop agriculture on an intrinsic basis. This is why after World War II the establishment of the Common Market in Western Europe was accompanied by the introduction of a joint agricultural policy which meant regional prices at a level above world market prices. Furthermore, this is why even socialist countries with an agricultural surplus saleable in foreign markets would consider the establishment of a new community agricultural price policy within CEMA quite important. This would eliminate the present situation where, although CEMA countries set prices higher than world market levels to support their own agriculture, and even use budgetary means to this end, they refuse to do the same in the area of community relations.

In order to widen the range of competitive price formation in the processing industry, the system has been introduced even in sectors where consistent application requires a 4- to 5-year grace period.

The 1968 price reform has done away with the system of official prices for all products and services and with the policy of a price freeze in general. At that time we adopted a flexible price mechanism together with the principle of price "maintenance." Based on the experience of the last decade, there seems to be a basis for requiring that the guiding role of price be expressed in the process of price formation.

The changes in the price mechanism implemented in the period from 1968 to 1979 have essentially developed the methods that serve as the basis for operating this flexible price mechanism while preserving the relative stability of prices. It is also in keeping with the nature of things that when Hungarian price relationships are regulated by processes occurring outside of the national economy and the world market price trends that reflect them, then this price mechanism is more sensitive to inflation than the one introduced by the 1968 price reform. Price policy can, of course, correct world market price relationships, but only in a way that does not endanger the translatability of efficiency into international competitiveness.

Three Phases of Price Reorganization

For the first time a price reorganization is not finished with the introduction of the new prices. To begin with, we defined three phases of the price reorganization. Modeling was completed in June, 1979; implementation was completed in December 1979; the correctional phase will last until September, 1980.

Modeling was based on published principles of budgetary calculation and price formation, using the 1977 nonruble import prices for energy and base materials and an exchange rate of 38 forints per U.S. dollar. Implementation was carried out on the basis of nonruble import prices for energy and base materials forecast for 1980 and a commercial exchange rate of 34 forints per

U.S. dollar. The upvaluing of the forint was intended to compensate for the inflation occurring in the world market during this interval; this, however, was not quite successful as a result of another price explosion in 1979. The task of the correctional phase is to compensate for the errors we made in the forecasting of world market prices and to ensure, when possible, that losses and profits in competitive sectors reflect, after correction via price preferences, their international competitiveness, and that noncompetitive sectors cannot achieve a better position than progressive industries just because they continue to use production cost price formation methods.

The first lessons of the new system of economic management regulators and the new price mechanism introduced in 1980 were summarized in May. To this end, we used repriced enterprise balance sheets for 1979, enterprise balance sheets for the first quarter of 1980 and price statistics. In the course of our analysis of the price conditions that emerged we found that, while in the area of consumer prices there are hardly any deviations from the plan, in the area of producer prices the difference is substantial.

As part of the 1980 price reorganization, most of the consumer price changes, representing a significant increase in the consumer price level took place in July, 1979. Consumer prices could increase no more than 0.8 percent in January, 1980 on account of the producer price reorganization. Taking this into consideration, consumer prices can increase by 3.7 percent in 1980 as a result of measures taken in 1980 and market factors during the year.

Relative to December 1979, consumer prices increased by 1.1 percent in the first quarter. This is only slightly higher than planned and is due to two factors. First, the turnover of winter clothing sales was less than usual. Second, the consumer price level of seasonal goods was 35 percent higher in the first quarter than in the same period of last year. High prices for seasonal goods have no substantial effect on the consumer price level for the whole of 1980 because turnover is low in this period. On an annual basis we expect a 17- to 20-percent rise in the consumer price of seasonal goods. It must be noted that, as a result of unexpected increases in world market price levels. It was necessary to employ "extraordinary" measures (exchange rate reduction, consumer price supports) to keep the consumer prices at the planned level.

One of the goals of the 1980 price reorganization was to eliminate the 4 percent negative difference in the two-tiered price system in 1978 and to ensure that consumer prices in 1980, calculated on the basis of the new starting prices, are 3 percent above producer prices. This would have fit in with a 7 percent rise in industrial producer prices. Yet, the first 3 months' price index calculated by the KSH [Central Statistical Office] indicated a 14 percent industrial producer price increase instead of the 7 percent. In the other productive sectors of the national economy, price levels developed according to plan.

Under these conditions, a resolution was made to move forward the start of the work on price correction. We ordered self-correction by enterprises but the results were more modest than expected. According to calculations performed to shed light on the causes behind these differences, the macrolevel input-output analyses did not pay sufficient attention to the indirect effects of higher material and energy prices (the so-called cumulative coefficient); this has led to a calculated industrial producer price increase 3 to 4 percent lower than actually occurred. Since most of this is concentrated in mining metallurgy and investment machinery, its effect on the two-tiered price system is slight. There is, however, another factor what needs to be taken into account. The introduction of new industrial producer prices was linked with a quarter-long price freeze. After the end of the freeze, price formation based on foreign trade prices was introduced on 1 April 1980. Simultaneously, prices were adjusted to current world market prices when the producer prices of certain energy resources were modified on 1 July. The April measure raised producer prices in industry by approximately another 5 percent, due to a larger than expected rise in world market prices for energy, in spite of a 5 percent lowering of the exchange rate of capitalist currencies on 1 March. This has a more pronounced effect on the two-tiered price system. We can expect consumer prices in 1980 to be only 1 to 2 percent above the producer price level.

First quarter profits were somewhat below the planned level. Nevertheless, profits are likely to reach planned levels because our experience shows that first quarter profits are usually rather low due to a number of transitional factors and efficiency of operations will improve in the course of a year. But this situation came about because the price levels calculated by enterprises were lowered by 3 percent in 1979, based on a resolution by the Council of Ministers, and wage contributions were finally set at 24 percent instead of the 17 percent originally, figuring in price calculations. It appears that the chief function of the third phase of the price reorganization is going to be the correction of discrepancies among enterprise results; the required information, however, will not be available until the balance sheets for the first half of the year are completed.

Since the introduction of the new economic policy in 1957 no price policy task has been comparable in complexity to the 1980 price reorganization. This is in part due to the fact that the price authority and enterprise apparatus with a great deal of experience in production cost price formation had to be reoriented toward calculation of competitive prices in sectors producing 35 percent of the national product. The requirement that prices serve as a continuous guidance in economic decisionmaking also represented an unusual task. Thus, in this case we are faced not with a traditional price reorganization, but the introduction of a new course, an area where we lack sufficient experience.

The information requirements of the new price mechanism are different from the old one. The information base of price formation by the production cost method is provided by enterprise accounting. Since enterprise accounting is

centered on cost calculation, this is an advanced information system. The world market price or, more precisely, the foreign trade price, plays only a secondary role in this type of price formation; in any case, it only arises in a concentrated form within the framework of a price reorganization. In a competitive price system, the most important prerequisite for operation of the price mechanism is the day-to-day knowledge of world market or foreign trade prices. This must be sufficient to evaluate import and export price policies and to provide guidance to price policy on the micro, meso and macroeconomic level. We have already defined the requirements and the responsibilities of the participants. The information system, however, is not yet operating satisfactorily.

The question also arises as to our evaluation of price movements occurring in the world market: how to distinguish between long term and short term, cyclical changes that do not require a response. These questions are difficult to handle. They are causing confusion even in countries where the economy has traditionally operated under a market price system. We have made some mistakes and we will continue to do so; but the number of mistakes must be reduced to the minimum.

One of the concrete tasks we are facing is the reduction of price bureaucracy. Methods of calculation have changed only slightly with the introduction of the new price mechanism; the same is true for inventory reevaluation and other technical regulations. There are some signs indicating that the administration of more frequently changing prices will add a new bureaucratic element to management. One of the important tasks of the coming period is for price authorities, financial organs and enterprises to work together in searching for simpler methods of regulation to ensure that changing prices do not require more administration than the price calculation methods used in the past.

There are additional new tasks in the area of informing the population. This problem has been on the agenda since 1968. At that time it took several years to arrive at suitable forms of informing the population. Today there is a new situation. Not just because the number of products whose consumer price is free has expanded somewhat, but rather because, with a few exceptions, industrial producer prices have been freed and, as a result, the pressure of producer prices on consumer prices has increased.

The National Material and Price Office has focused attention on these new problems associated with informing the population. Public sentiment must be improved. The sense of defenselessness in the relationship between seller and customer created by the uncertainty about prices must be dissipated. The inquiry in this area also includes the question whether it would be advisable to set certain procedures for otherwise justified changes in the price of certain products.

To summarize: under new conditions of central price management, we are dealing with problems that we could not fully solve. We are in a learning phase where everyone, from the National Material and Price Office to the enterprises, has its own tasks. We must master these problems as soon as possible. This can be successful only if everyone recognizes the responsibilities we must shoulder in order to restore the balance of our national economy under more difficult world market conditions.

Export or Import Price Basis

We must also be capable of distinguishing between true problems and those that arise mainly as a result of a search for loop-holes. Criticism is concentrated, of course, on the competitive price system. They say it is wrong to tie domestic prices to export price trends because in most countries the export price subsidies. This is also true in our country, since sales receipts are supplemented by permanent (tax refund) payments and temporary (modernization) budgetary support. Aside from this, the general rule is that in countries where export prices are below the price of domestically sold products, the domestic price formation process is coupled with a gross or net turnover tax on each production phase. This tax (sales tax or value-added tax) is rebated or waived in the case of exports. In our country, turnover taxes are paid by commerce.

They say: due to depressed domestic prices in line with export price levels, the production of certain goods will cease and then the demand can only be satisfied by importing at a higher price. For this reason it has been proposed to regulate producer prices on the basis of import prices instead of export prices. Naturally, import prices are much higher than export prices since in this case transportation costs and import duties are also included. The more the production structure is protected by import duties, the less suitable import prices are as a guidepost for effective structural policy.

The idea of a transition from export prices to import prices is in fact supported by the belief that this could lead to larger average normative industrial profit rates. Thus, it is highly important to see quite clearly that the decline in the average industrial profit rate was not due to the transition to an industrial producer price system based on export prices, but that it was an independent process. The decline in average industrial profit rates is an indication of the decline in the internal accumulation capacity of the Hungarian national economy brought on by the deterioration of the terms of trade and, in the final analysis, the increased difficulties of economic growth.

In terms of the import price, the crux of the matter is whether if an enterprise stops producing certain goods, the situation will be better or worse at the new production level or in the new production structure. This can be resolved only on a case-by-case basis. This is why we said that, whenever an enterprise can demonstrably substitute for imports by marketing a certain product, then it is possible, in a given case, to provide an exemption

from the requirements of export price levels and export profit levels. In any case, the export price level merely regulates enterprise profit rates, not the concrete price of products. Prices of domestically sold products may differ from export prices; in this case, the import price represents the upper limit.

Initial Experience and Topical Tasks

After the introduction of new prices, at the time of analyzing the initial lessons, there has been agreement on the fact that a radically different industrial producer price system was successfully introduced without major difficulties. What is more, in the past months we have made unexpectedly large gains in the area of restoring our intenational balance of payments. This makes it easier to operate the new system of prices and regulators in a consistent manner, and to strengthen normative financial regulations. Based on the conclusions we drew and the demands we face, we will modify certain elements of the system of regulators. There is a good chance that we will be able to avoid the practice that has emerged since the beginning of the 1970's leading to a wide-ranging system of exceptions granted to enterprises.

Today our attention is focused on the finalization of the price policy guidelines of the Sixth Five-Year Plan. We expect continuing inflation in world markets. The rise in the relative price of natural resources is still continuing. According to forecasts, this will result in an almost 8 percent worsening of the terms of trade during the five-year plan period. Thus, we could not avoid importing inflation even if we raised the exchange rate of the forint in line with rising export price levels. We must also consider the fact that particular export prices grow at rates that differ greatly from the average rate. Nevertheless, exchange rate policy is one of the central regulators of price relationships within the new price mechanism. We must have an exchange rate policy that promotes the improvement of economic and, in particular, trade balance, export efficiency and export product structure, as well as the relative stability of prices.

The central issue of the price policy guidelines of the Sixth Five-Year Plan is the planned size of consumer price increases. Based on various considerations, it seems sensible to set annual average consumer price increases at approximately 4 to 5 percent. This is the best way to reconcile price policy with the policy on living standards in a period when, due to increasingly difficult conditions of economic growth and the social interest associated with the early retirement of foreign debt, the goal is not to increase but to preserve living standards and real wages. Due to the goals of state incomes policy, the system of enterprise wage regulations and differentiation according to performance, wages will increase at an average rate of 4 to 5 percent even at this development stage. Therefore, the task confronting price policy is to ensure that the size of wage increases is the same as the size of price rises while price relationships develop so as to bring the consumption structure closer in line with the changing conditions of international division of labor.

The 4 to 5 percent consumer price increase can also be regarded as an upper limit that still has no negative effect on the desirable level of savings and credit demand by the population. If at all possible, consumer prices should not increase at a rate above 4 to 5 percent annually. This is because such a rise would necessitate an increase in the interest paid on deposits by the population, or, alternatively, we must expect a decline in the willingness of the population to save over and above what has already been taken into consideration. At the same time, the importance of the interest paid on consumer loans would decline and this would increase loan demand by the population. Therefore, if world market inflation exceeds the assumed level, it would be advisable to raise the exchange rate of the forint to an appropriately higher level.

The long range gudielines of the new price mechanism represent the stable element of price policy. These guidelines will be implemented through price movements that are difficult to foresee. Formulation of the numeric portion of the price plan is possible only with a much higher level of uncertainty than in the past.

Forecasts of the deterioration of the terms of trade during the period from 1981 to 1985 are based on assumptions relating to general world market price trends. Thus, the price forecasts do not consider improvements in marketing policy which could eliminate or at least substantially reduce price losses suffered as a result of the lack of export stocks, noncompliance with shipping deadlines, irregular deliveries, quality complaints, uneven quality, deficiencies in the supply of spare parts and field service as well as unused opportunities in the area of new types of cooperation. Without improved marketing policy, i.e., merely through structural transformation and traditional production cost reductions, it is impossible to do away with the preferences (modernization supports) introduced in 1980 on a temporary basis.

Undoubtedly, the conditions for marketing policy have improved. Still, it does not seem advisable to take this into consideration in the price plan. Such a step would mean the distribution of a hoped-for future foreign trade profits for domestic use by the national economic plan. This is what happened, in essence, in the Fifth Five-Year Plan and this was one of the reasons behind excess consumption. On the other hand, no special problems are caused by the distribution of additional resources discovered in the course of the implementation of the plan.

Following the publication of the price reorganization guidelines, the decline in domestic demand (and the resulting need to export), combined with a more active export price policy, indicated the appearance of the assumed positive effects during 1979. The reduction in demand occurred as a result of the advertised decline in normative profits. This made enterprises more cautious in their investment decisions. The reexamination of export price policy was placed on the agenda when the competitive price system was announced. We saw favorable changes in the relationship between industry and foreign trade. These became stronger after the publication of more detailed regulations.

The period just concluded is insufficient to arrive at a definitive analysis of the effects of prices and regulators. Nevertheless, the increased sensitivity of enterprises to world market processes is already clear. In their purchases, they are paying more attention to ordering only raw materials and base materials they really need for production, instead of requesting expensive materials with unnecessarily high quality parameters from foreign trade. The building of associative relationships between industry and trade has accelerated. In many cases, the incentives of the foreign trade enterprise are tied not just to currency prices, but also to improvements in the currency production index. Coordination between industry and foreign trade in the area of prices has improved, as have their informational contacts.

Other positive effects of the price and financial regulations are also beginning to emerge: there are stronger enterprise initiatives toward economic import substitution and material savings, increased cost sensitivity and more aggressive price bargaining.

Price and financial policy must be carried on in a consistent manner in order to spread the positive effects of prices and free the reserves needed to carry out the national economic tasks of the coming years. In this connection, it is extremely important to intensify the pressure to export by creating equilibrium between purchasing power and product supplies and to use favorable operational results to increase competitive conditions that are beneficial to the functioning of the price and financial system, instead of using them to loosen up income levels envisaged by the plan. Operation of a competitive price system requires more than just legal provisions. They must be supported by prevailing market conditions. This is the only way to secure the conditions necessary for rapid progress.

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ROLE OF RAILROAD IN INTERNATIONAL SHIPMENTS DESCRIBED

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[Lecture by Bela Szabo, MAV (Hungarian State Railways) deputy director general at the Summer University of Shippers in Kecskemet, 8 July 1980: "The Position and Role of the Railroad in Accomplishing the Tasks of International Shipments for the National Economy"]

[Text] The evolution and development of production and commerce have required movement of people and goods. The means and methods of movement are connected with and depend on the level of production. This mutual influence continues to exist today, and it will be an inseparable part of our future development.

The human race went beyond local dependencies and connections between goals and consumption in a very short time, historically. The first division of labor, even though still at a primitive level, brought with it a geographically expanding interest in goods and people, and these were brought together through transportation. Production and commerce generated transportation as an inseparable by-product, while the level of development of the latter determined and influenced the development and growth of the former in both their systems and means.

At the high level of society and production in our days, transportation as a system already has its own domestic and international division of labor, and it is developing into a worldwide system.

Cooperation in shipping at the international level has been integrated; its differing systems and forms have been created and are continually being developed by the various countries. Within the transportation system, the evolution of various methods of transportation has come into being as the result of a division of labor.

The principles of division of labor between the sub-branches of transportation are determined by factors of geographical possibilities, degree of economic development, level of motorization, purpose and nature of movement, distance to be covered, speed, and many other factors.

Within the area of transportation, division of labor first appeared as a vertical connection. In regard to international transportation, it first emerged with the establishment of railroad connections between sea harbors and countries without seacoasts. Horizontal division of labor first evolved in domestic shipping between boats and trains, where geographical relationships made it possible.

Following the sprea of internal combustion engines, an increasingly significant share in the division of labor of the tasks of shipping was undertaken by highway transportation through the broad application of transportation vehicles on the highways.

In the last few decades air transportation has become critically important in the long-distance transportation of people, while the method of transportation by pipeline has provided favorable possibilities in the transportation of oil and natural gas.

In addition to rapidly developing air and pipeline transportation, motorization based on cheap fuels and the expansion of highway transportation have confronted the railroads with new conditions and relationships.

The decrease in the railroad's share of transportation has not meant, however, that the railroad is losing its fundamental significance. In spite of the proportional decrease, railroad traffic is continually increasing.

Among the countries in CEMA between 1950 and 1978, the total amount of rail transportation increased by 8 times in Romania, 6.5 times in Bulgaria, nearly 6 times in the Soviet Union, 4.5 times in our country, 4 times in Czechoslovakia and Poland, and 3.5 times in the GDR. During this period about 1,000 kilometers of railraod track per year have been constructed in the Soviet Union.

The basis of the new price calculations was taken from the year 1973, when the explosion in oil prices began. It soon became apparent how favorable the efficiency of the railroad was in regard to fuel costs. In consequence of the continual rise in oil prices, the pace of electrification of the railroads has been stepped up. The portion of electrified tracks in neighboring countries is extremely varied. In Austria it is 46.2 percent, in the Soviet Union 29.2 percent, and in our country 17.5 percent. This is far below the average figure for Europe.

The dieselization and electrification of the railraods in the developed countries of Europe took place long before such modernization activities were begun by MAV, but as the result of large expenditures in this direction here already 93 percent of the rail transportation benefits from dieselization or electrification, and the share of electrification has reached 50 percent.

In harmony with the pace of growth of the national economy, transportation must satisfy the requirements of transportation of people and goods, which are continually increasing from the standpoint of both quantity and quality. In satisfying the demand, railroad transportation has had, has now, and will have in the future a critical role. We can respond to this task only in the framework of a conscious and planned division of labor in transportation and through the realization of developments based on it.

The movement of people and goods requires much equipment. Use of the equipment in any economy is connected with a significant energy demand. It is therefore a basic requirement that the costs of transportation be optimized through the evolution of a proper division of labor.

In addition to the requirements for transportation deriving from development of the country, our participation in international transportation of people and goods, deriving from our geographical location, puts additional demands on our transportation. It is the combined result of this and our open economy that within the total amount of transportation, a very significant fraction is represented by shipment of exports, imports, and goods in transit.

In 1975 the available railroad, highway, water, air, and pipeline routes carried a total of 664.4 million [metric] tons of goods all together. Fifty-two point three percent of this was accomplished by common carriers. The total performance of common carriers was 39.6 billion ton-kilometers, which corresponds to 88.4 percent.

At the end of 1978 these figures were 760.9 tons with a 51.6 percent share, totaling 46.6 billion ton-kilometers, equivalent to 87.5 percent.

As I mentioned before, export-import and transit traffic plays a significant role in the activities of transportation of goods. The railroad is prominent in the accomplishment of this as well. On the basis of the weight of goods transported in 1978, the railroad accounted for 68.6 percent of imports by the national economy and 87.1 percent of exports as well as 98 percent of the transit goods.

The role of the railroad was of critical importance also when examined from the point of view of gross ton-kilometers. Its share of imports was 51.6 percent, and of exports and transit goods alike it was 59.1 percent.

These numbers also mean that for the railroad the portion of international traffic compared to total traffic is considerable, and it has a special significance from the point of view of both traffic organization and economics. Successful solution of the tasks arising from this and the results and problems appearing in connection with it have a direct effect not only on the railroad, but also on the whole economic activity of the country.

The railroad fills a very important role in domestic and international transportation of people as well.

The number of passengers transported in international traffic has increased significantly during the past 5 years. In 1975 we carried 2.7 million passengers, and in 1979 it was 3.3 million. In certain regards the traffic shows small fluctuations. For example, in the year 1979 the number of passengers arriving and transiting from Poland decreased by 224,000, and there was also a decrease in regard to Czechoslovakia and the GDR. Passenger traffic with Romania increased, and the number of passengers varies around 457,000. In regard to the capitalist countries, we had the most passenger traffic with Austria. The agreement for travel without visas between Austria and Hungary increased the number of Austrians arriving; but even with that the number of passengers was under 100,000.

The tendency of international passenger traffic to increase requires increased measures to be taken to satisfy the travel demands. In this regard we have increased the number of express trains departing from Budapest (for example from Budapest to Varna [Bulgaria]), and we have increased the area of services offered.

A new service that was begun in the summer season was the installation of sleeping-cars on the Budapest-Berlin, Budapest-Warsaw, and Budapest-Belgrade lines.

Creation of the possibility of shipment of personal cars on international express trains also represents a new service. Small cars have been predominant so far among the cars shipped by this system.

It must be noted that the level of services in passenger traffic is low in both quantity and quality; it has fallen behind the level of that of the developed railroads. The most problems are caused by inappropriate levels of passenger comfort and cleanliness.

In the interest of improving the level of passenger transportations, we have acquired about 300 four-axle passenger cars capable of 140 km/hr speeds.

In the interest of developing the seat-reservation system, we have provided the central reservation office and the regional subcenters with communication facilities.

The international reservation system has been connected with Austria, but in relation to other countries this is still a problem awaiting solution.

The share of international shipment of goods--export, import, and transit--in the transportation activity of the railroad has increased systematically during the period 1975-1980, except for some insignificant transitional decreases in certain years. In 1977, 38 percent of the goods carried and 53 percent of the total transportation was comprised of shipments of an international character.

In recent years the evolution of export and import shipments in international traffic has faithfully reflected the influence of the implementation of the guidelines set for the development of our national economy.

In the year 1979 the volume of goods transported in export traffic, expressed in tons, showed a 10.4 percent increase relative to the year 1975, and our import traffic decreased by 1.6 percent.

This set of relationships in international goods traffic reflects our international business policy.

Regarding the developmental tendencies of transportation, our export-import traffic with the CEMA countries has increase the most, due to more, and more broadly based, socialist integration.

Fifty-six point eight percent of our export traffic and 79.2 percent of imports is with socialist countries.

Soviet-Hungarian traffic plays the greatest role in international goods traffic; it amounts to 47 percent of total import volume. Export-import traffic is mutually significant with Czechoslovakia, the GDR, Poland, Yugoslavia, and Romania.

Our most significant Western relationships are with Austria, the FRG, and Italy.

The size of our transit traffic is basically determined by the traffic in exchange of goods between countries that prefer to use the Hungarian railroad network because of favorable geographic or tariff reasons.

Transit traffic is a peculiar area of international business, in which we sell transportation capacity in exchange for foreign currency. Our position in competition in the shipping market depends on whether we can provide equivalent or better conditions for shipping.

Transit traffic in 1979--20 million tons--shows a 6.1 percent increase in tons of goods transported relative to 1975 and 3.6 percent relative to 1978. In terms of the ton-kilometers used for determining rates, the increases were respectively 8.4 and 4.2 percent.

Increase in transit traffic has a special importance mainly for economic reasons, since MAV can earn transferable rubles or U.S. dollars with expenses lower than the average of the national economy.

Because of the higher income and lower costs of transit traffic, it provides a greater profit than shipment of domestic goods. Foreign transit shippers pay their expenses in foreign currency. Maintaining and developing transit shipments is therefore a prime national interest.

An important role in transit traffic is played by MASPED [Hungarian General Shipping Enterprise]. Last year we transported 1.2 million articles under terms of the agreement between MASPED and MAV for regulation of transit traffic.

A good and close cooperation has developed between MASPED and MAV. The knowledge and experience of MASPED in relation to the composition and relational patterns of goods traffic in international commerce are extraordinarily valuable to us, as we can make use of them in setting international tariffs for export-import traffic.

High-level methods of shipping are being offered by new services, of which the most important representative in international traffic is the method of shipment by large containers.

In 1975 we handled more than 13,000 containers in (export-import) traffic and 32,000 in 1979. The weight of goods (export-import and transit) in large containers has increased in 5 years by some 200,000 tons. An increase in shipment of containers has been decisively guaranteed by the increase in export-import traffic with CEMA countries.

Goods shipment in large containers based on the SZPK mutual container-use agreement began in 1978. This provides substantially more favorable conditions than the older procedure based on bilateral agreements.

At the beginning of the SZPK traffic, MAV had a very small stock of containers. Therefore, in regard to the ratio between giving and receiving, the resulting balance was a deficit.

We are trying to overcome the debt in container-days gradually by a great increase in export traffic to socialist countries. In order to encourage export loadings [by container], we have made agreements for reduced shipping rates with several enterprises engaged in large shipments in international trade. We want to stimulate larger shipments through rebates.

In spite of all this, loading by shippers without delay, improved technology, and better organization work by MAVTRANS [Transfer Service of Hungarian State Railways] will all be needed to speed up the turn-around time for containers--sometimes exceeding 40 days [at present].

At the same time, it is in the interest of our foreign-exchange economy as well to accelerate the increase in our stock of containers.

Included in our international transportation of goods, as a technology and method of shipping, is also the exchange activity regarding pallets for carload shipments.

Our goods traffic involving exchange of pallets for international carload shipments has more than doubled in comparison with 1975. In 1979 the weight

of goods shipped on pallets was 223,000 tons. In spite of a huge quantity of pallets obtained, the achievement of exchange is made difficult by the fact that shippers or neighboring railroads return the pallets late or in many cases not at all.

In summary we can state that the development on the part of the railroad in the area of applying modern shipping methods and technological equipment in international goods transportation has been significant, but the proportion of goods shipped with these methods is still low; for this reason more efforts are needed in order to increase their use.

Along with modernization of goods transportation, mixed shipments are becoming prominent, because they improve the quality and economy of service.

Energy costs are increasingly playing a determining role in the costs of export, import, and transit shipments. Approaching the question of division of labor within domestic transportation from this point of view, I think it is timely to examine the technical and economic question of what kind of schemes can be considered for delivering to their destination goods shipped over long distances that have hitherto gone via the highways, in the interest of saving shipping costs--without reducing the quality of service. In the case of regular shipping routes, for example, the possibility is being offered of transporting a truck or at least its trailer by rail--within the time it would take on the highway--over certain parts of its route.

In addition to the energy-saving modernization of the work of shipping goods, developments in the direction of applying modern technology, and the reduction of both human and machine work are also important. One such solution for example is the forwarding of shipments that arrive in wide cars without reloading them, which has become technologically possible through the recently introduced base for adjusting axles.

Goods shipped internationally by railroad are extremely varied. From the point of view of technology, operation, and organization, this requires a very complex set of conditions and preparations. The ability to handle this traffic is fundamentally determined by the capacity of tracks, switching points, and border stations.

The Hungarian railroad's central, radial, and trunk network of some 3,000 kilometers is connected with the European system. More than three quarters of the traffic is handled through it, and almost all of the international traffic.

The utilization of the trunk network is very high, given its level of technical equipment. In recent times the electrification of tracks (for example on the Budapest-Kelebia line) has been an important scheduled development.

Along with the modernization of locomotives, especially as the result of electric locomotives, the energy use of this type of equipment has been

reduced by nearly 50 percent (in 10 years). It is worth mentioning that in 1979 of the 100,000 ton-kilometers pulled by locomotives, 50.6 percent was powered electrically. This was accomplished by 23.4 percent of the locomotive engineers, so that the increase in human productivity was also considerable.

For the point of view of international traffic, an extraordinary role is assigned to the border stations. The most important requirements of border stations are an adequate gross handling capacity, smooth accomplishment of rail and other examinations, the speeding up of international traffic, and reduction of handling time at the border stations. We are attempting to satisfy these requirements by changing from a system of switching border stations to a system of joint stations.

International freight traffic crosses the border at 19 of MAV's 22 border crossings. Of these, 11 are functioning as joint border stations.

The most important of the border stations from the point of view of their size are the following: Zahony, Szob, Lokoshaza, Rajka, Kelebia, and Nyirabrany. Fifty-five percent of the international traffic is handled at these six border crossings.

The size of border traffic is showed strikingly by the automobile traffic. The total automobile crossings last year amounted to 4.1 million cars.

The highest amount of traffic is handled in the reloading area at Zahony. Zahony occupies a special place in international traffic. The fulfillment of the task of the reloading area has a decisive effect on the whole network. In terms of tons of goods, the amount handled in this area is some 12 percent of the total traffic on the Hungarian railroad.

The industrial and technological development of the Zahony reloading area is one of the central questions of the development of the railroad. We are implementing the developments in several stages. Expenses so far have already reached the level of 4 to 5 billion forints. During the fourth stage of development, the time for expansion of the standard tracks at the Eperjeske arranging station has arrived, and we have placed direction controls and train-arranging tracks at the north arranging yard of Fenyeslitke in operation. The base for adjusting axles for wide cars has been constructed in Hungary as well. The construction of a transfer station for goods of less than carload size is underway.

Our stock of trucks has been modernized significantly in recent times. As a result of this, the carrying capacity of the trucks has grown by 15 percent. The average load of the trucks is presently 29.2 tons.

From the point of view of shipments in international trade, an important role is played by the composition of the stock of trucks. Most of all we are urging the acquisition of truck types usable for several purposes.

There is a lack of certain special kinds of trucks, especially trucks capable of being loaded mechanically.

From the point of view of the shippers, the variety of possibilities of shipment is important.

In order to expand international trade connections, the railroads have made efforts to create appropriate and comprehensive international freight-train systems. One of these is the so-called TEEM [Trans-European Express Marchandises] train, which travels according to internationally established time-tables and at high speeds. Our country occupies an important position in this express freight-train system; here we are interested in 12 trains with 17 routes. The time taken by the TEEM trains to cross Hungary over the MAV tracks is 5 to 6 hours. In this system, for example, Hungarian goods can reach Salzburg in 12 hours, Basel in 29, and Copenhagen in 44.

In the international system of freight trains, the TEC trains, carrying large containers, must also be mentioned. At this time these move only at appropriate times according to need. However, as a result of expected development of containerization, we can count on a spread in their use and an increase in their frequency.

As can be seen, MAV is paying increased attention to the smooth handling of international traffic. In spite of this, many factors are still spoiling both the quantity and quality of the level of goods transportation. Among these I mention frequent unnecessarily slow overall speed, uneven loadings, which appear mainly as weekly, monthly, and quarterly fluctuations, longer than necessary waiting at stations, as well as instances of slow signals and track disturbances and problems resulting from lack of capacity.

The time limit on my lecture makes it impossible to make a detailed analysis of each of these examples. Nevertheless I think it necessary, because of the composition of this audience, to mention the factors and the situation resulting from "capacity inadequacy," external and domestic loads on existing capacity, a situation that is not a result entirely of attitudes dependent on the railroads, that affect increase in total performance, and that often influence delivery times. The consequences in these areas are acute and force the railroads to take emergency steps.

Further expansion of the capacity of border-crossing points, which have been established and developed taking into consideration the projection of the volume and composition and international goods traffic, the various agreements on goods exchange traffic, etc., is in the mutual interest of the parties. This usually means a serious financial burden, which is always tightly connected with the ability of the particular economy to bear it. Accordingly, questions of how the capacity that has been established through these kinds of developments is utilized, what kinds of things influences them, where they arise, and what is done to solve them are significant matters.

As is well known, the vast majority of international traffic is made up of shipments which are subject to agreements negotiated in advance by the railroads and foreign trade organizations. Nevertheless, experience has shown that considerable differences arise between plans and actual requirements in terms of volume, composition, and time.

Part of this is naturally influenced in a positive or negative direction by unexpected events that affect economic and business activity. But the questions of what proportion they represent, and whether they are within or exceed the capacity of the transportation equipment and system to undergo change, are also significant.

In practice the greatest and most frequent problems in our experience are caused by irregularity of shipments and uneven distribution of items being shipped. I must emphasize that I am not talking about those cases where delays in loading are caused by unavailability of empty cars due to various problems originating within the railroad, but about causes outside the railroad.

Such irregularities in shipping not dependent on the railroad very frequently force the railroads to introduce so-called goods-traffic limitations for a longer or shorter time, in spite of the fact that not even these measures will always be completely successful in regulating traffic according to gross capacity.

In order to moderate the detrimental consequences of this kind of situation, we set up quotas on quantities--expressed in tons or cars--that can be transported on particular international routes. These can be in effect for a day or longer. In such a case, it is in the interest not only of the railroad, but primarily of shipping, that the quotas be used up completely.

In order to completely utilize the quotas on our part, we very frequently encourage the foreign trade enterprises, wherever it can be technologically and organizationally expected or justified as a condition of shipping agreements, to accept the concept of unit-shipment of goods.

As experience in practice shows, the volume of transshipment can be expanded without significant increases in investment and human labor by expanding the quantity and variety of goods shipped as units. Use of this kind of system more widely and in larger volumes can open the way to an increase in the portion of shipments loaded mechanically, and at the same time reducing the time required for transshipment and delivery. In the former case productivity of loading and unloading can be increased in a natural way.

Unfortunately, our initiatives have still today not encountered broad understanding, and for this reason they remain for us unchanged tasks to accomplish.

The thought has already arisen that it would be appropriate in the interest of more efficient handling of international traffic to create a joint

international service that would continually watch the running of international trains and notify the railroad when necessary to take corrective actions.

The complete solution would naturally be industrial development to eliminate shortages in capacity as well as achievement of an international traffic organization.

By studying the economic significance of international traffic on the railroad we can observe that 56 percent of the total goods traffic income of MAV consisted of income from international shipping. In 1979 income from transit shipments was 4.5 billion forints, which means an increase of one-and-a-half times compared to 1975.

Even without analysis, these figures show that it is necessary to watch daily the connection between performance and income.

The price systems that determine income are quite varied--because of a large number of factors.

The economic process is complicated by the circumstance that price rates, which are generally expressed in foreign currency, must be converted into forints at the exchange rates in effect at each time.

The foreign-exchange income and expenses of the railroad, or their size in terms of forints, is fundamentally influenced by the floating or rapidly fluctuating exchange rates, which frequently cause serious losses to MAV.

Monetary instability began in the early 1970's. Floating exchange rates of capitalist currencies has made settlement of railroad accounts very difficult.

A basic change in exchange rates took place in February, 1979. At that time the difference between commercial and noncommercial rates was reduced (the noncommercial rate was brought closer to the commercial).

Precisely because of this, re-examination and adjustment of the price level of international rates in light of changes in the exchange rates became a weighty question.

Incorporation of goods shipment into managment of foreign currency involves application of differing tariff systems for ruble and nonruble accounts and mixed commercial and noncommercial exchange rates.

The price levels of our tariffs were raised in 1979. The replacement in regard to countries with ruble accounts of the ETT rates by the MTT rate, which raised former transit rates by some 90 percent, was significant. The price level of the new MTT tariff is still some 60 percent lower than the freight rates of developed capitalist countries.

In the TCV [Baggage and Passenger Tariff] price rates, the prices charged for MAV lines rose by 100 percent. MAV's TCV prices before the increase were also lower than the prices of the nonruble countries, which generally followed up the price changes with repeated increases.

MAV's domestic and international passenger and goods transportation rates and price levels are different.

The price level of domestic passenger transportation is a factor belonging to the political category of standard of living. International passenger tariffs have been and continues to be determined by whether we are dealing with participating or competing railroads.

Domestic goods shipment is connected with the wholesale price level, and in the international sense it differs from the method used for passenger transportation.

Our price level for domestic passenger and goods transportation is an integral part of the general price system, and it reflects national economic policy.

Our price system was changed radically in January 1980. The world-market prices of raw materials, semifinished, and finished products affect the railroad just like the other branches and sub-branches of the national economy. The effect of these on costs, which in turn affects profits, can only be counterbalanced by planned adjustments in price increases.

In relation to the participating railroads--except for the small proportion of prices which can be set freely--every change is possible only on the basis of unanimous agreement. It is a fundamental requirement of other export, import, and transit shipments that beyond the effects on costs the price level should adjust to the value of the goods as well.

All this together means that the time of stable price rates has come to an end. The tasks connected with this are new, and we must learn this and handle it flexibly in the interest of insuring competitive ability and preserving a source of foreign currency.

In the area of shipping, international cooperation will insure in the future an important role to the government's policy on transportation.

We must accomplish our tasks efficiently and economically, taking into account that transportation now utilizes 12 percent of our energy consumption at the national level, at a time when we import 50 percent of our energy. Increase in performance will naturally require additional energy. For this reason we must emphasize energy-consequences in planning and accomplishing our expansions and divisions of labor, providing for specific reductions in energy use.

In succeeding plan periods, international cooperation will have increased importance, primarily with neighboring railroads in the interest of smooth achievement of international passenger and goods traffic and increase in transit traffic.

The declining trend in passenger traffic is expected to moderate in the future. This fact is supported by the dynamic increase in international tourist traffic that can already be felt. The level of passenger transportation will to an increasing degree become a measure of social and economic development and of a more civilized way of life. The effect of making the 5-day work week common, and of the continuing development of international economic and cultural relations will require improvement in the quantity and especially in the quality of passenger transportation.

In international traffic, we must increase connections between the capital city on the one hand and the tourist centers on the other. In this framework it is appropriate to look at the possibilities of joining the "TRANS EUROP EXPRESS" network, which provides fast connections between the large cities of Europe, and we must also urge the introduction of the planned "INTEREXPRESS" train system in relation to the CEMA countries.

On a seasonal basis it will also be necessary to increase the number of international trains.

We consider an increase in the speed of international express and fast trains in the interest of decreasing travel times to be important.

The European level of comfort in international traffic is adequate, but we must add passenger, dining, and sleeping cars capable of being pulled at high speed to our stock. Among services connected with passenger transportation, an increasingly important role will fall to reservations. Requirements for reservations of seats and sleeping berths is growing, and demand is increasing year by year. As a consequence of increased demand, services must adjust to international requirements and conditions. For this reason it is necessary for us to join the European electronic reservation system, through which reservations on all European lines for any international train will be possible.

The increase in demand for travel and heightened expectations for services to travelers will require the introduction of new forms of services for travelers and new equipment. In the interest of this:

We are spreading the use of the automatic ticket system, paying attention also to economic utilization of the work force, since it serves to reduce the workload on cashiers in stations with much traffic.

We are speeding up the process of providing ticket-printing machines to ticket cashiers.

In the area of ticket sales, we want to expand the network of ticket offices.

As part of the development of the orientation and information service for travelers, we are expanding the installation of modern visual orientation devices and pictograms according to international standards. We are increasing our system of foreign-language orientation.

The continually increasing quantity of goods traffic--expected to reach 63 million tons in 1985--and the demands it will impose on transportation will make necessary further improvement in international railroad freight traffic.

A lively competition is taking place in the international transportation market. The carriers who are handling the international traffic are looking for the most favorable possibilities for transportation, both in regard to advantageous costs and the fastest possible routes. Our task in the competition that has developed is to maintain existing traffic and to obtain favorable shipments. We can achieve this with knowledge of the market place, formulation of appropriate business models, and speeding up of international shipments, which can be done in various ways.

For this reason, it is necessary to increase the travelling speed of the types of trains used in international traffic--TEEM, TEC fast freight, etc., and to decrease the amount of time spent waiting at the border. We must decrease further the time spent by transit freight trains in crossing on our tracks.

In the interest of increasing speed of delivery, we must encourage shippers and neighboring railroads to form complete trains going in a single direction.

The planned accelerated increase in import traffic will require increased preparations. In this framework we must pay much attention to modernization of technology at border stations in order to relieve this bottleneck.

We must install an up-to-date system, utilizing modern computer equipment, to keep track of cars entering and leaving at border stations. In the Zahony area, an automatic directing system is an essential requirement for the flow of traffic and business in the transfer area.

Promoting and providing for the implementation of modern shipping equipment and techniques is one of our especially important tasks.

According to the plans, during the next 10 years the quantity of goods shipped in containers will increase to about 10 times the present amount.

Because of the continually increasing manpower shortage, industry and commerce will be forced in our opinion to turn to modern technologies for movement and packaging of materials. This circumstance will have a stimulating effect on the development of palletized movement of goods.

Starting from this premise, it is important to promote more and more the spread of traffic using exchange of pallets. For this reason, it will be necessary to increase intensively the number of MAV pallets.

Spreading of modern shipping equipment and technologies will require cooperation among the sub-branches of transportation.

In this framework, we must strive for the formation of a unified transportation chain, in which the shippers will be free from the activities of moving goods to and from stations and loading and unloading.

In order that in coming years we will be able to satisfy the requirements of international transportation--from both the quantitative and qualitative points of view--in addition to accomplishing the tasks described above, appropriate technological and scientific developments will be necessary.

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PROGRESS, PROBLEMS OF SELF-MANAGEMENT ENTERPRISES

Zagreb VJESNIK in Serbo-Croatian 15 Sep 80 p 5

[Article by Ranka Adum Cicak: "Where Is the Hangup in Formation of Self-Managed Organizations?"]

[Text] How is associated labor in Yugoslavia doing in the formation of self-managed organizations? What has essentially changed in that organization since adoption of the Law on Associated Labor? What are the barriers which must still be hurdled for the workers to finally complete what they have begun--taking complete control of income without the "assistance" of small groups of technobureaucrats accustomed to power and monopoly in decisionmaking, and how high are those obstacles?

An extensive analysis which has just been completed by the Federation of Yugoslav Trade Unions has managed to expose if not all, at least most of the obstacles which now stand in the way of organizing labor at all levels--from the basic organization to the SOUR [complex organization of associated labor]--in accordance with self-management.

The analysis showed that the high rate of inflation is one of the substantial reasons why associated labor is slow to organize. It disrupts the flows of social reproduction and whets the appetites of those who have money--so that they want to spend it rapidly rather than to add it to other money and invest in plans covering a longer period of time. Organizations which because of unequal conditions for the conduct of economic activity have found themselves in a more favorable position are not exactly anxious to pool their labor and capital with those who are poorer. And the inadequately developed system of self-management social planning is delaying the proper organization of associated labor. Not to mention the extent to which associated labor is hindered by the closing off of the economy within the borders of regions, republics and autonomous provinces and confinement of available capital within regions.

Who Is Outwitting the Basic Organization?

Is it naivete or an unwholesome shrewdness that brings people to measure the potential for the workers to exercise their self-management rights by the number of workers in the basic organization and neglects the potential for the earning of income? Taking as their point of departure the blanket assessment that the workers do not have the objective conditions for full exercise of their self-management rights neither in small nor in cumbersome OOUR's [basic organization of associated labor], these "innocents" seek the optimum number of workers guided by a desire to manipulate self-management themselves, but to camouflage that manipulation with an organization that in its form and numerical size is ideal. They pretend not to know that there are greater opportunities in small basic organizations for direct self-management, but that conditions for full exercise of the self-management rights of the workers can also be created in large ones. Those who have attempted to preserve the old power relations of their own groups have been trying at all costs to organize OOUR's merely as a formality, but with the relations as vague as possible. When in certain groupings (transportation, construction and trade) some organizations began to define more precisely in social compacts what constitutes operational completeness or what constitutes the principal activity of the OOUR, the troublemakers quickly came forth with objections that these compacts restrict the inalienable rights of the workers. Fortunately, their desire to preserve the present situation of their own rule in the form of a defense of the inalienable rights of the workers and to conceal the group-ownership relation was so transparent that it was detected in good time in every workplace.

Work organizations which are not divided into basic organizations have gotten into a situation where they do not have the greatest objectivity in evaluating all the conditions for their own work. It thus happened that no analysis was made of engineering and technological and economic position and potential for the self-management of the workers in 15 percent of the organizations in the chemical industry, the nonmetallic metals industry and rubber manufacturing. In 30 percent of the basic organizations in the nonmetallic metals grouping relations in the distribution of funds and rights and obligations were not regulated. In 33 percent of the organizations of associated labor in Bosnia-Hercegovina in which OOUR's have been set up no self-management accord was adopted on distribution of funds, rights and obligations, and in 17 percent of the organizations surveyed they said that they did not even need such an accord.

Such poorly prepared associations has had the result that dwarfish basic organizations are being created in which there is no operational completeness or on the other hand excessively large basic organizations which are not impractical because the number of people make them cumbersome, but because they are performing several activities and immediately come into conflict with the Law on Associated Labor.

Work Organizations Not Divided Into OOUR's

There are almost four times as many work organizations not divided into OOUR's as there are those which do have basic organizations. The number of organizations of associated labor without OOUR's is as high as it is because the economy is fragmented, but also because of quite poor organization (as has been discovered, say, in the electrical products industry, the chemical industry, the nonmetallic metals industry, the sugar industry, the oil industry, the dairy industry, the meat industry, postal, telegraph and telephone services, and agriculture). Though sociopolitical organizations in opstinas have attempted to explain these oversights to associated labor, the number of these organizations dropped only 3.5 percent last year and the year before last. In 1978 there were 14,269 work organizations without OOUR's, and in Serbia there were 32 work organizations which previously had OOUR's which are now set up without them. Attempts to preserve the old relations devoid of self-management by avoiding basic organizations have been detected in a large number of activities, industries and groupings (electric power, petrochemistry, the chemical industry, nonmetallic metals and rubber manufacturing, municipal services and utilities, the agroindustrial complex, construction and the building materials industry and certain social services).

Internal Banks To Suit a Variety of Tastes

After the initial efforts for each organization to have its internal bank, now they are being established more and more frequently only in larger entities. Six percent of all the internal banks have been established in work organizations. An analysis has shown that the management of internal banks has been regulated in widely differing ways and that in certain cases it is even unlawful. Thus it happens that credit committees (which only basic banks are allowed to have, since only they grant long-term credits, while internal banks grant short-term credits) are being established in internal banks. Also, regulations between assemblies of internal banks and workers' councils of complex organizations of associated labor often have not been regulated, and decisionmaking is passed on to the small business boards of the internal banks. Thus certain internal banks are already figuring large as a place for centralization of the financial assets of associated labor on which the decisions are made by a small number of management people. There are also cases in which the assets of the associated basic organizations are automatically transferred to the accounts of pooled assets. In such situations how can the workers even oversee what is happening to their own money?

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ADVANTAGES OF SELF-EMPLOYMENT DISCUSSED

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 28 Jul, 18 Aug 80

[Editorial: "Initiative Under Suspicion"]

[28 Jul 80, pp 14-16]

[Text] It is becoming quite clear that expectations with respect to the growth of employment and the social product must be brought into line with the determination to reduce the infusion of foreign capital and inflationary financing of development to a realistic scale. If a high rate of inflation is the price that must be paid for a satisfactory rate of economic activity over a period of years, a slowing down of the pace of development is an inevitable tendency in a consistent development orientation. The consequences of this tendency can be diminished by stimulating that economic activity which can ensure preservation of qualitative factors of development at minimum investment. In that context self-employment and broader reliance on the businessman's initiative deserves far more attention than up to now.

For all the expressions of great expectations from what is referred to as small business and for all the praise of those who have proven their economic resilience, a more careful examination also reveals an extensive network of pitfalls and resistance to business initiative and willingness to invest earnings in the process of reproduction.

The Effect of Restricted Opportunities

Small business, in which self-employment is dominant, has been developing more slowly in the period of the current medium-term plan than was expected and slower than other economic activities. The growth rate is one-fifth short of the plan, the growth of employment is off by one-third, reproductive capacity is off by one-half, and indebtedness has doubled.

The interrepublic agreement on the bases of joint efforts in conducting the policy governing the development of small business was adopted at the end of March. It took nearly 4 years to establish the basic conditions

and rules for development of an important sector of the economy, and one of the reasons was the tug-of-war over the official definition to precisely identify what is included in "small business." The significance paid to the definition is justified by the desire to prevent the more favorable status being taken advantage of by all those activities and undertakings which do not belong in this sector. The stress on the status of "small business" as an inevitable condition for the undertaking to deserve social support clearly indicates the fear of initiative.

The predisposition toward restrictions and conditions on the granting of status as an incentive derives first of all from the inertness of government agencies and from the reluctance to exercise direct supervision so as to discriminate the cases of excess from the activities for which there is an evident social need. The constitution (Article 64) guarantees the freedom of self-employment in all activities and provides that law "may specify the activities in which independent personal labor may be performed with privately owned assets [self-employment], when the social interest so requires." We have two different orientations here, since defining what is prohibited is not the same thing as defining what can be developed.

The restrictive logic is also manifested in delimitation of production and service crafts and trades as the domain for development of self-employment, while trade, housing and municipal services have suffered a marked neglect. Nor is it difficult to prove the lack of detailed arrangements in sectors where self-employment has a very significant role such as farming or hostelry and tourism.

The unutilized potential in agriculture is demonstrated by the datum that almost one-tenth of the land still tillable is not being cultivated. We should bear in mind in this connection that what is called "anomalous" land is considerably more extensive than total cropland. It is also well known that the area of plowland and gardens has diminished by 450,000 hectares over the last two decades, most of it eaten up by haphazard construction.

Far from us to support an orientation toward slower deagrarianization or diversion of the logical flows of migration from the landholding to nonfarming activities. However, a whole series of indicators state unambiguously that unutilized natural potential for food production is not a direct consequence of industrialization and that the rise of productivity in agriculture is not keeping pace with the transfer of population to nonfarm activities. The private sector of agriculture, which possesses 84 percent of the potential for food production, is lagging appreciably behind in productivity. Only one household in six is oriented toward specialized production for the market. Research has demonstrated that rural households derive half of their income from outside agriculture, which is also a consequence of an altogether understandable tendency when we bear in mind the datum recently cited by the chairman of the Federal Executive Council, that the income of a farm household is half that of a nonfarm household.

Affirmation of self-employment in farming essentially means making agricultural production more attractive and creating conditions for intensive development of the agrarian complex, without which the desired transformation of the economic structure characteristic of an industrial society cannot take place.

Unutilized potential for self-employment in tourism is manifested above all in the fact that the average bed in private tourist lodgings is used barely 1.5 months every year. Of the approximately 300,000 beds in the private tourist industry, which is one-fifth more than total hotel capacity, not even one-tenth are in lodgings where complete services are offered to guests. The neglect of self-employment, which can be seen by the underdevelopment of small-scale room-and-board arrangements, leaves unused a sizable potential for increasing the volume and improving the quality of services.

The absence of a more flexible and vigorous development policy in the tourist industry has had the result that it does not pay to expand activities and round out services. Instead of significant incentives for development in tourist-oriented opstinas and regions, restrictively oriented practical policy has objectively favored the human inclination to realize at least some more modest income with a minimum of labor. The chronic shortage of hostelry personnel offers additional incentive for the optimum of private income to be sought in a combination of personal income from employment in the socialized sector with the renting out of beds in one's own house. The timidity about offering broader opportunities for development of private initiative in tourist hostelry, at least to the limits which the law allows and which have not even been approached, is opening up room for the nonchalance that goes with monopoly. Not only the socialized sector, but also those private individuals who have legalized their operation, are free of competition. Of course, the private hosteler who has the status privilege of being one of a very few or even the only one in a town has no reason whatsoever to be concerned about the prices and quality of his services. Moreover, in that respect the tourist hostelry industry is no exception.

Timidity Is Nurturing Monopoly

The natural motivation of initiative is the desire by private individuals to maximize their income. This has been institutionalized in associated labor, but not in the private sector. Both sector are typified by inadequate economic motivation, but self-employment is burdened as well by an aversion that comes from the fear of excessive enrichment, since the makers of practical policy do not have or do not believe that they have reliable means of supervision which would prevent unjustified enrichment. The consequences are seen most clearly in the widespread restrictive practices, which ultimately make associated labor considerably more attractive than personal initiative combined with investment of private capital.

Though the advantages which development of self-employment offers to overall economic and social development have long been known, there are very frequent examples of a tightening of conditions for this type of employment. The "small businessman's" initiative is clearly important to rounding out the economic structure, to expanding the assortment of goods which cannot be profitably produced in a strictly industrial manner, to satisfying the ever more elaborate needs for various types of services and especially to increasing the productive employment of the population. Nevertheless, almost every day we can find news or articles in the newspapers about the golgotha suffered by those who want to invest their capital in an economic activity which will provide them income and will ensure better satisfaction of the needs of society.

A typical case is that of the private poultryman in Zemun who in order to open a shop was required to furnish not only the usual guarantees, but also a certificate to the effect that he had no sponsor. When he asked for a design from the Bureau for Construction of the City of Belgrade, they told him that he must first obtain the consent of the electric power company for an electric power connection, and the electric power company required that he have an approved design before they would grant that consent. After he did somehow escape this vicious circle, the people in the bureau sent him to order the design from a private architect. He then obtained everything required for a building permit, and when he had overcome all the difficulties, both the opstina and the city bureau for construction sent him bills for the rent.

A second example also involves a willingness to invest capital in trade on the basis of self-employment. The Bojnik Opstina Assembly ordered the closing of a private poultry shop in the village Dragovac which has been open for a year before the opstina assembly exercised its legal right and adopted a decision that private commercial shops could not be opened in certain places (including the village in question). The rationale for this decision was the opstina assembly's desire to prevent a private businessman from competing with commercial organizations of associated labor. This case had an epilogue in a trial before the Constitutional Court of Serbia, when it turned out that there was not sufficient legal basis for the closing, since the decision was put into effect retroactively.

The fear that the competition of private businessmen would threaten the socialized sector sprang up because of the story about the fate of a little coffeehouse in a Slovenian opstina. When it opened a few years ago this "pesky innkeeper" quickly attracted customers and thereby frightened the local hostelry enterprise, and opstina agencies adopted an attitude of drastic strictness in response to its pressure. The "host" gave in and sold the place to the hostelry organization of associated labor which had been "threatened," but the customers began to stay away from the little coffeehouse. At this late date someone thought to offer the owner a chance to take over his former place. He accepted, again the place is full, but they say that the host, probably aware of his superiority over the

socialized sector, no longer exaggerates in his zeal to achieve the quality of service and selection he provided formerly.

Another piece in the picture of the socialized economy's fear of competition from the private sector is the reaction of the trade association in the regional economic chamber when in late June the Titovo Uzice Opstina Assembly adopted a decision on the opening of private shops and stores throughout the opstina. Organized trade described the decision as paving the way for the tendencies of privatization in supplying principal foodstuffs. This step, they went on to say, opens the way to various kinds of malverzation and jeopardizes the operation of the food stores of existing organizations of associated labor. The panic of a Goliath at the very sight of David (who in this case does not even have a slingshot) is understandable only if we see it as the desire to preserve the comfortable business situation which monopoly guarantees.

Maximum Zeal--Minimum Security

Of course, the fear of organizations of associated labor that they might be threatened by the business acumen of private entrepreneurs is not the only hindrance to a further spread of self-employment. We surely must also add the various self-appointed fears--on behalf of society--of excessive enrichment and expansion of the business activities of private entrepreneurs.

When we speak of commitment of private capital to develop small business, there is the suggestion that this is a joint enterprise of those investing money and of many others who are investing nothing. The "seeking of opportunities" to obtain capital usually refers to the savings of individuals earned by working either in Yugoslavia or abroad. By all appearances partnership is conceived as the readiness of one party to invest his good will and certain deductions and on the part of the other to invest the initial capital and do the work and take the entire risk as to the outcome of the undertaking. Instead of concentrating on providing the conditions under which owners would have a real motivation to invest their money in economic activity, opstinas are usually becoming directly involved, "concerning themselves" with the content and quality of the development program, and making judgments as to whether the market offers prospects for the future establishment to survive and prosper. Thus the executive body of a Belgrade opstina rendered the verdict that the founder of a contract organization to service and maintain typewriters and other office machines could not do business successfully, since for years an organization of associated labor in the same field had languished in the same opstina.

The desire of the competent authorities of sociopolitical communities to be involved in the actual operation and in the purely business aspect of developing economic activity based on self-employment, but without making a material contribution or bearing economic liability, is also evident in the excessive predisposition to quantification. Those outside who exercise

various powers are manifesting their concern for the development of small business primarily by setting the targets which the businessman, provided he fulfills all the conditions of suitability, must meet in terms of the volume of business, the level of income and the number of new jobs. The license to undertake an economic activity frequently depends on more or less subjectively evaluated needs of the opstina or region and strictly quantitative indicators both with respect to the desired level of satisfying needs and also with respect to the desired increase of economic activity, employment or improvement of the supply of some commodity.

The normal orientation of public concern to establish conditions under which the businessman's initiative will spring up, will persist and--if it proves incompetent or harmful--will be eliminated, is thus twisting about in a tangled ball of confused roles. The complicated procedure that must be followed for any business undertaking to commence tends to maintain the situation in which roles are confused. Moreover, this procedure diverts a sizable portion of energies which are already scarce into the technical administrative area. Thus in actuality an additional obstacle is set up to any business initiative.

Nevertheless, the primary element which has an inhibitive effect is still the lack of economic motivation. One can hardly expect someone to invest hard-earned money if he has almost no visible incentive nor guarantee that he can count on support of the "community," at least not until he stands on his own feet and develops the business. In such a situation people decide rather to spend their money on consumption than to clear a way through the briar patch of various obstacles only to reach uncertainty, which along with inflation and difficult business conditions, is compounded by the many latent and open fears about enrichment and exposure to the possibility of persistent dissection in order to ascertain the origin of property. Under such conditions, when there is this strangely variable "social climate" and policy with respect to the development of self-employment, the absence of the anticipated expansion of contract organizations of associated labor, which will be one of our topics in the next installment, turns out to be clearer.

[18 Aug 80, pp 16-17]

[Text] The indubitable need for more intensive development of self-employment is based on the manifold advantages which society would have from investment of otherwise idle capital, personal initiative and the full responsibility which those operating with their own capital cannot by the nature of things avoid. Nevertheless, as we have seen from the examples given in the first installment (EKONOMSKA POLITIKA, 28 July 1980), the enterprise and desire of individuals to invest their savings to develop some business activity--this also applies to noneconomic activities--comes into conflict with fear or inertia. Fear and inertia are also affecting contract organizations of associated labor, which are a socially recognized form for self-employment to expand and for the private establishment to grow to become an organization of associated labor.

In spite of the smiles of good will which opstinas which have marked needs for new jobs and development are wearing, expansion of contract organizations of associated labor has not attained the expected dimensions. Over the last 3 years some 70 UOUR [contract organizations of associated labor] have been established; they employ a total of about 1,000 workers. Proceedings are under way to establish another 30 or so contract organizations, but it is hard to foresee when they will actually make their appearance, since the founding procedure lasts as much as a year.

The gap between the expectations of the authorities and the readiness of potential initiators to invest their capital and labor will persist so long as 32 clearances are required to establish a UOUR, including a permit from the organization of associated labor of the same kind which has its headquarters in the same opstina.

Regulations adopted in recent years to elaborate the provisions of the constitution and the Law on Associated Labor foresee--in most republics--that the capital will be returned to investors over a period of 10 years provided the annual payment does not exceed half of the annual amount set aside to expand plant and equipment. During that time, until the UOUR grow to become socialized economic entities (organizations of associated labor), the founders act as managers and bear more responsibility than other personnel for the business success of the collective. The rate of interest, which as a rule trails far behind inflation--figures as the only instrument, a weak one at that, for protecting the initial investment against devaluation by inflation--though the constitutional provision in no way, at least not explicitly, confines protection of the past labor invested solely to interest.

Among the contract organizations that already exist there is not a single one which is operating at a loss, and the personal incomes of employees are appreciably higher than earnings in organizations of the same kind founded by the public. The dynamism of development is best illustrated by figures for Slovenia, where there are 25 UOUR operating. Gross income last year was up 50.7 percent over the previous year, income was up 45.4 percent, net income was up 43.1 percent, and personal incomes were up 38 percent; however, it is also in Slovenia that a special program is being prepared to invigorate development of UOUR, since they note that the number is not increasing, that is, that interest is dying out in establishing this form of pooling labor and capital.

Obstacles Stronger Than Incentives

Though obviously the basic economic motivation is inadequate, potential founders of contract organizations of associated labor are not sufficiently encouraged by any sort of additional privileges. They have the same treatment as all other private businessmen when they import equipment, and they have almost no opportunities to obtain the right to foreign exchange. The founder of the Suvenir UOUR of Belgrade, which is doing an excellent business producing various types of albums and similar goods, has announced the

possibility of his moving to another republic since the self-managed special-interest community for economic relations with foreign countries has not allowed him to import a machine which is not produced in the country and for which he has provided the foreign exchange. Another reason might be that his local opstina (Cukarica) has refused for a long time a permit to erect a prefabricated structure.

Troubles with business space have become almost proverbial, and all those who want to provide work for themselves and others by investing their own capital come up against them. The UOUR Elektromiki, which produces teaching aids for specialized education, including complete display rooms for physics, employs some 20 workers cramped in 30 square meters. Its founder says that he could employ another 30 or so specialists, including some who have been permanently on the rolls of the unemployed, but he is unable to furnish a larger place of business.

The next obstacle is related both to capital and also to administrative procedure which has not been adapted to the particular case. To establish a UOUR and to be entered in the register of the economic court, one must among other things obtain a certificate that the money for fixed capital and working capital has been deposited in a giro account. However, the Social Accounting Service opens a giro account only after the entry has been made in the court register.

Self-employed persons who want to open up an ordinary private shop face obstacles which are equally great. To equip a store, say, in accordance with the conditions prescribed, one must have several hundred thousand dinars. In addition, to open a private store the founder must have at least the specialized training of a skilled worker in the field of commerce and at least 3 years' experience in commercial activity. This means that no one who has not worked in trade can open a private store, even though he has the capital--which one could hardly expect to earn by working in retail trade in the socialized sector. It is no wonder, then, that those in authority in the assembly of the city of Belgrade say that no one has inquired about private commerce for some years now, though people are nevertheless interested in the conditions for opening establishments in the crafts and trades and hostelry.

The increasingly frequent disruptions on the market, which are not correlated directly and exclusively with the shortage that comes from inadequate production, have brought more public attention than before to shortcomings in the distribution of goods. Thus we now note that in one Belgrade opstina where trade has only 0.13 square meter of sales space per capita, there is store space which has been empty for years in apartment buildings, since those for whom they were intended are unable to put them to use.

Competition of Goods, But Not of Firms

More intensive development of self-employment in trade would make it possible to develop authentic competition of goods instead of competition among firms, which usually ends in a monopoly and a closing off of the market out of the desire to guarantee easier conditions for the domestic producer or tradesman. Trade in agricultural products is characteristic in this respect, since considerable amounts of goods from private farms have no access to the cities. Now people are getting the idea of legalizing "traveling poultrymen," who would carry their goods to the customer's door, and also of expanding the functions of open-air municipal markets, whose number is small. The Permanent Conference of Cities and Opstinas is proposing that market administrations make it possible not only to rent counters, but also to purchase fruit and vegetables and to lease storehouses. Of course, if the proposal of the association of cities were to go no farther than expanding the powers of the market administration, that would pave the way for consolidation of new monopolies. It would be a significant and worthwhile change if with reasonable and effective control all those capable of providing a larger and better-quality supply, including dealers and traders, became active.

The empty places which the underdevelopment of self-employment has left in the supply of goods and services on the market are not noted solely in commercial activity. It is an indicative statistical datum that employment in the so-called private property sector increased only 3 percent in the decade 1968-1978 (from 100,000 to 103,000). The share of this sector's labor force in the total labor force dropped over the same period from 2.8 to 1.9 percent. The relative lag of the crafts and trades in the socialized sector and the insufficient involvement of self-employment in agriculture and tourism (see the first installment), clearly indicate the unused potential for augmenting economic activity and speeding up overall development.

It is obvious that restricting the real incentives for self-employment to timid and local tax exemptions, which has been the practice up to now, is inadequate if we take into account that the opstina tax amounts to only one-tenth of the total payments which a private craftsman or tradesman, say, must make for social service and public purposes. Certainly this has been the main reason why in Domzale Opstina, where "small business" is fairly well developed, incentives are sought primarily in removing obstacles and streamlining the procedure. Nor is it probably accidental that it was that opstina that has been obtaining a larger portion of its budget revenues (43 percent) from private craftsmen and tradesmen than any other opstina.

The Outlets of Hampered Enterprise

The Zagreb Center for Marketing Research has estimated on the basis of a survey that in the country at large more than a million people are performing (and collecting for) the jobs of building houses, maintaining dwellings

and household appliances or rendering other consumer services without a license. The estimate does not seem too high if we compare it with others which indicate four times as many operators in the "gray economy," in the space of which even the most rigorous public control would be helpless.

In any case, it would be altogether unrealistic to expect anyone whose plumbing or wiring breaks down to rely on the willingness or capabilities of the municipal service centers designated and authorized for maintenance, which are usually too busy. It is also difficult to believe that they will indignantly refuse the offer of a dealer or smuggler when a particular article is not available on the legal market. Private mechanics have all the work they can handle maintaining and repairing automobiles for the simple reason that there are not enough garages of this kind, and good market conditions are therefore also maintained for those who operate without authorization and without being registered. It has been well known for a long time then that any auto part can be obtained more easily at a "flea market" than in a store, but we still have not noticed nor heard of the intention of any economic organization to earn its income by selling parts from disassembled vehicles, which are in demand.

One could go on listing examples indefinitely. The stubbornness of the "gray economy" is abundantly fed by the shortage of goods and services. It can be combated only by developing regular and regulated supply regardless of whether we are talking about the unauthorized rendering of craft and trade services, street peddlers of all kinds of goods, tailoring and dressmaking, or even the renting of dwellings or medical and dental prosthetic services.

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FOREIGN TRADE DATA FOR MID-AUGUST 1980 GIVEN

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 12 Sep 80 p 3

[Article by Simona Jankovic: "How To Proceed When Imports Are Increasingly Expensive"]

[Text] To whatever extent estimates of the possibilities for the economy's export-import activities, especially opportunities for increasing exports, have depended on external factors dictating the situation and trends in the world economy, some realistic evaluations are possible. Even they are furnished as guideposts which, though not perfect, are still indicative of a majority of the industries and economic sectors in their effort and the measures they take toward maximum exactness in fulfilling the planned proportions and absolute quantities. Thus a recent survey done in the Yugoslav Economic Chamber or, more precisely, by the regional committees, sections and joint representative offices of the economy abroad, points very directly to certain specific undertakings in carrying out the agreed policy--aimed, of course, at achieving real changes in the entire foreign trade sector. After all, judging by the official figures arriving from the Federal Bureau of Statistics, the results achieved so far in commodity trade with foreign countries are favorable, but still not good enough from the standpoint of the payments-balance needs of the country as a whole.

Foreign Commodity Trade From 1 January to 15 August 1980, in millions of dollars

	1 Jan to 15 Aug		
	1979	1980	Index
Exports--total	3,989	5,326	134
Advanced countries	1,808	2,123	117
Developing countries	659	1,065	162
Socialist countries	1,522	2,138	140
Convertible	364	423	116
Bilateral	1,158	1,714	148

Table (continued)

	1 Jan to 15 Aug 1979	1980	Index
Imports--total	8,550	9,195	108
Advanced countries	5,355	4,954	92
Developing countries	1,202	1,640	136
Socialist countries	1,993	2,602	130
Convertible	509	502	97
Bilateral	1,483	2,099	141
Trade deficit--total	4,561	3,869	85
Advanced countries	3,547	2,831	80
Developing countries	543	575	106
Socialist countries	471	464	98
Convertible	145	79	54
Bilateral	325	385	118
Coverage of imports by exports (%)	47	58	
Advanced countries	34	43	
Developing countries	55	65	
Socialist countries	76	82	
Convertible	72	84	
Bilateral	78	82	

Note: The dollar was computed at the rate of 27.30 dinars.

If we take separately the value of commodity exports, according to the table they have so far increased 34 percent in nominal terms and 12 percent in real terms. The value of imports has risen 8 percent, while the actual volume has dropped about 12 percent. Also, the trade deficit was $3.869 billion--that is, $692 million smaller than in the same period of last year. We should also mention that the coverage of imports by exports was 58 percent (in 1979 it was only 47 percent). In the first 6 months, however, export prices were up 20 percent and import prices 23 percent.

We should add that the regional pattern of trade has improved thanks to larger exports to the developing countries and then a decrease in the commodity trade deficit with the advanced countries of the West and also with the socialist countries.

Nevertheless, the trade deficit exceeds the limits envisaged by the projection and necessary to fitting within the annual payments deficit of $2 billion.

In general the trends of exports up to this point and estimates of the general associations and sections in the Yugoslav Economic Chamber concerning potential for the growth of exports up to the end of the year indicate that

somewhat larger sales of goods can be achieved on the foreign market, but only if all other conditions are assured for production of the goods intended for export. Because of the inadequate and irregular supply of raw materials, supplies and energy to production in the first half of the year, and this is expected to be greater in the second half, specific measures will have to be taken to fulfill the plan export targets, as well as the augmented needs for export. At the same time, business executives point out, a commitment will have to be made to import those things necessary to the normal conduct of production when they cannot be purchased from domestic sources. Only in this way, the business executives emphasize, will it be possible to bring the present payments deficit within the planned $2 billion.

The country's economic structure and the composition of its exports are such that we must continue in the future to count on imports as a normal item.

7045
CSO: 2800

STATISTICS BUREAU RELEASES EMPLOYMENT FIGURES FOR APRIL

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 25 Aug 80 p 30

[Text] According to data of the Federal Bureau for Statistics, in April of this year there were 792,000 people looking for work in Yugoslavia, 531,000 of them, or about 60 percent of the total number, seeking work for the first time, while at the same time there were about 95,000 job vacancies. The situation, then, is somewhat better than in the previous month, when 805,000 persons were awaiting work and there were 94,000 jobs offered.

As compared to April last year the number of those seeking work has risen, however, 2.3 percent and the number of job vacancies less than 1 percent.

Those awaiting employment included 328,292 persons with specialized training (in April last year they numbered 305,445). The largest group among them have secondary education--154,879 (140,893 last April) and 135,000 were skilled and highly skilled workers (a year earlier they numbered 140,000). There were 16,046 unemployed persons with senior postsecondary education (13,464 the previous April) and 12,277 persons with junior postsecondary education (in April 1979 they numbered 10,679).

That same month, however, only 52,855 job vacancies were filled in spite of this large number of those seeking work. The explanation for this is as old as the situation itself, which has been recurring year after year: the job openings require education and specialists for which there is a shortage, while the unemployed in turn offer knowledge which does not correspond to the needs, mainly in the economy. In industry and mining, for example, only 17,214 of the 28,291 job vacancies in April were filled; in construction 18,123 new workers were sought, but only 10,000 were hired.

In the breakdown by republics the rolls were longest at employment security communities in Serbia, which accounts for more than half of all the unemployed--427,516. In Bosnia-Hercegovina 133,015 persons were looking for work, in Montenegro 23,099, in Croatia 80,827, in Macedonia 117,608 and in Slovenia 9,810.

The figures for May are slightly better, since the number of unemployed dropped to 770,000 thanks to seasonal work, but this year it is still higher than in 1979, when 753,000 persons were looking for jobs in Yugoslavia.

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CSO: 2800

ORGANIZATION OF PRIVATE FARMERS LAGGING

Zagreb VJESNIK in Serbo-Croatian 27 Aug 80 p 4

[Article by Mirko Sajler: "The Peasant Must Not Be Deceived"]

[Text] If the differences in yields between the private sector and the socialized sector of agriculture were narrowed by only half, Yugoslavia's peasants would yield 1 million tons of wheat and 2 million tons of corn more than they do today.

At a time when our society is struggling to intensify agricultural production and to substantially increase food production, the private sector cannot and dare not be ignored. The reason is simple: 85 percent of the plowland and a still higher percentage of the livestock population are still in the hands of Yugoslav peasants, but the farmland and livestock operations of the socialized sector still provide larger amounts of food. This is proof that Yugoslav peasants are still not utilizing their production capabilities. According to a calculation of the Federal Committee for Agriculture, the private sector could produce 1 million tons of wheat and 2 million tons of corn more in a year than it is now producing if the difference between its yields and the yields of the socialized sector were cut in half. That is, even though the land of private farmers usually borders on the land of the socialized sector, average wheat yields are as much as 20 quintals per hectare lower.

The Threat of a Migration by 4 Million People

What should be done to invigorate these huge sources of food? First of all, the private farmer dare not be left to himself and omitted from all the plans for development of agriculture. The formation of cooperatives, cooperative arrangements, OOUR's [basic organization of associated labor] and work organizations of associated farmers, and other forms whereby the Yugoslav peasants pool their labor and capital with one another or with socialized organizations should be speeded up. But little has been done so far in this area. Only 300,000 of the 2.4 million farm households in Yugoslavia are members of the 2,000 cooperatives or organizations of cooperators. The reason that there are too few of these organizations and too few

cooperators who have entered into association in them is usually inconsistency in conducting the policy agreed on. In many communities purchase and sale relations are still predominant between the peasant and society, rather than the relations of shared income, as it ought to be. Many organizations try to deceive the peasant in order to augment their income, since they have not established cooperation with him on the principles of shared income. They want, then, to retain the old situation, wrapped in the fleece of the Law on Associated Labor. If this kind of behavior toward the peasant continues, the planners expect that by the end of this century about 4 million people will attempt to infiltrate into the cities from rural areas, and as many as 1.5 million of them will be seeking jobs in industry. In order to avoid this stratification of the rural community and rural-urban flows of migration, particular importance must be paid in the coming medium-term plan to rural development and agriculture.

The Plan Up to 1985

The future plan for development of the agroindustrial complex up to 1985 does in fact foresee this. In devising it the republics and provinces committed themselves to provide the initial funds for investment in the transformed and newly formed agricultural cooperatives, organizations of cooperators and other forms of association. Incentives are also envisaged in the form of exemptions from taxes and certain contributions, and it has even been proposed that the base for taxation of income earned by associated farmers be reduced by as much as 50 percent by comparison with the obligations in effect up to now. An example from Slavonia shows how important this is. In that region, which is Yugoslavia's second grain-growing area in size and importance, the private farmers own about 17,500 tractors. But this powerful machinery is still not pooled, since as soon as they do so, the farmers must pay sizable social obligations. So they still operate without an association, rendering their services to the people around, collecting for it, but paying no taxes and contributions whatsoever, since jobs done this way are not recorded anywhere. And the farmers have certainly figured out that it is better to operate in this unauthorized way than to enter into association and end up paying social obligations which are not small.

Resistance on the Part of the Combines

Faster inclusion of private farmers and private farms in socially organized agriculture, which is set forth quite clearly in the Law on Associated Labor, has encountered resistance where it was least expected--in the combines. Thus the letter of the law means one thing to us, and practice something else. In some combines an endeavor is made to retain organizations of associated labor for cooperation instead of transforming them into basic organizations of cooperators. There are attempts to resist the development of cooperatives and refusal to hire private farmers. That is, no one wants the peasants in the enterprise. It is interesting and disturbing that in Croatia only 517 private farmers have so far been hired, not a one

of them from the regions of Slavonia and Baranja, where this type of production is most highly developed. The private farmers have been hired predominantly in the Split and Varazdin opstinas, and to a lesser extent around Gospic, Bjelovar, Karlovac and Zagreb. These are mainly producers of milk and livestock.

This kind of attitude toward the private farmer is determined above all by the avoidance of a possible risk. It is quite clear that it is incomparably easier and safer to establish purchase-sales relations than to cooperate with the private farmer on the principles of shared income. In spite of the Law on Associated Labor, then, which clearly indicates that they should cooperate with the private sector, many combines are retaining commercial relations represented by the "buy-and-sell" system.

New Policy Toward the Private Sector of Agriculture

This must change if the private sector is to survive as an inexhaustible source of food, if the migration of peasants to the city with its string of social and public problems is to be prevented, and if we are to utilize everything that our country can do to increase the production of foodstuffs. We should add to alteration of the attitude of socialized organizations toward the private farmer the need for industrial plants to be built in the larger villages where surplus manpower would be employed. This is a way of creating mixed farmer-worker households, which quite certainly would be economically stronger. The Federal Committee for Agriculture will also call upon the commercial banks to alter their policy toward the private sector and to conclude self-management accords with the associated private farmers for the credit financing of food production.

The competent sociopolitical communities will have to pay more attention to building infrastructural facilities, highways, water supply networks and then schools and health institutions. This would encourage many people to link their existence to rural areas and food production, which would ultimately mean that we would have sufficient foodstuffs not only for our domestic needs, but also for the world market, on which there is a shortage of such commodities.

7045
CSO: 2800

AVERAGE PRIVATE FARM INCOME, EXPENDITURES IN 1979

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 1 Sep 80 p 35

[Excerpt] In the revenues of farm households, which averaged about 130,000 dinars in 1979, the amount earned from farming is declining more and more, namely about 35,000 dinars was earned from farming last year, or 26.8 percent of the average farm revenue, compared to 30 percent in 1978. Incomes earned from jobs held by family members outside farm work, income from social service payments, from rent, from artisan activities, from hunting and fishing amounted to more than this. These sources of revenue accounted for over 51,000 dinars or 38.9 percent of total revenues (in 1978 they amounted to 39,000 dinars or 38.2 percent of total revenue). Farms received an average of 7,700 dinars from sale of property, inventories and similar transactions, or 5.8 percent of total revenues, while consumption of their own products is estimated to be about 27,000 dinars, or 20.2 percent of revenue.

Farms in Vojvodina and Slovenia had the highest incomes, namely, about 194,000 dinars. Most farm revenues in Slovenia came from work not connected with farming (49 percent), while in Vojvodina revenue from farming itself accounted for 41 percent of all revenue. Farm revenue in Croatia averaged about 105,000 dinars, 46.7 percent of which was earned from work outside farming.

In the average 4-to-5 member farm household most expenditures are for food and beverage (31.2 percent of all revenue), 6,500 dinars, or 5 percent of revenue, is spent for shoes and clothing, 6,700 dinars, or 5.1 percent of revenue, is spent for living quarters, heat and light, while 4,500 dinars, or 3.5 percent of revenue, is spent for transportation and PTT services.

Production costs on farms averaged 12,000 dinars in 1979, or 9.1 percent of revenue, investment in the farm averaged 7,800 dinars, or 5.9 percent of revenues, and payments for taxes and [state] contributions amounted to 2,800 dinars, while payments on debts averaged 3,900 dinars, or 3 percent of revenue. All other costs of farm households amounted to 16,800 dinars, or 12.8 percent of all revenue.

CSO: 2800

CROATIAN, NATIONAL OUTLOOK FOR EDIBLE OIL PRODUCTION

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 16 Sep 80 p 4

[Article by Tomislav Kapetanic: "Oilseed Is Taking Over the Fields"]

[Text] In our country at the present time there are more than 20 oil producers, and according to estimates of experts vegetable fats coming onto the market are of very good quality. There are after all few countries which have sunflowers such as grow in Yugoslav fields, and their seed is our principal oilseed. Unfortunately, not enough is produced. Oil consumption is growing very rapidly, and these products are mixed, and the producers are not required to indicate on the bottle the origin of the raw material from which it was made. An oil manufacturer in Zagreb puts in his "mixed" oil "old timey" oil from rapeseed, which only in recent years has begun again to establish itself in our fields. This oilseed is now on a par with sunflowers thanks to the most recent decision of the Federal Executive Council.

That is, a decision was made to change the producer's sale prices of sunflower seed and rapeseed of this year's harvest. The producer's sales price of these two oilseeds was raised from 6.80 to 8 dinars per kilogram. In this way, the judgment runs, considerably more favorable conditions are created for increasing purchases of oilseed, for higher production of oil and for better supply of this product to the market. There is a temporary ban, up to the end of this year, on exporting oils to the foreign market so that there will be enough to meet domestic needs, since our oil consumption already ranges at a per capita annual level of about 10 kg.

Times Are Changing

There are fewer and fewer households that use lard for cooking. Whereas 15 years ago per capita consumption of lard was about 7 kg and that of oil only 3 kg, today it is quite different; it is estimated that the ratio is 90:10 in favor of vegetable oils. For a time between 1965 and 1971 oil was cheaper than lard, and it easily won consumers over. Oil is now more expensive, and even so demand is at the "white-hot" level, while the demand for animal fat has dropped off altogether.

The situation is similar on a world scale, oils long ago took over: 60 percent of the fats used in preparing food are today of vegetable origin. About 150 million tons of oilseed are produced annually from a large variety of plants: soya, sunflowers, the peanut, cotton, the oil palm, the coconut palm, and rape. In all there are about 300 plants from which oil and fats can be extracted. From the standpoint of profitability it pays to raise rape along with sunflowers in the moderate climatic zone. Other domestic oilseeds, such as mustard, flax, poppy, and so on, have little significance in an economy producing fats for food.

Only the most elderly inhabitants of our country have forgotten the taste of oil from rapeseed. Finally, we should also say that at one time the farmers regarded rape as a good plant to raise (from the standpoint of profitability), and it was also of interest to the processor, the oil industry. Its yellow flowers blossomed in fields from Slavonia to the Drava Valley and the Medjimurje, and the first oil mills in fact sprang up in the areas where these fields were located. Sunflowers, however, have predominated in all the plains areas, and only when imports of large amounts of soybean oil from the United States began, did rapeseed come back. Moreover, arguments were also set in motion about rapeseed being "hazardous" to health. Poland and Sweden, for example, were not taken in by that tale about rapeseed being hazardous, and they have developed intensive production of this oilseed, accompanied by obvious progress in both selection and soil and crop practices. Nor have rapeseed and rapeseed oil been neglected by the French nor even the Italians.

India leads the list of rapeseed producers (25 percent of world production), though this oilseed is especially interesting to Europe as well and especially countries located at some distance from the Mediterranean. Extensive experiments are being conducted with rape. Over the last several years selection efforts in the GDR have yielded many new so-called winter varieties, and they have been put into production in the shortest time (the yield averages about 20 quintals per hectare). But at the same time something much more important has also been achieved--the fat content has been raised 48 percent, which is considerably above the international average. Since the GDR, like many other countries, has been forced to import oilseed, this means considerable savings for it, and at the same time it is an incentive for other countries to begin to plant this crop.

The Most Recent Prices Favor Planting

Thus it is that rape is back with us again. In Croatia (which by tradition and its favoring climatic conditions is at present the most important area for raising rape in Yugoslavia, it is also being planted this year in Macedonia) 5,000 hectares were planted, for example, in 1974, in 1975 the area was already 10,000 hectares, and this year production is planned (planting is under way) on 25,000 hectares, the most up to now.

It has been demonstrated that the raising of rape under our conditions is a highly profitable undertaking, and specialists of the oil mill in Zagreb say that our eating habits also favor this oil.

According to a projection of the development of oilseed production in Yugoslavia, rapeseed should reach a level of 75,000 tons by the end of this year, which is enough for about 30,000 tons of oil. Last year the interest of socialized farms in this republic was not quite as great in planting rape, mainly because of the low purchase price. The most recent prices of oilseed, which put sunflower seed and rapeseed on a par, came at the right time, at the very height of preparation for planting (which begins earlier with the present varieties). But since new and later varieties are also being introduced, it is expected that the planting program will be fulfilled and that therefore it will not be necessary to import raw materials for the production of oil. Certainly this is more worthwhile and cheaper than purchasing oil abroad.

7045
CSO: 2800

OTHER REPUBLICS SAID TO EARN HARD CURRENCY FROM CROATIAN GOODS

Zagreb VJESNIK in Serbo-Croatian SEDAM DANA Supplement 13 Sep 80 pp 6-7

[Interview with Lazo Drljan, graduate economist and director of the work organization Vanjska Trgovina (Foreign Trade) of the Zagreb Agroindustrial Combine Sljeme, by Salih Zvizdic; date and place not given]

[Text] Lazo Drljan, graduate economist, is director of the Vanjska Trgovina Work Organization of the Zagreb Agroindustrial Combine Sljeme, whose export-import organizations exported goods worth $16 million in 1978 and about $15.5 million last year, and the value of their exports in 8 months of 1980 exceeds $13 million. With those exports they cover all the combine's import needs and achieve a certain surplus of exports over imports. That is why Sljeme is among the so-called active exporters (sixth on the national list in its activity).

We conducted an interview with director Lazo Drljan about current problems with exports, especially those which affect active exporters such as his work organization.

[Question] Recently you have been greatly involved personally in solving the problems that particularly affect active exporters. What is this about?

[Answer] It is certain that the active exporters are bearing the main burden of augmenting exports and reducing the trade deficit, which, of course, does not bother us. But it does bother us that we have an unequal position as compared to the so-called passive exporters, i.e., those whose exports are smaller than their imports, and as compared to the quota recipients, who use a specified amount of foreign exchange, but do not export anything.

How Export Dollars Melt Away

[Question] Can you back this up?

[Answer] Abundantly. To illustrate, the rights to foreign exchange which we earned last year were simply taken away from us, and because of the well-known restrictions on imports, we have not been able to use them before the end of the year. This means that that amount of income in the form of foreign exchange was taken away from us, and we even had quite a few difficulties obtaining imports for our own needs. We are particularly upset by this because we earned that foreign exchange on the basis of regulations established in advance and the agreements of the Self-Managed Special-Interest Community for Economic Relations With Foreign Countries. Moreover, this year our foreign exchange quota has thereby been decreased by 30 percent, so that today we have at our disposition only 49 percent of the foreign exchange which we earn, as called for by the regulations, of course, while some organizations have even less foreign exchange at their disposition.

[Question] To what extent does this act as a disincentive on active exporters?

[Answer] This is easy to explain. As is well known, in spite of the support and incentives, a loss is incurred in exporting, i.e., in earning foreign exchange. At the same time the foreign exchange taken away from us is given to other users who earn money on that foreign exchange. So, we incur losses in order to obtain the foreign exchange, while others using that same foreign exchange can only show a gain.

[Question] Would you like to give an example?

[Answer] There are many of them, but I will mention one: a well-known and successful organization which in many respects is on the list of the best in the republic, Podravka in Koprivnica, has imports twice as large as its exports. A portion of the foreign exchange which Podravka uses comes from Sljeme, since it is an active exporter, but which, however, has for a long time been burdened with losses. Of course, this then has an effect on the behavior of the active exporters, who lose interest in exporting. In the first half of last year we exported more than $10 million worth of goods, and then in the second half, when our rights began to be diminished unjustifiably, we exported only about $5 million worth. Others are doing the same, and thus millions of dollars from exports are melting away.

[Question] Some say that the active exporters cannot be granted greater rights because the payments-balance situation of our republic does not permit!

[Answer] This "reason" is frequently heard even when at the top levels, but unfortunately I must say that it is not correct. This is where the mistake is, perhaps the biggest mistake. The only thing that is true is that we ought to export more, precisely because of the situation with the balance of payments, but provided the exporters are given greater rights in use of the foreign exchange.

Let Us Reach an Agreement

[Question] Recently it was said in a responsible place in Belgrade that our foreign exchange system is good, but that mistakes are occurring because it is poorly applied.

[Answer] That is exactly what we say. Of course, even the foreign exchange system can and must be constantly improved, but considerable difficulties, and we are only talking about some of them here, come precisely from the lack of consistency in applying the system.

[Question] However, there is also the other side--if the active exporters are given greater rights, there will be the question of how to obtain foreign exchange for the passive exporters and quota recipients. Then there is also the problem of certain general needs which cannot be met without foreign exchange, such as petroleum, coffee, tropical fruit, certain consumer goods, industrial goods, and the foreign exchange needed for the medical service, the armed forces, and so on.

[Answer] Now, this is where the greatest error is made and where there is least understanding of our position. We the active exporters are not eating up the foreign exchange, nor do we seek to spend what we have earned solely for our own imports. We are not seeking any kind of absolute freedom in the disposition of foreign exchange. We agree completely that a portion of the foreign exchange we realize is to be used for the general needs of society.

[Question] You are opposed to administrative manipulation of foreign exchange? What is your proposal?

[Answer] If things are simplified, then what is happening to the foreign exchange of the exporters is nothing other than administrative confiscation of foreign exchange and then administrative distribution to others. And all of this is done without us, though we earn that foreign exchange, usually by incurring losses ourselves. This is contrary to our system, and it is also harmful to our economy. We therefore propose that we ourselves would pool a portion of the foreign exchange with other users, after a portion has been subtracted for the general needs of society. We do not even ask that that share be the share we personally desire, but the share that we agree on in the SIZ [self-managed special-interest community]. It is clear that we cannot accept the argument that active exporters must suffer losses just so the country can have, say, coffee and then so that those importing and selling that coffee can show fat earnings. In any case, we all know, administrative confiscation of income is contrary to every statute.

[Question] How would the pooling of foreign exchange with other users look as you see it?

[Answer] We would like to enter into agreement with users of foreign exchange so that the loss and the risk would be jointly and equally borne by exporters and importers. This could even be refined to the point where the exporters would enter into long-term agreements concerning joint production for export and a policy under which importing would be done under the most favorable conditions for both partners and for society as a whole, the ultimate goal being to share income rather than losses and to bring the trade deficit into normal limits and possibly to eliminate it altogether. This is a basic condition for long-term agreements, since otherwise there is no lasting success in augmenting exports and bringing imports into line. In that case the SIZ's would assume their true coordinating role instead of their present role, in which they are burdened with nonself-management and administrative elements of confiscation and siphoning of income, with their harmful consequences, especially to the economy and to the exchange balance.

[Question] Would this require changing the basic enactments, say, the Law on Associated Labor, the Law on Foreign Exchange Transactions and perhaps the constitution?

[Answer] No! Our proposals are altogether in conformity with the basic legislation and require only that they be applied as they are written.

What Is the Situation in Other Republics?

[Question] We have been speaking mainly about Croatia. How has this been solved in other republics?

[Answer] The rights of exporters are greater in other republics, but in the other republics they also enter into public and altogether specific agreements as to how the users of foreign exchange will bear the losses of the exporters. In other words, enforcement of the regulations has gone further than in our republic. Whereas in Slovenia, for example, they publish the percentage of the losses of the exporters which the importers will assume as their share, in our republic we hear only that a self-management accord is reached between exporters and importers on the use of foreign exchange, that the purchase of foreign exchange has been covered, that there has been some kind of "smuggling," and so on.

[Question] These issues have been debated in competent bodies in Croatia. What were the conclusions of those debates?

[Answer] Yes, they have been debated! I would mention two debates of the Chamber of Associated Labor of the Croatian Assembly, one at the end of February last year and the other this July. In February a resolve was adopted concerning the meat industry, which stated: "... to set forth the right of exporting organizations to use foreign exchange for imports up to the amount of 90 percent of the net foreign exchange inflow achieved, as follows: 70 percent for processing materials and spare parts and 20 percent for equipment. Organization responsible: Croatian SIZ for Economic

Relations With Foreign Countries. Deadline: 15 March 1979." Certain conclusions on the same topic were also adopted in the meeting this July, and in accordance with our proposals a recommendation was made to the SIZ to "reassess" the SAS [self-management accord] governing that subject matter. Unfortunately, none of this seems to be binding on anyone.

[Question] Doesn't this mean that in some cases the administration is stronger than self-management bodies in our self-managed society? How is it that the SIZ is operating outside of the SAS?

[Answer] Unfortunately, there are cases when the administration has excessive power. As for the SIZ, in this case it is operating on the basis of a self-management accord which the representatives of the economy adopted in meetings of delegations and in an assembly of the SIZ.

[Question] It seems unusual that you should have adopted an agreement which you are now fighting.

[Answer] That accord was prepared long ago and its adoption was rather late. It passed in a meeting of the delegation which I attended [?], and motions for further debate did not pass. Though procedure is important, I do not want to say that the error lies solely in procedure. It is more important to note the fact that active exporters in our republic are greatly in the minority as compared to the number of passive exporters and quota recipients, and it is certain that that was the makeup of the assembly in which that SAS was adopted. That need not be tragic, but it is tragic that the error is not being corrected.

Differing Interests

[Question] In other words, in practice there is a chasm between the active exporters on the one hand and the passive exporters and quota recipients on the other?

[Answer] Perhaps it is too much to call it a chasm, but it is certain that there is what I might call a pluralism of interests and that our interests cannot be identical so long as the conditions for obtaining and disposing of foreign exchange remain as they are.

[Question] What foreign exchange rights does the SAS you have mentioned grant to passive exporters and quota recipients?

[Answer] It entitles them to use 100 percent of the foreign exchange which they earn by exporting and also the right to obtain 50 percent (60 percent in the case of quota recipients) of the amount of foreign exchange which they used the previous year, and that is the foreign exchange which has been confiscated from the active exporters. So, this is many times more favorable for the passive exporters than for the active ones. But if the situation is correctly portrayed, that is, if note is taken that an inappropriate policy governing the use of rights will diminish exports or the

pace of exporting, it is quite certain that there will be no "chase," since the representatives of the economy will reach agreement. It is also particularly important to note that this kind of policy even discourages the passive exporters from any substantial augmentation of their own exports.

[Question] How can that be?

[Answer] If they increase their exports beyond their own needs, they are threatened with the danger of becoming active exporters and joining the group of exporters with unfavorable conditions for the use of foreign exchange. That is why they strive to keep their exports at a "certain level."

Smuggling and Smuggling Squared

[Question] To return to your proposals about the pooling of foreign exchange. It is thought by some that after the "agreement" reached by certain representatives of the economy, it could happen that in some places on the internal market the price of foreign exchange would rise high over the official rate. The reference is to what is called smuggling of foreign exchange. What do you think about this?

[Answer] This problem does objectively exist, but should we set fire to the house in order to burn up the mice? we can only guess about what might happen. The basic thing is to take note of the problem and to begin to resolve it correctly, in the spirit of our self-management system. Our statutes say that organizations shall dispose of the foreign exchange which they earn and that the organizations shall agree about the creation and use of foreign exchange. How, then, does anyone become entitled to confiscate foreign exchange from them and at the same time to say that they would smuggle that foreign exchange and in that way upset the official rate of exchange of the dinar and so on. We certainly are not able in this interview to enter into the details of all the aspects of the rate of exchange of the dinar, since that is a separate topic. But I would only mention that the relation between the official and the real rate of exchange of the dinar will by and large be more favorable when, among other things, exports are increasing at a more rapid rate. So, we cannot expect a stable rate of exchange of the dinar exclusively on the basis of administrative orders. Finally, as for smuggling, this is a canard launched by those who look with suspicion on the economy and its representatives.

[Question] How do you mean that?

[Answer] You see, the export industry is left to organize itself and to perform very complicated processes of purchasing, producing, financing and selling goods and then to export them and collect for the goods abroad. This is a long route and under present conditions it is particularly complicated. But no one is afraid nor charging that those goods or that money is being smuggled. But when it is a question of the right of that industry to enter into agreement with the users of foreign exchange concerning the

conditions of using perhaps only 5-10 percent of the value of its total output on the basis of the standards of society and self-management discussion and agreement, then someone has the nerve to talk about smuggling. This is also insulting. If concluding a self-management accord between exporters and importers about the use of foreign exchange is smuggling, as some say, then in good conscience we can say that administrative distribution of foreign exchange, that is, confiscating income from some and giving it to others, is smuggling squared.

Goods Are 'Fleeing' to Other Markets

[Question] You say that foreign exchange is being "distributed" administratively. Where is this done, how?

[Answer] It is usually done in the chambers and in the SIZ. Anyone who has no other way of seeing what this looks like can merely come to one such "distribution." As a rule the demands of the economy for foreign exchange are twice or three times as great as the foreign exchange that is available. At the same time, success is rarely achieved in finding firm criteria governing distribution, though here again the active exporters are supported more in words than in deeds. The whole debate seems unprofessional and above all contrary to self-management.

[Question] Can you speak a bit more concretely about how active exporters are getting along in the other republics?

[Answer] I am familiar with the situation in the neighboring republics, Slovenia and Serbia, where active exporters are doing considerably better than in Croatia. Active exporters in Slovenia, for example, dispose of 95 percent of the foreign exchange they earn from exports. Incidentally, the payments-balance situation in that republic is better than ours, which can certainly be related to the larger exports, which are the result of the better incentives for active exporters. Also, it is a fact familiar to quite a few representatives of the economy that a certain amount of export goods from Croatia go to certain other republics (mostly Slovenia), and they are exported from there as Slovenian exports. Our manufacturers do this because the Slovenian exporters, who have greater rights, can furnish the owners of the goods more than exporters who have smaller rights. The situation is similar with stimulation of active exporters in Serbia. In any case, our own SIZ certainly knows all about this.

[Question] Do representatives of the economy in those two republics agree on the sharing of losses incurred in exporting?

[Answer] This is normally done, since it is quite clear and publicly stated to what extent importers using foreign exchange must reimburse exporters, as the earners of the foreign exchange, for losses incurred in exporting. This was written about in the press and talked about on television. It is a matter for agreement, it is all out in the open, no one talks about smuggling nor threatens with inspectorates and penalties....

[Question] What have you done to get the proposals on certain improvements in the earning and distribution of foreign exchange to the most responsible bodies in the republic?

[Answer] We have presented all our proposals in writing to the competent bodies of the government and SIZ. Our basic proposal is that the SIZ Assembly be called into emergency session and that this SAS concerning imports and rights to use foreign exchange be amended so as to grant greater rights to active exporters in Croatia, or at least that those rights should be similar to those in other republics. We have also frankly warned some of the comrades bearing the highest responsibility, giving them examples, about the negative impact of the present situation on the republic's balance of payments.

We have also sought solutions through the delegate base, and, clearly, through self-management channels. I would particularly like to emphasize that these efforts of ours should not be regarded as some kind of criticism for the sake of criticism, since they are far from that; this is an honest attempt to contribute to correct assessment of certain relations in the field of foreign exchange transactions in our economy and our republic. Especially since our proposals are not demands which cannot be met, since we are not asking either for an overnight rise of labor productivity nor any expensive credits running into the billions. It is a question of improving the system and improving operation, but also of conducting transactions within the framework that has been generally accepted.

7045
CSO: 2800

SLOWDOWN IN SLOVENIAN PRODUCTION, EMPLOYMENT

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 8 Sep 80 p 12

[Excerpt] In the last 7 months Slovenian industry increased production by only 2.5 percent compared to the same 1979 period. July was the most unfavorable month when production was 5.2 percent less than July 1979. The main reasons are irregular supply of raw materials, producer goods, and parts (not only from imports but from domestic production), and the worsening situation in regard to financial liquidity, especially at the beginning of the year. Organizations of associated work reported that the supply situation worsened from month to month. According to estimates, in over 50 percent of economic organizations the supply of imported materials and parts was unsatisfactory, while over 10 percent said the situation was critical. Demand for industrial products (for foreign and domestic buyers) is more or less satisfactory. Considering that industry has considerable unused capacities, one can conclude that it could increase production markedly and sell it, if it only had sufficient raw materials, producer goods, and parts.

The difficult supply situation, restrictions in investments and personal incomes, as well as the insistence on abandoning "extensive employment," have contributed toward slowing down considerably the increase in persons hired which has also resulted in lower growth in volume of production; because of the relatively low level of automation, production growth to a large extent still depends on increase in employees, above all in direct production. But in the first half of this year the monthly average increase in employees in industry (including mining) increased by only about 1.5 percent, or a little less than 5,000 (to 348,402 compared to 343,406 in the same 1979 period). In earlier years the half-year increase in the number of employees was 2 to 3.5 percent.

Reduced production this July compared to last July was most marked in the following five industrial branches: electric power equipment and appliances (20.1 percent reduction), metals (6.6 percent), furniture (4.4 percent), machinery (3.8 percent), and textiles (9.7 percent). Increased volume of production was registered in chemical products (4 percent), the automotive industry (2.3 percent), electric power industry (5.1 percent), building materials (3.4 percent).

Of greatest concern is stagnation in production of electric power equipment and appliances, one of the most important industrial branches of Slovenia.

CSO: 2800

SLOVENIAN WHEAT CONSUMPTION, PRODUCTION

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 9 Sep 80 p 4

[Article by A. Jovanovic: "Grain on the Basis of Shared Income"]

[Text] In Slovenia, according to the estimate of the Slovenian Republic Committee for Agriculture, Forestry and Food, commercial wheat consumption ranges up to 240,000 tons. Approximately 150,000 tons of bread grain is produced in the republic and undergoes processing of that republic's milling industry. The other 90,000 tons are obtained in the form of flour from the other republics.

Slovenia has a shortage of wheat, which is why it has a long-term orientation toward purchasing sizable amounts from the other republics. To that end its organizations have established long-term links on the basis of shared income with work organizations from grain-growing areas—for example, with the Servo Mihalj PIK [agroindustrial combine] in Zrenjanin and the Sirmium PIK in Sremska Mitrovica, so that these organizations deliver about 65,000 tons of wheat annually.

In spite of difficulties in wheat purchases this year, thanks to the actions undertaken Slovenia has managed to provide between 70 and 75 percent of the amounts it needs. Since purchasing is not at yet over and will intensify in the coming period, especially by means of replacing the wheat with corn and flour, it is believed that the needs will be met. That is, the position has been taken in Slovenia that less and less bread grain is to be imported, Ivo Marenk, chairman of the Republic Committee for Agriculture, Forestry and Food, said, among other things, and to halt it whenever possible, which is why efforts are being made to obtain the bulk of the amounts on the domestic market.

It is understandable that an effort is being made at the same time in this republic to diminish its dependence on other regions. This is a large and complicated task, especially since the prevailing view is that the potential of Slovenian agriculture facilitates a predominant orientation toward animal husbandry. The situation on the domestic market—a demand for wheat that exceeds supply—imposes this reorientation.

Surpluses in the Private Sector

Market surpluses of wheat in Slovenia can be expected from the private sector, since the socialized sector has a considerably smaller output, and every kernel goes into the silos. This is especially important if we bear in mind that more than 90 percent of the area is privately owned. This situation argues for the development of cooperation.

A larger supply of wheat cannot be expected to come from expansion of the area planted, but from attainment of higher yields per hectare. There is much room for improvement here, since the yield per hectare in Slovenian wheat production is still relatively low. It also varies greatly, and the socialized sector achieves better results. The opportunity for higher yields lies, then, in the use of better-quality varieties of seed and a more up-to-date technology that meets Slovenia's specific conditions. However, the area planted to wheat will be enlarged, but at the expense of other crops; in the past the area planted to wheat has represented only 32 percent of total area cultivated. Corn, for example, has had a share of 30 percent. An effort is now to be made to increase the share of both these grains--to 40 percent of total area for each.

This year's wheat purchasing has been rather successful thanks to the new prices and the substitution of corn for wheat. To be sure, the results were not as great as expected. The main reason was that the support price of wheat from this harvest was set just before the harvest. However, this year's harvest of 20,000 tons is considerably larger than in previous years. This especially applies to the private sector, from which 5,300 tons have already been taken. It has been noted that this sector is very well organized in some areas, where sizable quantities were obtained, while at the same time there are regions where its growth rate is not satisfactory as yet.

Since a majority of the farms are oriented toward animal husbandry, we were told by Andrej Petelin, president of the Federation of Slovenian Cooperatives, indirect purchasing has yielded the best results. Experience already shows that the private farmers are very much interested in substituting wheat for corn or flour.

In order to achieve better results in the future efforts will be made for the banks to commit themselves on a more long-run basis to the timely supply of funds, and their aid is also very important in the pooling of capital with organizations in the wheat-growing regions--primarily in Vojvodina and Slavonia. This kind of organization of the banks for the purchasing of seasonal surpluses which cannot be covered with internal assets, remains a long-term orientation.

Timely Adoption of Economic Conditions

The activity of Slovenia's grain-growing organizations to establish long-term relations with organizations in the wheat-growing regions will continue as well. The work of services specialized in the promotion of agriculture and opstina staffs is also to be intensified; the staffs will be made up not only of representatives of the opstina and the Socialist Alliance, but above all with members from the ranks of agricultural organizations.

At this moment the preparations for the fall planting are most important, and all of this has been channeled toward higher yields, which would help to create more abundant market surpluses. In this respect much is expected from staffs specialized in promotion of agriculture and cooperative organizations, especially in writing contracts with cooperators.

Aside from the economic conditions for the production of wheat, corn and other field crops, there is also a need to adopt measures in good time for the production of milk and livestock. After all, this arouses the motivation of farmers to achieve higher productivity and better results.

Along with the measures being taken by the self-managed special-interest community for economic relations with foreign countries, it is important to see that proper soil and crop practices accompany the fall planting. That is, there is at the moment a shortage on the market of manufactured fertilizers and chemicals used for plant protection because they are being exported. In order to avoid importing wheat and other crops, solutions will have to be found so as to meet farmers' needs.

Finally, a set of measures is being taken in Slovenia to achieve more successful results next year, since 1981 is the start of the new medium-term plan. Certainly it is necessary to achieve adequate productivity and thereby higher income in agriculture, which would be a substantial contribution to stabilization developments.

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CSO: 2800

AGRICULTURAL PROBLEMS, FALL PLANTING IN CROATIA

Zagreb VJESNIK in Serbo-Croatian 18 Sep 80 p 5

[Article by Milivoj Stipanicic: "Purchasing in Every Village"]

[Text] The official figures, which show that the total wheat harvest in Croatia this year is 1,125,400 tons and that the republic's needs for consumption (as human food) should be approximately 600,000 tons, might give a mistaken impression that everything is in order, that there is no concern about bread.

That is not the case. This harvest, even with the exceptionally favorable social measures to increase purchases and the undoubtedly improved organization of the purchasing effort, so far has not yet yielded the planned market surpluses, and at present there is still a need for further intensive purchasing of wheat. Especially from the private sector, where, according to estimates, about 500,000 tons of harvested wheat is "lying," a portion of which still might go into the market surpluses. Grain which does not appear as a market surplus follows altogether different routes, and usually becomes livestock feed.

Balances

Here, then, is an extremely good reason for continuation of the effort to purchase wheat, which among other things was debated on Wednesday by the republic staff for harvesting, purchasing and planting. The principal aim is to fulfill the purchasing program, whose target is 600,000 tons, and at present we are only a step from achieving that target, which eliminates the need to import wheat from abroad to meet Croatia's need. The flow of wheat from Croatia to the other republics is approximately covered by purchases in Vojvodina, and there are no major problems here.

It is estimated, then, that about 400,000 tons of wheat from Croatia will be sold, and it is calculated that nearly 50,000 tons of wheat and flour will be purchased in other republics (that is, Vojvodina). Consequently, the level of fulfillment of the target for purchasing market surpluses of wheat is crucial as to whether we will have to reach into our scanty

reserves of foreign exchange to make up for a possible shortage in the wheat balance through imports.

Headers

The header is a machine for harvesting corn which at harvesting time is mounted on general-purpose grain combines so that they can harvest corn. So, these attachments which make it possible to use a combine in harvesting corn are now jeopardizing the program for the fall planting. It will be late anyway, because a portion of the areas now occupied by corn will become available at a late date because of the extended growing season of corn.

But if the harvest is not rapid and efficient, this delay could truly jeopardize the considerably larger program for planting fall crops. Without combines there is no fast harvest, and they are short 100 headers in the combines of Slavonia and Baranja, which means at least some 100 combines which are not at present ready for the harvest.

These devices are a domestic product (Zmaj of Zemun), but since Zmaj also has large export obligations, it is not certain at present whether it will be able to deliver the headers to our combines or not. Interventions, agreements, petitions and assurances have followed one upon the other. At present this is an outstanding problem, much greater than it appears at first.

Fertilizer

The augmented planting plan, however, is threatened most seriously by the shortage of manufactured fertilizers. Repair of the INA [Petroleum Industry of Zagreb] plant in Kutina delayed delivery of amounts of manufactured fertilizers for the subsequent period, which were already too small, so that in spite of the efforts being made at Kutina, it is obvious that even the most necessary amounts of manufactured fertilizers have not been furnished for the planting. The permission granted to import 13,000 tons of fertilizer was late, but even when we include future deliveries from INA (45,000 tons?), this will not be enough even for the initial applications.

Confronted with this situation the republic staff is preparing a report for the Executive Council of the Croatian Assembly, since it is obvious that it will have to intervene with a supplemental importation. The staff also recommends adaptation of the production technology to the conditions of the shortage of fertilizer, which could yield at least partial results. Those who have rights to foreign exchange (the combines who have delivered market surpluses of wheat over and above the need of their own milling) will probably use a portion of their foreign exchange incentives to import manufactured fertilizers, but Zitozajednica is also preparing a survey of the pattern of deliveries up to now, on the basis of which the Republic Committee for Agriculture, in collaboration with other authorities, will prepare a proposal for utilizing those opportunities as well.

There are no major difficulties with seed. It is disturbing that there is little concern about replacement of commercial wheat with seed wheat, which would improve purchasing, and at the same time it would expand the use of better-quality varieties of wheat. One of the recommendations of the staff for planting also concerns dissemination of this practice.

Area (in Hectares) and Pattern of the 1980 Fall Planting

		1979 (actual)	1980 (plan)	Index 1980/1979
Wheat	Socialized sector	96,094	105,000	109.3
	Private farmers	249,294	250,000	100.3
	Total	345,388	355,000	102.8
Winter rye	Socialized sector	1,096	1,000	91.2
	Private farmers	5,179	5,000	96.5
	Total	6,275	6,000	95.6
Winter barley	Socialized sector	14,065	14,500	103.1
	Private farmers	23,899	25,000	104.6
	Total	37,964	39,500	104.0
Rape	Socialized sector	16,702	24,500	146.7
	Private farmers	295	700	237.3
	Total	16,997	25,200	148.3
Other fall planting	Socialized sector	983	1,400	142.4
	Private farmers	15,526	14,300	92.0
	Total	16,509	15,700	95.1
Total fall planting	Socialized sector	128,940	146,400	113.5
	Private farmers	294,193	295,000	100.3
	Total	423,133	441,400	104.3

7045
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PRIVATE, SOCIALIZED AGRICULTURE IN SERBIA, KOSOVO

Agriculture in Serbia Proper

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 18 Aug 80 p 29

[Text] According to analyses made in the Executive Council of Serbia, the average landholding of the peasant farm in Serbia proper is 3.7 hectares scattered over more than eight parcels and located in four atars. There is no interest in the purchase and concentration of land. There are few land sales. Nor are the socialist farms interested in buying land, they do not even have the funds to buy the land offered them. From the standpoint of the optimality of agricultural production, the pattern of landholding in Serbia proper is the most unfavorable in Yugoslavia and in Europe. Because of urbanization, construction of highways and settlements along them, weekend cottages and playing fields, about 10,000 hectares of cropland, usually the most fertile areas, is taken out of agricultural production every year. About 70,000 hectares are not being cultivated. The average age of the working farmer is 55. About 10 percent of the private farmers have entered into associations. The share of purchases in total output of the private sector is about 10 percent for wheat and about 2 percent for corn.

Agricultural organizations and cooperatives possess 5.7 percent of all the cropland in Serbia proper, about 4 percent of all the cattle and about 6 percent of all the hogs. In a comparison of all regions in Yugoslavia socialized farms in Serbia proper have the lowest share in the social product of agriculture, and they have the second lowest share, after Montenegro, in total cropland. The socialized sector's share in total purchases of farm products is slightly over 30 percent. The capacities of the food manufacturing industry are poorly developed in the regions where their raw materials come from; more than 50 percent of the capacity is in Belgrade. With respect to the degree of industrial processing of farm products the food manufacturing industry of Serbia proper is in next to last place in the country and processes less than 50 percent of the harvest. The equipment and technology of the food manufacturing industry have been lagging behind; for example, not a single packinghouse fulfills conditions for export to the American market.

The republic's executive council is preparing an extensive report portraying the situation and offering recommendations whose implementation would alter the situation in the agriculture and food manufacturing industry of this region. The title is Socioeconomic Problems of Food Production in the Coming Period in Serbia Proper.

Agriculture in Kosovo

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 25 Aug 80 p 29

[Text] The private sector of Kosovo's agriculture has a share of 20 percent in the province's social product of the economy, while more than 45 percent of the population derives their existence from agriculture. More than 88 percent of all cropland in Kosovo is privately owned, and that land accounts for about 98 percent of the livestock population, 80 percent of the orchards and more than 50 percent of area planted to grapes. The importance of the private sector of agriculture to development of Kosovo's overall economy is evident from these figures, and that is why the provincial fund for advancement of agriculture was set up in good time (1972). So far (up through last year) 270 million dinars have been invested in the private sector of agriculture through the fund, the assets of the fund constituting more than 50 percent. Usually the funds are furnished on a nonreturnable basis--in the form of rebates, premiums and other exemptions. Considerably more funds have been invested in the private sector of Kosovo's agriculture from the federal fund and the International Bank for Development--a total of 800 million dinars. Moreover, 240 million dinars have been invested under the program for building up meat reserves in the form of livestock.

Expectations for this year are that 400 million dinars will be invested in the private sector of Kosovo's agriculture from funds of the International Bank for Reconstruction and Development and the federal fund (under the third line of credit), 60 million dinars under the program for building up meat reserves in the form of livestock, and about 25 million dinars through the provincial fund for advancement of agriculture (last year a bit more was invested--about 29.5 million dinars).

This year, as has been the case up to now, the largest investments will be in animal husbandry (meat and dairy), and then also in field crops, fruitgrowing, market gardening, and so on.

7045
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POWER POTENTIAL OF TREBISNJICA RIVER TO BE TAPPED

Sarajevo OSLOBODJENJE in Serbo-Croatian 9 Sep 80 p 7

[Article by Vlado Mrkic: "Using the Potential of the 'Upper Levels'"]

[Text] One of the most interesting projects for construction of new sources of energy in Bosnia-Hercegovina, and indeed in Yugoslavia, is the "Project for Utilization of the Hydropotential of the Waters of the Upper Levels of the Trebisnjica's River." It is above all significant because it foresees multiple and complete use of the water of this inestimable and almost sole resource of this part of Hercegovina.

Eastern Hercegovina, though it has abundant precipitation, has always had problems either with water or without it. The abundance of water in the wintertime causes floods, and during the summer the drought regularly inflicts tremendous damage, and human labor has never been secure. The traces of the human struggle with water in this region are very old. Thus the first dam and storage reservoir in the Balkans, built on the Klinje back in 1897, was aimed at reducing floods in Gatacko Polje and at providing irrigation.

Seven Power Plants

Comprehensive exploration began after the war. The first basic water management scheme was adopted for the entire region, and it has already demonstrated that water use would be most effective if applied simultaneously to meeting the needs of the power industry, agriculture and other users. The studies have not been limited exclusively to the watershed of the Trebisnjica proper, but has also extended to other karst poljes and other water resources, since it has been demonstrated that they can be utilized effectively.

In view of the abundance of water, the proximity of the sea, and the relatively great differences in altitude, first thoughts have gone to hydropower use in a time when there is a great need for electric power, but the basic conception of their multipurpose use has always been present.

The new and updated basic water management scheme was prepared in 1967, but its solutions envisage that the water would go off to the sea by the shortest route after passing through the power plants.

Honoring the requirement that the water be retained as long as possible on the surface so that it would also offer other benefits to people, the most recent solutions were arrived at. According to them, a total of seven power plants would be built in the Trebisnjica hydrosystem with six storage reservoirs whose total capacity would be 1,325 million cubic meters of water.

The backbone of the entire system is the Trebisnjica, which once was an underground river. Today it no longer exists. Its source has long been under the waters of the Bileca storage reservoir. Its bed through Popovo Polje has been lined with concrete so as to close its sinkholes and thus transform it into an ordinary canal. Its mouth, if the term applies, is in the penstock of the Capljina Power Plant, and from its lake the water goes into the Neretva, but only when man has no further use for it.

This part of the job has been mainly completed with construction of the Capljina Hydroelectric Power Plant. Floods in Popovo Polje, the largest polje in the karst, which in a year of average rainfall, the specialists say, lasted 240 days and covered as much as 5,000 hectares, have been reduced to only the bottom of the polje, about 500 hectares, and last a few days at a time.

All the Karst Poljes

Now comes the second phase in building the hydrosystem which is to gather the water from all the karst poljes in this part of Hercegovina, beginning with the highest, Gatacko Polje, which is 950 meters above sea level, and then Nevesinjsko at 850, Dabarsko at 480, Fatnicko at 460 and Bilecko Polje at 430 meters above sea level.

The programs of the project for utilizing these water resources have been prepared and revised, and the technical solutions themselves--we were told by specialists of the "Hydroplants on the Trebisnjica" in Trebinje a few days ago--foresee multipurpose use of the water.

So far designs have been made for the Nevesinje pumped storage power plant and the Dabar Hydroelectric Power Plant. These two power plants would have a capacity of 250 megawatts and an annual output of 860 million kilowatt-hours of electric power, which is approximately equal to the annual growth of consumption in Bosnia-Hercegovina.

In the canyon of the Zalomka River, between Gatacko and Nevesinjsko poljes, the project calls for construction of a storage reservoir with a capacity of about 180 million cubic meters of water. Each cubic meter "is worth" 2.3 kilowatt-hours of electric power because of the altitude at which it is located.

The path of the water from the karst poljes will really be unusual. In Nevesinjsko Polje an equalizing basin will be built. From it the water will go by tunnel to the Dabar Hydroelectric Power Plant on the edge of Dabarsko Polje, by canal across Dabarsko Polje, by tunnel from the Dabarsko to the Fatnicko Polje, and from Fatnicko Polje again by tunnel to Bilecko Lake and then by the well-known route to the sea, through the turbines of several power plants.

The value of the entire system will, of course, be fully manifested only after it is completed, after all the structures planned have been built. Only then will every cubic meter of water pass through all the power plants and in each one generate new kilowatts of electric power.

Other Benefits

However, that is not all. This time that further step which often we have lacked in the programming and planning of similar projects was taken. Often in capital investment projects we have evaluated the production of electric power, but we have only enumerated the other benefits. However, cases are not rare when these "other benefits" are worth more than the electric power generated.

It might be said that this conception of the specialists, which is already being carried out in this part of our country, is in that respect among the extremely interesting accomplishments. It is based on the ever more present need for energy and food, and in its basic conception this scheme meets both those requirements.

Regulation of the karst poljes in eastern Hercegovina creates conditions to make all the karst poljes capable of intensive agricultural production. There will no longer be floods, and there will be enough water for irrigation. This resolves the most important problems. Perhaps the magnitude of these resources and capabilities will be demonstrated by the figures that the total area of these karst poljes is about 50,000 hectares, of which 38,000 are tillable. Construction of the large storage reservoirs will make it possible to irrigate them. In certain parts of the areas conditions have already been created for irrigation (Konavli, Zupa, and Trebinjsko and Popovo poljes).

Finally, construction of the Trebisnjica hydrosystem can also solve the problem of supplying this region with drinking water and water for industry. Opportunities are created for construction of regional water supply lines. The formation of storage reservoirs and streams through the karst poljes also furnish conditions for development of new settlements and industrial facilities.

In conclusion, the question is this: When will this vision become reality? It is no longer something to just dream about. What has already been done in Popovo Polje and over the entire course of the Trebisnjica was the first

large step. In coming years the "Upper Levels" Project will present to us a great challenge and great opportunity.

Sketch of the Trebisnjica hydrosystem.

HE = hydroelectric power plant
PHE = pumped storage power plant
RP = switching installation

Key:
1. Adriatic Sea
2. Popovo Polje
3. Popovo Polje regulating basin
4. Svitava regulating basin
5. Zalomka storage reservoir
6. Nevesinje regulating basin
7. Klinje storage reservoir
8. Bileca storage reservoir
9. Grancarevo dam
10. Gorica dam
11. Trebinje regulating basin

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BRIEFS

BUILDERS IN IRAQ--Iraq which is our largest foreign trade partner among the developing countries is of great interest for the construction enterprises of Bosnia-Hercegovina: 48 percent of the construction work which organizations in Bosnia-Hercegovina contracted with foreign countries last year was contracted with Iraq. The value of contracted work last year amounted to $112 million; it is being carried out by the Investprojekt, Unioninvest, Vranica, Sipad, Krivaja, and other enterprises. This year the most work was contracted by Unioninvest, together with Vranica and Centrotrans; work on this project will last 4 years. Despite the success of construction enterprises of Bosnia-Hercegovina in Iraq, Bosnia-Hercegovina's deficit in trade with Iraq has increased 4.5 times this year, because of the increased price of crude oil which accounts for 99.5 percent of total imports from Iraq. [Text] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 26 Sep 80 p 3]

IMPROVED BANK LIQUIDITY--In the last few months bank liquidity has markedly improved after it had worsened at the beginning of the second quarter of this year. Especially important is the fact that banks have unexpectedly large foreign exchange reserves. In reporting to delegates of the Committee for the Credit-Monetary System of the SFRY Assembly Chamber of Republics and Provinces, Milan Golijanin, vice governor of the National Bank of Yugoslavia, said that on 31 August the bank had 12 billion dinars, or 25 percent more than in the same 1979 period; it had 19.5 billion dinars in its reserve fund. Favorable liquidity will enable banks to finance social reproduction and to support the volume of sales within planned credit-monetary limits. The status of liquidity varies according to regions, but as a whole it is essentially satisfactory. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 18 Sep 80 p 1]

SLOVENIA-VOJVODINA COOPERATION--In the next medium-term period economic cooperation between Slovenia and Vojvodina will acquire broader dimensions, especially regarding food production and the supplying of Slovenia with agricultural products. At discussions of delegations from Ljubljana and the Slovenian Executive Council with representatives of agroindustrial complexes in Subotica, Sombor, and Senta, attention was devoted to possibilities for joint efforts in food production, as well as other fields such as trade, tourism, the metals industry, energy, etc. where by applying the Law on

Associated Work, i.e., on the basis of joint income and risk, common interests could be found. In addition to agreeing on investment of efforts to increase wheat production in Vojvodina, it was agreed that the cultivation of barley, rye, and oats should be done (through joint efforts) in the hilly-mountainous areas, not only of Slovenia, but of other parts of the country where there is interest in doing this. A similar declaration was made regarding livestock production, especially sheep and cattle raising. Since Vojvodina has to use secondary raw materials from direct agricultural production as a substitute for corn to produce animal feed and Slovenia has essential organic components for feed derived from purification of waste water, mutual interest also exists in this regard. There is also the possibility for building joint commercial centers, not only in Ljubljana, but also in other Slovenian cities where more Vojvodina agricultural products could be sold. Similar moves would be made in regard to tourist facilities. Joint efforts were also suggested in raw material production for the textile, metal processing, and wood industries; in regard to energy, it was said that joint efforts should be made in other regions, such as investing in coal production in Bosnia-Hercegovina. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 25 Sep 80 p 1]

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21 October 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2056

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21 October 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2056

CONTENTS

BULGARIA

Fulfillment of 1980 Six-Month Economic Plan
(STATISTICHESKI IZVESTIYA, No 2, 1980) 1

Administrative Developments, Structure of Agriculture Described
(Yordan Kostadinov; POLITICHESKA PROSVETA, No 8, 1980) 8

Higher Profitability in Industry Urged
(Dafin Doynov; IKONOMICHESKI ZHIVOT, 3 Sep 80) 17

New Aluminum Plant, Output Described
(Radoslav Gulubarov; ZEMEDELSKO ZNAME, 6 Sep 80) ... 20

CZECHOSLOVAKIA

VHJ Directors Discuss Comprehensive Experiment Results
(Pavel Karel, Jaroslav Pesta; HOSPODARSKE NOVINY, 22 Aug 80) 24

GERMAN DEMOCRATIC REPUBLIC

Increased Inner-German Trade Result of Higher Energy Costs
(H.-J. Mahnke; DIE WELT, 22 Aug 80) 34

HUNGARY

National Agricultural Association Weighs Competitiveness
(MAGYAR MEZOGAZDASAG, No 36, 1980) 37

Food Industry, by Janos Marton
Meat, Grain Production, by Vilmov Marillai
Horticultural Products, by Gimes Anna Burger

Coal Mining Investments Described
(FIGYELO, 19 Sep 80) 50

POLAND

Development, Production of Cement, Lime, Gypsum Industry Described
(Karon Watola; CEMENT WAPNO GIPS, May 80) 55

BULGARIA

FULFILMENT OF 1980 SIX-MONTH ECONOMIC PLAN

Sofia STATISTICHESKI IZVESTIYA in Bulgarian No 2, 1980 pp iii-vi

[Excerpts] General Remarks

This publication comes out once a quarter and contains annual, quarterly and monthly statistical data categorized by basic indicators characterizing the socioeconomic development of the Bulgarian People's Republic.

The program of STATISTICHESKI IZVESTIYA [Statistical News] comprises 12 sections:

I. Basic data on the development of the national economy
II. Population
III. Population's standard of living
IV. Labor
V. Capital investment
VI. Industry
VII. Agriculture
VIII. Transportation
IX. Communications
X. Domestic trade and prices
XI. Tourism
XII. Foreign trade

Data for all sectors are categorized by organizational structure and composition of enterprises for the period in question.

Cost indices are published in prices of the year in question; annual indices of industrial and agricultural output, of capital investment, goods turnover and prices, foreign barter trade, and monthly indices of industrial output are calculated in comparable prices; annual indices are calculated with 1970 as the base, while those for a period of less than a year are calculated on the base of the corresponding period of the preceding year.

Data on the monetary income, expenditures and consumption of households are from the representative observation of household budgets.

Data for the current year are preliminary and are subject to revision in subsequent issues.

Explanation of abbreviations and symbols:

0 Amount less than half of the unit being used
- No instance
. Data lacking
PAK Industrial-agrarian complex
APK Agroindustrial complex

CONTENTS

	Page
General Remarks	iii
Development of the National Economy during the First Half of 1980	v
I. BASIC DATA ON THE DEVELOPMENT OF THE NATIONAL ECONOMY	1
II. POPULATION	2
1. Natural Movement of the Population	2
III. LIVING STANDARD OF THE POPULATION	3
1. Average Monthly Pay of Manual and Office Workers in State and Cooperative Industrial Enterprises, by Quarters	3
2. Average Monthly Pay of Manual and Office Workers in Construction, by Quarters	3
3. Average Monthly Pay of Manual and Office Workers Categorized by Types of Transportation, by Quarters	4
4. Average Monthly Pay of Manual and Office Workers in Trade, by Quarters	4
5. Monetary Income of Households, by Social Groups	5
6. Monetary Expenditures of Households, by Social Groups	6
7. Per-Capita Household Consumption of Certain Food Products, by Social Groups	7
IV. LABOR	11
1. Manual and Office Workers, by Sectors	11
V. CAPITAL INVESTMENT	12
1. Indices of Capital Investment, by Forms of Property	12

Page

2. Capital Investment..... 12
3. Capital Investment, by Sectors..... 13
4. Capital Assets Put into Operation, Classified by Technological Structure..... 14
5. Capital Assets Put into Operation, by Sectors..... 14

VI. INDUSTRY..... 15

1. Industrial-Production Manual and Office Workers in State Industrial Enterprises, by Sectors and Cooperative Industrial Enterprises..... 15
2. Indices of Total Output of Industry as a Whole, by Economic Groups..... 16
3. Indices of Total Output of State Industrial Enterprises, by Sectors..... 16
4. Indices of Total Output of State and Cooperative Industrial Enterprises in 1980, by Okrugs.... 17
5. Production of Certain Types of Industrial Products..... 18
6. Indices of Per-Capita Labor Productivity of Industrial-Production Personnel in State Industrial Enterprises, by Sectors..... 24

VII. AGRICULTURE..... 25

1. Indices of Total Output of Agriculture, by Sectors..... 25
2. Farm Animals in Agricultural Organizations and Units..... 25
3. Farm Animals in Agricultural Organizations and Units as of 1 July 1980, by Okrugs..... 26
4. Products and Productivity of Farm Animals in Agricultural Organizations and Units..... 27
5. Products and Productivity of Farm Animals in Agricultural Organizations and Units in 1980, by Okrugs..... 28
6. Agricultural Products Purchased..... 29

VIII. TRANSPORTATION..... 30

1. Manual and Office Workers, by Types of Transportation..... 30
2. Rail Traffic..... 31
3. Common-Carrier Motor Traffic..... 32
4. Maritime Traffic..... 32
5. River Traffic..... 33
6. Civil Air Traffic..... 33
7. Labor Productivity, by Types of Transportation.... 34

		Page
IX.	COMMUNICATIONS	35
	1. Manual and Office Workers and Labor Productivity in Communications	35
	2. Communication Services, by Type	35
X.	DOMESTIC TRADE AND PRICES	36
	1. Manual and Office Workers in Trade	36
	2. Goods Turnover in Retail Trade	37
	3. Goods Turnover in Retail Trade in 1980, by Okrugs	38
	4. Certain Food Commodities Sold in Retail Trade	39
	5. Certain Nonfood Commodities Sold in Retail Trade	40
	6. State Retail Prices of Fresh Vegetables and Fruits	41
	7. Prices of Fresh Vegetables and Fruits in Cooperative Markets in 66 Cities	42
	8. Price Indices of Fresh Vegetables and Fruits	43
XI.	TOURISM	44
	1. Foreigners Visiting the Bulgarian People's Republic with the Object of Touring	44
	2. Bulgarians Visiting Other Countries with the Object of Touring	45
XII.	FOREIGN TRADE	46
	1. Foreign Barter Trade	46
	2. Exports and Imports with Socialist Countries	46
	3. Exports, by Commodity Divisions	47
	4. Imports, by Commodity Divisions	47
	5. Exports of Certain Commodities	48
	6. Imports of Certain Commodities	51

DEVELOPMENT OF THE NATIONAL ECONOMY DURING THE FIRST HALF OF 1980

In keeping with the requirements of the new economic approach and as a result of the widely launched socialist competition among labor collectives, all sectors and activities of the national economy achieved new, still higher rates of development during the half-year.

Significant progress was made in raising the efficiency and quality of social production.

Industry

The enterprises of state and cooperative industry produced 4.4 percent more output than in the first half of 1979. The highest rate of production growth was achieved by state enterprises in the following industries: chemical and rubber industry 12.8 percent; electric and thermal power 7.6 percent; machine-building and metal-working industry 7.0 percent; glass and china-and-pottery industry 6.9 percent; fuel industry 6.0 percent; leather, fur and shoe industry 5.4 percent etc.

An increase in industrial output was achieved in all okrugs, with the highest rate of growth achieved by Shumen, Razgrad, Ruse, Stara Zagora, Sofia, Khaskovo, Blagoevgrad, Turgovishte okrugs etc.

The production of items of special importance for the national economy increased. Production increases over the corresponding period in 1979 were as follows: electric power 6.8 percent; coal 4.3 percent; cast iron and ferroalloys 2.3 percent; pig iron for steel production 2.1 percent.

The machine-building and metal-working industry produced 9.7 percent more electric motors, 25.2 percent more power transformers, 35.7 percent more lathes, 1.4 percent more battery-operated trucks, 7.1 percent more motor trucks, 17.5 percent more television sets etc.

The chemical industry increased the production of nitrogen fertilizers by 12.7 percent, caustic soda by 54.4 percent, soda ash by 0.5 percent.

The output of the state enterprises in the paper and pulp industry increased 2.2 percent. Production of pulp was 103,800 tons, of paper 152,400 tons, of cardboard 29,600 tons.

The textile industry continued to develop at an increasing rate, as a result of which 4.6 percent more industrial output was produced. The production of woolen fabrics increased 8.4 percent, of silk fabrics 8.6 percent.

The per-capita labor productivity of industrial-production personnel in state industrial enterprises, calculated on the basis of total industrial output, increased 3.0 percent over the first half of 1979. The highest growth rate was achieved in the chemical and rubber industry, the machine-building and metal-working industry, the textile industry etc.

In state and cooperative industrial enterprises the number of industrial-production manual and office workers increased 1.1 percent (1.2 percent for state enterprises alone, 0.8 percent for cooperative enterprises alone).

The average monthly pay of manual and office workers increased 14.3 percent over the first half of 1979.

Agriculture

During the first half, agricultural work in the sphere of crop production was performed under adverse meteorological conditions. As a result of the increased concern of agricultural workers, good results were achieved in animal husbandry. The productivity of farm animals in agricultural organizations and units increased. The average milk yield per cow on fodder rose 1.9 percent during the half-year as compared with the same period in 1979.

Production increases over the same period in 1979 were as follows: cow's milk, 9,098,000 more liters, or 9.3 percent; 3.7 million more eggs, or 0.7 percent.

During the half-year all categories of farms produced 8.0 percent more meat from horned cattle than in the same period last year, 3.8 percent more meat from small cattle, 2.6 percent more eggs.

Capital Investment

The volume of capital investment utilized during the half-year was 361.9 million leva, or 17.7 percent more than in the same period last year.

The bulk thereof was invested in sectors of material production, with the greatest share of capital investment going for industry.

The modernization and reconstruction of existing production capacity continued also during the first half of 1980 in the entire national economy. The funds utilized for modernization and reconstruction exceeded 875 million leva, i.e., 36.3 percent of the total volume of capital investment.

Capital assets in the amount of 1,420.8 million leva were put into operation, 47.3 percent thereof being new machinery and equipment.

Transportation.

As compared with the first half of 1979, common-carrier transportation moved 3.7 percent more passengers.

Labor productivity per employee rose 26.0 percent in railroad operations, 13.1 percent in motor transport, 3.1 percent in maritime transport.

Communications

Revenues from communication services increased 17.0 percent (by 21,940,000 leva) over the first half of 1979.

The labor productivity of persons employed in operations rose 13.4 percent.

Trade

During the first half of 1980 the retail trade network and food-service establishments realized a retail goods turnover in the amount of 5,651.6 million leva

There were increases in the sales of most commodities such as rice, edible vegetable oils, sugar products, milk, eggs, jams, jellies and preserves, lemons and oranges, brandies, woolen and silk fabrics, sewn goods, knit outer and underwear, stockings, shoes, furniture, radio receivers and television sets, home refrigerators etc.

Favorable results were also achieved in our foreign trade relations. Foreign barter trade increased 13.4 percent in comparison with the same period in 1979.

As compared with the first half of 1979 there were more exports of lathes, electronic calculators, battery-operated trucks, electric telphers, typewriters, ships and ship equipment, soda ash, nitrogen fertilizers, Oriental tobacco, eggs, sterilized canned vegetables, stewed fruits etc.

More metal-cutting machinery, steam and water power plants, coke, cast iron, coal, sheet iron, wool, clocks, refrigerators etc. were imported than in the 1979 half-year.

The favorable results achieved in the national economy during the first half are a good foundation for the successful fulfillment of their annual production assignments by the labor collectives in our country.

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ADMINISTRATIVE DEVELOPMENTS, STRUCTURE OF AGRICULTURE DESCRIBED

Sofia POLITICHESKA PROSVETA in Bulgarian No 8, 1980 pp 44-51

[Article by Yordan Kostadinov, candidate of economic sciences: "Agroindustrial Integration and the Two Forms of Socialist Ownership"]

[Text] The rapprochement and merger between the two forms of socialist ownership in our country was initiated immediately following the victory of socialist production relations in agriculture (after 1958-1960). The process particularly intensified in the 1970s, after the April 1970 BCP Central Committee Plenum and the 1971 10th BCP Congress, when the development of APK [Agroindustrial Complexes] and other organizational and production forms of agroindustrial integration began to be established. It is continuing to develop at an even faster pace at the present stage which is characterized by the steady development and improvement of state and cooperative ownership and the intensification of their interpenetration and enrichment, their gradual coming together and their merger within a single ownership by the whole people.

Agroindustrial integration is one of the main prerequisites for the interpenetration and enrichment of the two forms of ownership and for upgrading the level of their maturity.[1] Prior to the development of agroindustrial complexes (APK), to a certain extent, this process was accomplished through the activities of intercooperative and state-cooperative enterprises of different natures. Under the conditions of the cooperative APK (those which involve exclusively the participation of the TKZS [Labor Cooperative Farms] and which, at first, accounted for more than half--55.4 percent--a far higher level of socialization of the cooperative form of ownership was achieved compared with socialization in the older TKZS. Whereas the average size of the cultivated land per TKZS ranged between 38,000 and 42,000 decares, while the number of cooperative farmers employed ranged between 1,500 and 1,700, the average land under cultivation per APK (1971) was 242,988 decares, while the number of employed individuals averaged 6,609.

The rapprochement between the two forms of socialist ownership is taking place more directly in the mixed state-cooperative agroindustrial complexes (APK)(with the participation of the TKZS and the DZS [State Farms]), the

industrial-agrarian complexes (PAK), the industrial-agrarian trusts (PAO), the scientific-production complexes (NPK), the scientific-production trusts (NPO), the National Agroindustrial Complex (NAPK), and the National Agroindustrial Union (NAPS). With the development and the operating of such economic organizations meeting the specific conditions of our country, new favorable conditions and prerequisites for the drawing closer to each other and enriching state and cooperative ownership and improving relations expressed through the cooperative and the state forms of ownership were created.

The mixed APK most clearly express the problem of reciprocal interweaving and enrichment of the two forms of socialist ownership through the activities of the developed specialized agricultural enterprises which, in recent years, have developed into sectorial and service enterprises. These two basic types of enterprises are being established with the participation of TKZS and DZS and with the elimination of the economic and juridical autonomy of such economic organizations in a number of APK. The specialized sectorial enterprises work on an intracost accounting basis. The APK has become the basic economic organization which can establish contractual relations with other economic organizations and enterprises.

The agroindustrial complexes are socialist territorial separate economic organizations. They are juridical persons operating on a cost accounting basis, engaged in the effective production of agricultural and other commodities, applying industrial methods, and insuring a high level of concentration and specialization of production and integration with the processing industry. They retain and further develop the positive basic principles of farming and management characteristic of the TKZS: democratic management, systematic application of cost accounting and self financing, individual and collective material incentive, and so on.[2]

APK activities lead to a higher level of socialization of socialist ownership in both its forms and make possible their interpenetration, enrichment, rapprochement, and merger. These levels of organic interaction between the two forms of ownership are theoretically substantiated in the BCP program. They are in a state of unified and continuous complex process of development and, from the practical viewpoint, it would be difficult at any given period to indicate the level reached by their interpenetration or the beginning of their enrichment, rapprochement, and merger. All these facets are manifested, one way or another, at each stage of development of the two forms of ownership and characterize their level of maturity.

Obvious achievements in terms of their interpenetration, enrichment, and rapprochement are already apparent in the development and improvement of the two forms of ownership in our country. In the next few years this process will be manifested ever more strongly through their merger as well.[3] In the course of the implementation of this interaction, development, and improvement, agroindustrial integration plays, and will continue to play, a certain role both as an organizational form (the creation of

integrated economic organizations) and, most of all, as an objective economic process.

With the intensification of agroindustrial integration, in recent years we have noted in our country a more intensive organic linking of industry with agriculture, and a more direct linking between labor, land, and productive capital of both sectors. It is precisely on this basis that the interaction between the two forms of socialist ownership--the state and cooperative--takes place.

The rapprochement and merger between the two forms of socialist ownership take place in the separate stages of the single "land-end product" reproduction process. This becomes materialized in the unified APK funds about which Comrade T. Zhivkov wrote the following in his 9 December 1974 report to the Politburo on the further development of agroindustrial complexes: "...Substantial changes will occur in the nature of agricultural ownership. So far we have not as yet developed a single property of the whole people. The agroindustrial complexes are the development of something new. The newly established capital, particularly of the mixed APK, is no longer exclusively state or exclusively cooperative property."[4] Clearly, in terms of its economic content, this is mixed state-cooperative capital which materializes the rapprochement and merger between the two forms of socialist ownership.

The establishment of complex state-cooperative capital as the direct result of the vertical integration between industrial and agricultural economic organizations is one of the basic ways to the establishment of a single socialist ownership by the whole people.

This process is particularly clearly manifested in APK such as Belasitsa in Petrich, Drustur in Silistra, and others, to which industrial processing enterprises have been added from the state sector on APK territory. In such cases a real integration is achieved between state and cooperative enterprises, an organic linking between agricultural and industrial production, combined within a given agroindustrial vertical chain. In such mixed APK the reproduction process takes place under single management and control, covering individual production units integrated within the "land-end product" vertical chain.

In the mixed APK the relations expressing socialist ownership substantially change. We would not be wrong in describing such property as state-cooperative. It contains elements such as increased cooperation, mutual aid, collectivism, material interest and responsibility no longer within the framework of a single, but of both forms of socialist ownership together. All this is an expression of the development and improvement of socialist production relations.

Such processes occur in the PAK and PAO as well. These organizational-production forms of agroindustrial integration ascribe new qualitative aspects to the socialization of socialist property and production. Let

us take as an example the Bulgarian Sugar PAO which included five industrial-agrarian complexes which, in turn, include TKZS, DZS, branch farms, and sugar plants and factories. These different enterprises, combined within the "land-end product" cycle, have blended organically and technologically. At the same time, a considerable enhancement of the socialization of socialist property has been achieved, mainly of the land and basic productive capital of both sectors, as well as the production and labor processes. In this case the development of and rapprochement between the two forms of socialist ownership have been encompassed within a single organizational-managerial unit.

Cooperative property was converted into property of the whole people in the development of the Bulgarian Sugar PAO on the basis of Council of Ministers Letter No 40 of 1972, establishing it as a state economic organization. However, this was achieved not through its gradual rapprochement and integration but directly through the organization of industrial-agrarian trusts in accordance with that normative document. Despite this, it took years to accomplish the factual merger, rapprochement, and blending of the two forms of ownership through economic means and structuring as a single organism.

Economic ties and relations among individual units within the agroindustrial chain in the Bulgarian Sugar PAO are still developing and advancing. Relations developing between these two units largely carry the marks of relations of property of the whole people which are still at the beginning of their formation.

Development and advancement of socialist ownership assumes new visible dimensions with the establishment of scientific-production trusts (NPO). Above all, the level of socialization of productive capital is enhanced in the areas of cooperative and state property. Within the NPO agricultural and industrial activities are in a state of close organic interaction between them and with science without intermediary organs and organizations.

Links and relations developing within the framework of the "research-production" cycle are close in nature and content to those achieved by the other economic organizations even though they have some technical NPO characteristics. The overall planning-economic and production activities of the NPO are based on contractual ties and relations between scientific and production branches and units within the PAO, the so-called internal relations and ties, on the one hand, and contractual relations and ties between the NPO and its branches with other economic organs and organizations outside the NPO system, so-called external economic ties and relations, on the other.

Agroindustrial integration raises the level of socialization of socialist ownership in its cooperative form mainly but to a certain extent, in its state form as well. The higher level of socialization of state ownership under the conditions of agroindustrial integration is achieved mainly by combining technologically related activities and production lines within the "land-end product" chain.

The organizational-economic forms of agroindustrial integration lead to the reciprocal enrichment, rapprochement, and blending of the two forms of socialist ownership and to improvements of relations specifically expressed by these two forms. However, it is not the forms but the objective internal processes which develop within them that are the main and determining factors. In this case it is a question of relations which arise on the occasion of utilization of productive capital and the distribution of the produced end product in the individual integrated economic organizations. Such relations are relations of cooperation and mutual aid between producers of the two sectors of the national economy--state (industry, mainly) and the cooperative sector, i.e., relations between the two basic friendly classes within our society--the working class and the class of the cooperative farmers.

The development of socialist ownership and, above all, of cooperative ownership is accelerated by the establishment of the National Agroindustrial Complex and the creation of the National Agroindustrial Union. The systematic conversion of the entire reproduction process in agriculture, the food industry and agricultural machine building to an economic foundation, the conversion to new and more advanced forms of management of economic activities, the application of the economic approach and economic mechanism, and the development of a new type of brigades in the villages insure good prerequisites for the simultaneous development and inprovement of the two forms of socialist ownership, their rapprochement and their gradual merger within a single socialist ownership of the whole people.

The establishment of the NAPK considerably raises the level of socialization of cooperative and state ownership. It intensifies the concentration of production, the land, manpower and basic productive capital. The NAPS includes not only cooperative but state economic organizations as well. It covers not only agricultural production but the entire processing industry. This is one of the basic factors in the development and advancement of both forms of socialist ownership.

Under the conditions of the NAPK and NAPS prerequisites are created for eliminating the economic division between the two production economic sectors and for their integration within a single planned entity.[5] Under such circumstances, the development and improvement of cooperative ownership may not be reduced merely to raising the level of its socialization as a purely quantitative process. They have yet another, exceptionally important manifestation. The new and more advanced organizational-economic forms such as DSZ, APK, PAK, PAO, NPO, NPK, and others--create conditions for the industrialization of agricultural production and for bringing it closer to industry.

The BCP program points out that "the introduction of industrial methods in agricultural production and management and the intensification of the interaction between state and cooperative economic units will gradually lead to the development of the national economy as a single integrated national economic organism, and to unification in the areas of planning,

price setting, financing, crediting, production marketing conditions, income distribution, organization of wages and ties with the budget."[6] This is largely achieved within the conditions of the NAPS and, particularly, with the application of the new economic approach. The implementation of such programmatic objectives leads to the "further interpenetration and mutual enrichment between state and cooperative ownership which will legitimately bring about their gradual merger as ownership by the whole people."[7]

Economic ties and relations among individual production units and producers (cooperative and state) within the NAPS are implemented on a qualitatively new basis. They are united within an organizational-production and management unit and operate on the basis of total cost accounting. The organizational-managerial structure of the NAPS is one of the factors for the involvement of socialist ownership in its two basic forms. The cohabitation of these forms positively affects the nature and organization of the production process, the means for the formation and distribution of income, and the entire system of economic ties and relations among individual economic organizations and their production units. The economic separation of cooperative ownership will be surmounted to an ever greater extent in the future within this complex system of economic relations and ties controlled by the NAPS. At the same time the state (nationwide) form of ownership as well will be developed further.

Without exaggerating the place and role of the NAPS as a more developed form of manifestation of agroindustrial integration at this stage in building a developed socialist society, in our view, it will create the most favorable conditions and prerequisites for directly surmounting the existing differences between state and cooperative ownership and for their development, rapprochement, merger, and formation in the near future of a single unified ownership by the whole people of productive capital in agriculture.

Under the conditions of the NAPS we have a factual "cohabitation" between the two forms of socialist ownership. This is specifically manifested in the establishment of single funds within the union, above all the Expansion and Technical Improvements, Economic Influence, and other funds. The formation of such funds and of the Wage and Social and Cultural Measures Funds is based on the contributions of the economic organizations which are members of the union and withholdings from their net income and from the activities of the economic organizations and enterprises under the NAPS Central Council.

Such accumulation of NAPS funds is, essentially, a basic prerequisite for rapprochement leading to the merger of the two forms of ownership. Relations expressing cooperative ownership are far more advanced under NAPS conditions. The single reproduction process which takes place within the NAPS essentially eliminates the barriers separating the cooperative from the state sector. The toiling cooperative farmers, most of whom work in

the APK, PAK, NPK, and others, develop relations not only with cooperative productive capital but with state capital as well. The agroindustrial chain is so structured that it is difficult to distinguish between the two sectors in the production process whose objective is one: the production of highly effective end commodities.

All this indicates that in terms of socialization cooperative ownership has come closer to state (nationwide) ownership. This is another manifestation of the major role and significance of agroindustrial integration and of the forms of its manifestation.

It would be erroneous and, to say the least, hasty to identify this process of rapprochement and merger between the two forms of socialist ownership, occurring within NAPS conditions, with a single ownership by the whole people. In the stage of building a developed socialist society it is through NAPS activities that the process of rapprochement and merger between cooperative and state (nationwide) ownership is achieved and, to a certain extent, in terms of its content and functions, NAPS ownership contains the features of ownership by the whole people. Under NAPS conditions socialist production relations in agriculture are largely expressed through ownership by the whole people, for cooperative ownership comes gradually closer to and merges with the ownership by the whole people through agroindustrial integration without having entirely voided its content.

For the present we are only at the beginning of this process. A higher level of socialization of cooperative ownership and of individual elements of its merger with ownership by the whole people has been achieved but is far from having the qualities of a single ownership by the whole people. This process will acquire an even more completed aspect with the organizational development of the second stage of the NAPS which will take over sectors and activities satisfying the needs of agricultural for machinery, equipment, chemical fertilizers, preparations, and others. This will make it possible to emphasize even further the leading role of the state (nationwide) form of ownership in agriculture.

The application of the new economic approach, the improved organization of labor and the development of modern type brigades in the countryside also create conditions for the acceleration of the process of rapprochement between the two forms of socialist ownership.

How will the new economic approach accelerate, more specifically, the reciprocal enrichment, rapprochement, and merger between the two forms of ownership?

The standardization of the principles and basic aspects and requirements of the new economic mechanism in agriculture and industry practically establishes far more favorable conditions for the reciprocal enrichment, rapprochement, and gradual merger between state and cooperative ownership forms. This largely eliminates the departmental approach and the specific

characteristics and conditions for the organization of the public production process and the formation and distribution of the wage fund. Funds, and procedures and means for their distribution within each of the two sectors have become standardized. Therefore, it would be no exaggeration to state that the objectives contained within the BCP program will be implemented through the activities of the state sector (industry) and the cooperative sector under the conditions of the new economic approach and mechanism, namely: "The continuing dialectical process of interpenetration and reciprocal enrichment will be taking place between the two forms. The participation of state ownership in the development and advancement of cooperative ownership and, conversely, of cooperative ownership in the development of state ownership, will be intensified. The forms of economic organization of public production in the state and cooperative sectors, production and management methods, income distribution, and level and forms of consumption, will become ever closer to each other."[8]

The systematic application of the requirements of the new economic approach and mechanism in agriculture and industry creates factual conditions for closing the "land-end product" cycle. This is guaranteed by the steady intensification and expansion of intersectorial ties between agriculture and industry and the ever more clearly manifested processes of agro-industrial integration. This leads to the organic linking between cooperative and industrial production and, respectively, of state and cooperative ownership within the framework of the agroindustrial integration underway, which covers all stages of the single reproduction process within the NAPS. The NAPS itself, as a new organizational-management and economic structure, creates, on the national level, most favorable conditions for the practical application of the new economic approach and mechanism and for intensifying the influence of economic levers and criteria in the production-economic activities of the corresponding economic enterprises and organizations within it.

The development of the new comprehensive type of brigade organization of labor in agriculture will provide the dialectical unity between the economic approach and the acceleration of scientific and technical progress, a scientific structure, optimum combination of factors with high production effectiveness, implementation of important social functions, and so on. Unquestionably, this will have a favorable effect on the rapprochement between the two forms of socialist ownership as well.

The process of development and improvement of the two forms of ownership and of their rapprochement and merger within a single socialist ownership by the whole people is complex and varied. A large number of factors and prerequisites are influencing and will continue to influence this complex dialectical process. However, the role and place of agroindustrial integration and its organizational-economic forms of manifestation are unquestionable as one of the basic factors for accelerating the development, improvement, and merger between cooperative and state socialist ownership.

FOOTNOTES

1. See T. Zhivkov, "Otcheten Doklad na TsK na BKP Pred Desetiya Kongres na BKP" [BCP Central Committee Accountability Report to the 10th BCP Congress], Partizdat, 1971, pp 189-191.

2. See the Model Statute of the Agroindustrial Complex, DV, No 25, 28 March 1980, p 276.

3. See I. Kostatinov, "Sotsialisticheskata Sobstvenost i Sotsialno-Klasovata Struktura v Usloviyata na NAPK" [Socialist Ownership and Socioclass Structure Under NAPK Conditions]. Partizdat, 1971, pp 57-90.

4. T. Zhivkov, "Izbr. Such." [Selected Works], Vol 23, p 585.

5. See I. I. Tereshkov, "Ekonomicheskiye Usloviya Obrazovaniya Obshchonarodnoy Kommunisticheskoy Sobstvennosti" [Economic Conditions for the Formation of Communist Ownership by the Whole People]. Minsk, 1973, p 204.

6. "Programa na BKP" [BCP Program]. Partizdat, 1971, p 59.

7. T. Zhivkov, "Agrarnata Politika na Partiyata--Kruvno Delo na Tseliya Narod" [The Party's Agrarian Policy--A Profound Cause of the Entire People]. Partizdat, 1979, p 18.

8. "Programa na BKP" [BCP Program]. Partizdat, 1971, pp 58-59.

5003
CSO: 2200

HIGHER PROFITABILITY IN INDUSTRY URGED

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 3 Sep 80 p 2

[Article by Dafin Doynov: "For Higher Profitability!"]

[Text] Decree No 32 of the Council of Ministers, dated 12 June 1980, notes that "discipline in the implementation of the state plan task on the volume of net output, insuring the planned amount of profits and payments to the state budget has been lowered in some economic organizations."

The national income, which is of exceptional importance to the socioeconomic development of the country, has always been the focal point of attention of the party's economic policy. The successes achieved so far in this respect are among the most considerable achievements of socialism in the country. They insure the high growth rate in the economic, social and cultural areas of our society. In 1979 the national income reached the impressive figure of 17.4 billion leva . That is why the net output indicator is first among the mandatory indicators of the new economic mechanism for all material production sectors.

The national income consists of two components: the wage fond and profits. However, the way both components grow is not a matter of indifference to the socialist society, for their purposes are different and they play different roles in the development of the country.

The main purpose of socialism is to raise the income of the working people and systematically to enhance their living standard. The successes achieved by socialist Bulgaria in this respect are remarkable! In the past 20 years alone the real income rose by a factor of more than 1.7. The material base, way of life and spiritual sphere in which the people live are changing, and so are the characteristics of the population's reproduction.

Along with all this,however, it is of exceptional importance to improve the possibilities of the material and technical base of society at large, expand the reproduction process at a high pace, insure the proper development of the nonproduction area, provide the necessary assets for the public

funds, maintain the country's reserves and its defense capabilities, and so on. This can be accomplished only if profits grow at the necessary pace. This means that the national economy must be highly profitable. Should the national economy grow only in terms of wages, neglecting profits, wages will grow faster than social labor productivity. This phenomenon would be unnatural, for the basis for the expansion of reproduction would be narrowed and overall social development will stagnate, including the living standard of the people.

We know that the problems of profitability, which have never been neglected, have now achieved new dimensions under the conditions of the new economic approach.

The new party and government documents reemphasize the exceptionally important role of improving the socialist organization of labor, bearing in mind the comprehensively acting production factors. The assignment now is to review the normative base.

We know the potential reserves concealed in productive capital. The shift coefficient remains low. A number of machines and installations remain idle. New production capacities are being developed slowly. Construction is delayed and completion deadlines are extended. A tremendous volume of unfinished construction is piling up. What does this mean in the language of economics? It means a hopelessly frozen national income. That is why the government ordered the "inventory of all productive capital--machines, installations, buildings, and others, which remain unused and measures be taken for their full utilization, including transfering them to other economic organizations" (Council of Ministers Letter No 43). Measures have been ordered rapidly to reach planned capacity of new productive capital. Penalties are stipulated for delinquent managers whose wages could be lowered.

The economic utilization of raw materials, materials, energy, and fuels is a basic factor in upgrading profitability. The National Party Conference (1978) called for additional economies of 1.1 billion leva in material outlays. A number of labor collectives pledged to make their contribution to the successful implementation of this task. Currently endless reports are being submitted on the fulfillment and overfulfillment of the pledge. However, instead of economies, some collectives are reporting overexpenditures, thus reducing the overall positive result.

Great attention should also be paid to the full utilization of manpower. Considerable time is still being wasted in periodical or full-day idling. There is a broad field for the application of new equipment and technology and for the mechanization of manual labor. Labor norms must be subjected to a basic review. It is neither natural nor admissible for labor norms to be highly overfulfilled without a growth of social labor productivity. That is why it was ordered that norms be issued for the maximum average meeting of labor norms by individual ministries and departments.

The new economic approach and the new economic mechanism require a new organization of production, labor, and management. The new type brigade, organized on a self-financing basis, will have to resolve the basic problem of economic development: increasing several fold social productivity. This means that all material production sectors will have to work on a highly profitable basis. All production reserves must be discovered and used with the help of normative production costs, including that of brigades. This is a basic factor in increasing profits. However, it is not exclusive.

The maximum loading of production capacities and the rational utilization of coal and other materials, including secondary raw materials, will help to increase the volume of output. Society will thus obtain additional material goods and additional profits. A strict analysis of the structure of items produced is necessary. Useful to the national economy are highly profitable goods in demand. Good quality is also very important. Along with consumer benefits it brings higher profits through higher prices. This too is a factor in increasing profitability.

The new economic mechanism offers the full possibility for combining the interests of the working people with those of society. A better employment of productive capital, materials, and labor, and a higher quality of goods are equally useful in terms of the income of labor collectives and the state. This must be accomplished by a general growth of both components of the national income. Wage increases without a corresponding profit increase mean anarchy. The further fate and development of society depend on what it sets aside for its future. That is why severe penalties will be imposed on managers who ignore such basic principles and allow the nonfulfillment of profit and turnover task plans. The amount of individual wages of leading cadres and leading specialists in economic organizations and branches will be made directly dependent on the implementation of the mandatory profit and turnover task assignments.

The imperative of increasing profits and achieving higher profitability in all national economic sectors is an imperative for new successes in the future economic development of the country and for the steady climb of the living standard of the people.

5003
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NEW ALUMINUM PLANT, OUTPUT DESCRIBED

Sofia ZEMEDELSKO ZNAME in Bulgarian 6 Sep 80 pp 1, 3

[Article by Radoslav Gulubarov: "With the Breath of Shining Aluminum"]

[Text] It is hardly likely to come across Geno Tsonev, director of the Economic Combine for Aluminum Processing near Shumen even in the morning hours. He is a man in front of whose eyes the first hole was dug and for whom, as of that day, every subsequent day has been filled with thinking, concern, and responsibility for everything and everyone in the combine. This industrial agglomeration, the biggest and most unique not only in the Balkans but in Europe, in terms of completion of technological cycles for the processing of aluminum, is throbbing in its pre-start up rhythm. The combine will be inaugurated on 5 November 1980, on Metallurgical Worker's Day.

...The sun streams through the glass roofs into the vast crevices in which the human voice is lost in the din of the metal and the bluish vapor over the long bodies of the presses. Young people are standing in front of control panels. Fans are spreading the breath of oil and hot aluminum. Bulgarian and Russian speech are heard. Integration? In this place it is so clear as to be tangible....

Friendship Labor Shifts

18 August 1977: The first aluminum shaped part is produced by the first installed Soviet 1,250 ton press;

7 November 1978: after thousands of tons of Soviet equipment and automatic systems have been installed, the press shop, the equivalent of an entire plant, is commissioned;

16 September 1979: the first "friendship smelt" has come out of the new furnace of the technological line for semicontinuous casting;

19 April 1980: the installation of a second blast furnace and line have been completed in honor of the 110th anniversary of Lenin's birth, thus completing the installation of the Soviet equipment.

"Come on, boys!" In manly competition, the labor day here lasts 24 hours....

The history of the building of the combine is traced through the results of the "Friendship" socialist competition which began with the installation of the first Soviet machines. The results are found in the economic indicators and in the endless hours spent in front of presses and furnaces enabling the Bulgarian young people to master the knowledge not found in any textbook, described as skill and love and responsibility for one's profession.

There was more than mere knowledge to be shared. Whenever the situation would become tense--which frequently happened as the building and assembling went on--the Soviet people were the first to stand behind the machines and not budge until the daily norm was covered 150 percent. One felt ashamed to fall back. One would be urged on by the tired eyes of Boris Korgin, Veneamin Yerokhov, Vladimir Trapeznikov and Nikolay Sobolyuk, of those Russian people with already graying hair, who, after voluntary Saturday work, on Sunday would go together with their wives to help villagers harvest the grapes or construction workers in Shumen building anniversary projects.

Currently, many traditions are being developed in the combine, traditions which will be taken up by the young.

Here, occasions to celebrate are frequent, but perhaps the most touching was the following:

"Metallurgical Workers! These graduates are now in your hands. We gave them knowledge and you must teach them to be worthy of this profession!"

Eighty boys and girls from the machine technical school and the V. Yovchev Secondary Vocational Technical School in Shumen are presented with their diplomas and, with them, their appointment orders....

"Even though this was risky, it was unavoidable," says Khristo Khristov, deputy chief of the press shop. "Metaphorically speaking, we had to learn to swim in the current and plunge straight into deep waters. We learned to surmount failures and enjoy victories. Mastering the production of any new item is a victory!"

The combine is already producing 700 different types of shapes, an entire range of pipes from 10 to 100 mm in diameter, over 70 percent of standardized construction parts, and rolled metal sheets from 100 to 50 microns thick. In other words, this means hundreds of thousands of leva in foreign currency saved by the state.

"The first steps leading to great creativity," Comrade Khristov goes on to say, "also belong to the young. The simple replacement of copper inductors with aluminum inductors in the induction furnaces, suggested and applied by Encho Velikov and engineers Mikhail Nikolov and Vitan Stoichkov, saved the combine 1[illegible]0,000 leva."

Either because of modesty or something else, Khristo Khristov does not mention that, together with engineers Ivan Kostadinov and Bozhana Nedyalkova and molder Stoyan Girgorov, he has developed complex ribbed parts meeting world standards. They will be used to make the searchlights for the house-monument on Buzludzha and the National Palace of Culture. To mention another figure, this represents a saving of 100,000 leva in foreign exchange.

Everyone in the casting shop has faced the old professional saying that continuous casting means continuous concern.

How does one become accustomed to the fact that out of the huge machine man must "extract microns" without holes or rough spots today, tomorrow, 24 hours daily, every week, every month, uninterruptedly....Most people lack this traditional feel for production continuity and the requirements of discipline and quality....

Let Us Compute Now!

"You may think that jar lids or the foil covering milk bottles are petty matters in a combine such as ours."

I am talking with Petur Georgiev, the young deputy chief director.

"You are always looking for big items....Well, here they are: We produced the first 100 tons of Omniya type sheets for lids. One ton costs over 2,400 leva in foreign exchange. Subtract from this 1,500 for the metal and then compute 1,000 times 100. Do you know how long it took us to learn how to make such lids? It took us a few months only, whereas in other countries it takes from two and a half to four years. We are currently increasing the output so that by the end of the year, as a result of the ahead of schedule mastering of the technology, our net economic savings will be about 750,000 foreign exchange leva. We shall do it! As to what went on so far, this is already history!...Could you imagine what it takes to maintain four rotating shifts, what it means to try out several technological suggestions subsequently rejected by practical experience.... Finally, we were able to resolve the problem ourselves."

Our conversation turns to blueprints, folds and catalogues, filled with "petty items" which cost the state millions of leva in foreign currency--molds, containers for semifinished products, utensils, aluminum foil.... they are included in the immediate plans! The chemical, food and pharmaceutical industries will be supplied with Bulgarian made foil of from 100 to 50 microns, so badly needed. And, in case I am still "seeking" big items, engineer Georgiev could "offer me" the following:

"In the shock phase preceding the 12th BCP Congress, the metallurgical workers have decided to complete the first 100-ton test of the aluminum sectors for the cables plant in Burgas. Annual savings from processing

outlays alone will amount to 300,000-400,000 foreign currency leva. The shop for anodizing over 600 different aluminum goods and the shop for aluminum window frames with a capacity for 150,000 square meters per year will be commissioned.

"We are discussing dozens of different types of items--dozens of types of items facing the management of the combine as a possible production variety. This is not only possible but necessary! What items to choose? Briefly stated, the profitable ones!

"Let us take this small aluminum part, eight mm in diameter and a wall thickness of five mm. It is expensive and it is important. It replaces automobile radiators and its use is rapidly spreading throughout the world. Mastering its production means producing it by the millions. It means big orders and huge profits. However, we must begin first with a reconstruction.... There are those who may say that even before the combine has been commissioned they are thinking of reconstruction! Life, however, is faster than plans! This may be a contradiction but it is precisely this which promotes progress.

"Through a program for reconstruction, modernization, and intellectualization of output, by 1990 the combine will be able to process over 100,000 tons of aluminum per year and save over 17.5 million foreign exchange leva."

Here is a partial breakdown of these figures.

In the next few years the combine will effectively enter the international trade in aluminum items and will satisfy virtually all national requirements.

The adding of a single additional process to the already constructed shop for window and door frames will result in the production of thousands of square meters of insulated aluminum frames--an item with a practically unlimited international market.

Following the completion of the rolled sheets shop the mass production will be undertaken of the exceptionally complex magnetic discs always needed by the electronic industry.

All this (not to mention many other facts and items!) means new possibilities in shipbuilding, instrument manufacturing, automation, electrical medical apparatus, and in the pharmaceutical and construction industries.... It means new possibilities for industrial Bulgaria, as a result of the toil of 2,000 engineers and workers handling machines and equipment worth over 70 million leva, with 80,000 leva average annual productivity per worker.

...I spent the entire day trying to locate the director, engineer Geno Tsonev and was able to find him only toward 7 p.m., after he had spent 12 hours in the combine! There was a knock at the door, and engineer Tsonev had to resolve a housing problem of a worker, deal with the mail, and so on.

It was after that that we started the long story of that first day at the combine, when this area was covered by cornfields, a conversation of the many days which passed since, and the many days lying ahead....

5003
CSO: 2200

VHJ DIRECTORS DISCUSS COMPREHENSIVE EXPERIMENT RESULTS

Prague HOSPODARSKE NOVINY in Czech 22 Aug 80 pp 8-9

[Interview conducted by Pavel Karel and Jaroslav Pesta: "The Finish before the Start: Concerning Experiences Gained from the Implementation of the Comprehensive Experiment and Preparations for the Practical Application of the Set of Measures"]

[Text] At the end of 1977, 12 fields were chosen by a resolution of the federal government for the implementation of a comprehensive experiment, the basis of which is the achievement of greater efficiency through an improvement in the quality of all types of work. In July 1978 we met with four general directors from the CSR consumer goods and chemical industries and printed their initial experiences from the application of this experiment in HOSPODARSKE NOVINY, number 30/1978, under the title of "Task Force Amid Question Marks." Now after 2 years we have met again with roughly the same group. Only Alois Tomsu was missing, having just completed in the middle of this year his long years of successful activity as the general director of the knitting industry. Participating in the discussion were the deputy minister of industry of the CSR, Engr Leopold Blatak; the general director of the woolens industry, Frantisek Brabec; Doctor Engr Rudolf Macak from the Bohemian rubber and plastics factories, and Engr Stanislav Endler from the leather goods industry.

Principles Have Exerted Positive Influence

[Question] Returning to our discussion of 2 years ago, we agreed at its conclusion that to experience the full impact of the comprehensive experiment, to get it into one's blood, is a matter of an extended time period. What is the situation in this regard today?

Brabec: After more than 2 years of experience we can state that the success of the comprehensive experiment depends on our ability to lead or motivate people, our ability to establish goals for them and to show the way to the achievement of those goals. On the other hand, success depends on our ability to educate people to work in this manner. In particular it is necessary to emphasize the role of organizational work,

because it is not difficult to find some path to improvement, it is not even difficult to point out or specify this path, because there are enough findings and experience for this; it is difficult to assemble the necessary number of people in such a way that one complements the other, so that they strive as a collective to achieve the established goal. This is where the role of organizational work steps to the forefront. Unfortunately we underestimate this work too often, and precisely for this reason we are also at times disappointed with results. At the same time the crux of the whole matter rests in this subtle work, in personal example, in the ability to coerce or cajole people to undertake a specific direction and to give it a little bit of themselves, which is to say, that they express their initiative, the desire to do something. Knowledge is not enough, one must also understand the mentality of people, their way of thinking, their ideas, their opinions, and from this then find a way to form a collective, to begin the battle for the achievement of the established goal. We are, I think, in the middle of this whole issue. It is possible to say that we are succeeding at certain things, but at the same time we are still at the beginning with other things, and these will require still a great deal of effort. We must concern ourselves much more profoundly with work psychology. My impression is that in the overall efforts to achieve greater efficiency this aspect has been slightly in the background, that we have forgotten about it. This is connected, understandably, to professional preparation and everything else.

Endler: I do not exaggerate when I say that we have succeeded, throughout the whole economic production unit, and in all factories and enterprises, in mastering the regulations of the comprehensive management experiment in the way in which they were included in the framework regulations and in the way we had elaborated them beginning in 1978. I think that all the new concepts are clear to all the managers, and that they are aware of the more than 50 deviations which are in force in the experiment in a slightly different form than in the general management regulations until the end of 1980.

On the basis of experience we can state that the principles of economic management in the comprehensive experiment had a positive effect. Above all, qualitative indicators were better fulfilled than quantitative indicators, better profit results were achieved, as well as a better return on operating assets or in labor values added than, for instance, in gross production and in the production of goods. Also, the relation of labor productivity and average wages is much more positive, especially given the measurement of productivity in terms of values added. However, this positive evaluation of the achieved results does not mean that all developments were positive, that we did not have problems, or that we did not have to solve matters which were outside the effective realm of the regulations of the comprehensive experiment. I have now in mind in particular the question connected with the physical interconnectedness of the plan, with the attempt to guarantee, without surpluses, inputs for the assigned outputs of the whole economic production unit and for each of our

enterprises. This means that the whole economic production unit and every enterprise would have the essential amounts and value of materials to guarantee the production of those products specified by the plan.

Problems arose especially because the rate of growth of prices of imported raw materials was greater than we were successful in incorporating into exported products. This is not, however, a uniquely Czechoslovak problem. It is generally known that the increase in prices of finished products lags behind the price of raw materials. In the final analysis it is not only an issue of the contemporary period, but is known as well from the past and clearly will not change even in the future.

We have succeeded--and I consider this a positive phenomenon--in significantly increasing the efficiency of foreign exchange. Prices quoted as "all charges paid" in our area rose more rapidly than wholesale prices, and on top of this we successfully toned down for the most part the impact of the missing elements which would have further improved our own foreign trade efficiency.

Macak: Our experiences with the verification of the comprehensive experiment show that the application of new management instruments has an undoubted influence on an increase in the efficiency of the whole production process, not only in a given year, but also from a longer term view. This was reflected in practical terms in the acceptance of higher objectives for the years 1978-1980 in the return on operating assets and in values added. This was evidenced also in an initial, and in my view very important, contribution in the increase in the activity of collectives, management collectives, but also of technical employees, and, last but not least, production workers.

People's thinking is gradually changing in the direction of an application and utilization of intensive growth factors. I use the word gradually intentionally because a change in people's thinking cannot be achieved by tearing a sheet from a calendar, by a termination order, or by any such means. Therefore, I consider increased activity and changes in people's patterns of thought to be the main contribution of and experience gained from the application of the experiment, especially with a view to future development. From this it follows that performances in coming years will depend on the degree of success in not only maintaining this activity, but in developing and deepening it still further.

The experiment, by means of certain new instruments, by emphasizing their objectives and also specific connections, created sufficient space, at least during this time period, for management and technical personnel, and for whole collectives of workers, to be able to develop initiative and apply their abilities and experiences. On the other hand, it created an invitation for those who would wish to continue longer in the old ways, who do not happily accommodate themselves to innovation. Innovational activity of workers at enterprise units for technical development,

comprehensive socialist rationalization, and research institutes increased, as did that of socialist work brigades and comprehensive rationalization brigades for the lowering of consumption of materials and the elimination of a shortage of several products supplied for domestic commerce, etc. The balance improved in the filling of supplemental investments in connection with 3 years of knowledge of resources creation in development funds.

For practical purposes, all organizations comprehended gradually that the experiment is being realized in the economic production unit as a whole, that the performance of every enterprise can contribute to economic production unit performance and vice versa, that the resources which are created are then dependent not only on the performance of the enterprises, but also on overall performance of the economic production unit.

Accountability Not Commensurate with Responsibility

[Question] Comrade Blatak, who was the general director of the leather goods industry 2 years ago, spoke then about the problem of economic production unit activity and the connnection of these units to foreign trade. What is your view of the current situation, what have we succeeded in improving in this sphere, and what remains to be done?

Blatak: First off, all the economic production units in our sector fulfilled their targets last year, especially in exports to the two main territories. And the experimenting economic production units, above all, influenced this performance. Nevertheless, the situation in which our economic production units operate is extremely difficult. There can be an improvement in this only when such new elementary principles are in force which will lead in their consequences to a fundamental order. I am of the opinion that it is absolutely necessary to find a way to outfit every worker with accountability commensurate with his responsibility. And furthermore, it is necessary to have at our disposition all factors of production in amounts corresponding to actually verified output, technological and materials norms, etc.

This applies, of course, above all to products which are socially required, efficient in all respects, and on a solid European level in all ways. Even a representative of such an organization, however, can often run into problems in supplier-consumer relations. For instance, in view of the well-known lack of foreign currency resources, it is not possible in my view to argue only the technical view of the necessity to replace obsolete machines and equipment. In the same way it is simply impossible in the current situation to obtain the required work force composition by natural selection. But insofar as we are discussing the most basic things, those which must always exist, then these are: well organized work, flawless standards, a well-worked-out system of intraenterprise management, successful technical development, and comprehensive socialist rationalization. We msut consider negative examples of these as serious errors. I believe that an improved system can contribute to the positive resolution of this situation.

A second group of problems related to this question, even if indirectly, is the extreme material intensiveness of our production. Every national economic structure should arise with a view to natural conditions and constantly adjust to them. It definitely does not help to state repeatedly that our country is poor in raw materials as long as we do not come to the relevant conclusions from this. I think that the makeup of our industry at this time already does not correspond to effective material resources utilitzation. It is a matter, for instance, of whether we can permit ourselves in any form the current huge consumption of electrical energy, and whether it is not high time to do more than think about what will happen when we extract the last ton of coal, and practically to begin the preparation of structural changes in our industry, which had been adapted to raw material wealth.

And, finally, a third group of problems connected with this theme: we are devoting very little attention to resource recycling. It is simpler for everyone to place demands on imports than to think about replacement sources from salvaged resources, from the outputs of technical development, that is to research the question of whether or not resources exist which this country could provide considering its existing natural and weather conditions. There certainly do exist in Czechoslovakia huge expanses of devastated fields, whole areas suited to the development of cattle husbandry, sheep herding, etc., and which could contribute a source of raw materials which otherwise we import very expensively from nonsocialist countries. I also think that we would derive more use value from a number of materials if we would devote more expert attention to their processing. Therefore I see the great advantage of the improved system in the fact that it does not prefer economic indicators which completely overlook the fact that we must devote exceedingly great attention during the production process to those sources of raw materials which are at our disposal.

Rules of the Game Must Be Upheld

[Question] The comprehensive experiment is, to be sure, nearing its finish, and the Set of Measures is literally about to start. This is, then, a slightly unique time, and therefore, what is likely to be the path to an understanding of the new principles at specific levels of management?

Brabec: Complicated, without doubt! It would be a little presumptuous to imagine that every worker would comprehend the whole complex of issues which are in the Set of Measures. The lower one goes on the management ladder, the more concrete and understandable must be formulation of thoughts. And this is precisely the task of management personnel at individual levels. I must have a totally different perspective, as director of an enterprise, from my deputy, the plant manager, the production manager, the workshop foreman, the master worker, etc.

The Set of Measures is extremely demanding in its internal relationships. We are constantly running into situations in which personnel, even at the highest management levels, are not fully familiar with the issues, and are beginning their decisionmaking in the old ways. They are not taking into consideration the new elements in the principles. This is, however, a matter of time, these principles, just as those of the comprehensive experiment, must get into the blood. As long as it is not in one's blood, or done semiautomatically, until that time problems will remain in that we will regress in our thinking, and particularly in our decisionmaking, to earlier times, in that we will form our opinions according to some of yesterday's preconceptions.

Life changes, however, in a significant way. For instance, there is the question of gross industrial production and outputs. Today outputs are in the forefront, yesterday it was gross industrial production. The two are connected: even when outputs are planned, we have to get to gross industrial production or the production of goods, so that we can plan sales. It is a matter, however, of thinking about yesterday's approaches to gross industrial production and the approaches today to the volume of outputs. Gross industrial production was often set yesterday to be met at any cost. It was necessary to increase it, and this caused demands for more expensive material and greater amounts. The labor value added was relatively small, because a large amount of waste existed in the output. Today there is an attempt to change, as much as possible, losses in labor value added into value, into material, and thus to increase the production volume. In no way, then, is this to be done through increasing consumption of materials, but by increased efficiency based on the better utilization of labor.

Endler: Nor can I answer this question in any way other than to say: The way is long and complicated, but it is possible. And precisely for that reason we should all be in a big hurry to familiarize ourselves with the regulations as profoundly and completely as possible. Certainly more preparation for the introduction of an improved management method is much better and more systematic than was capable of being assured for the introduction of the comprehensive experiment. Then we obtained the first framework regulations at the end of 1977, and by the beginning of 1978 we already had to implement the experiment. And this year? The regulations were published in March, and before the end of the year the whole economic sphere will have time to become familiar with them, to study them in detail, and therefore apply them much better. Nevertheless I think that it is still not too long a time. Certainly, as Comrade Brabec has just stated, managerial personnel at differing levels of management must know the regulations in differing ways. For instance, the management of an economic production unit must know them comprehensively, while this is not necessary for the master in his workshop. He must know the rules of intra-enterprise khozraschet and be able to apply them practically in the workshop. For us it is a question of every manager knowing how he must behave in the conditions of the improved system in the management of his own

sector, no matter how small, that he mesh harmoniously with the whole, and that on the basis of his performance the factory, enterprise, and finally the economic production unit can fulfill their objectives economically, effectively and in a quality manner. And clearly a certain amount of time is necessary for this, you cannot just do it on the spot. For this reason I am apprehensive concerning the slightly longer road. For instance, the whole first year was necessary for the full understanding of the principles of the comprehensive experiment. And we are still far from being able to say that we are 100 percent satisfied with the current situation in all enterprises and factories.

It is not easy to create the proper conditions in a place such as a workshop. There is the problem, for instance, of integrating one principle of the comprehensive experiment, which is also integrated into the improved system of planned management, namely a long-run orientation, into practice. Under our conditions this is really very complicated, especially if we consider that 50 percent of the final output of our economic production unit is for export, 3/4 of which is for capitalist countries. And one cannot plan exports there with 100 percent certainty. We have to integrate individual orders into the unified production plan. So even though we are already applying the comprehensive experiment for the third year, we will still not be able to get along, particularly in our assembly rooms from which products go to export, without a number of changes. But we must carry out even these changes in such a way that the work rhythm will not be interrupted at all, or as little as possible.

Blatak: No less important a factor is the way the improved system will penetrate into the supraenterprise organizations; here I have in mind the question of upholding the rules of the game, or the rules of plan methodology. These regulations must be enforced! The minute they are not adhered to a lack of trust arises and with it the evisceration of the whole effort. We remember very well 1953 when the currently valid principles of the management system were introduced. A brochure was published which contained all the regulations, the relationships, the responsibilities of individual levels of management, and that was it. There was nothing to discuss.

Also, when I worked in an economic production unit and we were implementing the first experiment, the so-called Czech experiment (the profitability of invested resources), specific regulations were announced in the area of investment. When we created resources for ourselves, we could do something with small-scale investments, modernize, but according to the regulations someone should have imposed a limit on this. And no one was capable of this. So clearly all trust in the experiment was lost. Which means--the success of the whole management method depends on the extent to which both sides take seriously the rules which have been announced and approved.

Plan Is Fundamental Instrument

[Question] Where, and in what area to you see the rockiest going for the Set of Measures?

Macak: We have had no illusions from the beginning that the verification of the comprehensive experiment would bring any advantages. Quite the opposite. We counted on there being difficulties in supplier-user relationships stemming from a certain disproportion and tautness in several areas, but also from inconsistencies and plan interrelationships. We of course had not counted on the situation which arose at the beginning of last year and which had an unfavorable consequence for all areas and activities. Insofar as we succeeded in eliminating--rather, minimizing--negative influences, this is evidence that we have derived benefits from the stepped-up activity of people. We fulfilled all volumetric indicators of production, even though understandably labor value added and return on operating assets increased more rapidly than did gross industrial production, and within the latter labor productivity from labor value added grew more rapidly than did productivity from gross production.

From what I have just said, it could follow that everything is in the best of shape in our enterprise sphere. This is not so, and we are aware of shortcomings and problems. We still have unused capacity for increasing the quality of intraenterprise management, in the application of khozraschet at work places. There are still things to improve in the general management system, as well as in specific activities. On the other hand, it is necessary to state openly that not even the most internally perfected system of intraenterprise management can resolve the basic disproportion in the national economy, a disproportion grounded in the plan, and shortcomings of the higher management levels. We must be aware of this and create conditions commensurate with the work of the enterprise sphere.

The most significant aspect of the battle with the current management principles must be considered the attempt to strengthen significantly in the course of 3 years the plan for economic production units in several areas related to the failure to adhere to the principles of tolerance, long-range outlook, comprehensiveness, and interconnectedness. If we prove unsuccessful in finding a compromise in this conflict, then this attempt will have sustained major damage in people's thinking. Simply put, it is quite certain that several enterprise collectives and individuals would cease to believe in the established principles and guidelines.

Brabec: If we are to insert these principles all the way into intraenterprise management, if we are to apply them in khozraschet management, then we must develop a good, internally integrated and balanced plan. Here I do not have in mind a slack plan. Quite the contrary, it should be progressive, but it must stem from the conditions, from the level of knowledge, the unused capacities, the needs of the society. To require the fulfillment of a plan which is not already covered by something or other in a workshop is impossible. The master and others must have at their disposition those things which they need for the performance of one or another procedure. This can be, for example, an absolutely accurate standard, but it must be respected. We are, however, often in the situation where we do not begin in this way, for some reason or another.

If we wish to improve overall management, we must in the first place begin with the plan as the basic instrument which not only leads, directs and motivates, but which is also then the standard for the evaluation of the level of activity, of compensation, etc. If then we do not want to have contradictions, then let us make efforts to work out the plan precisely, as the basic requirement for additional forward movement.

We are trying to do this. We know that it is not simple, because new considerations constantly crop up, the situation changes, but this requires primarily reaction time. For the most part, however, the reaction is delayed, the decision about how to resolve the consequences of a particular situation comes too late, and because of this there arises an unnecessarily long period of nervousness and a clear uncertainty, which always threatens management.

Endler: I agree with Comrade Brabec. The production plan will undoubtedly have special significance in the improved system of planned management, because this is the first time that the planning of net production in the form of labor value added has been introduced for the whole national economy. This has already been defined in the methodological guidelines. And the planning of adjusted labor value added, meaning of modified labor values added, which will serve to regulate wage development, will undoubtedly be made more precise with enough lead time so that the whole production sphere can make preparations.

At the same time it is also important to us to make it possible to produce from cheap raw materials products of high quality and competitive price, so that the relationship in this price between materials costs and processing costs, mainly wage costs, will change and, last but not least, so that there will be a better evaluation than to date of the foreign currency costs, however indirect, which are contained in the products.

Blatak: We often prepare plans which consciously contain a number of risky areas. Those which are connected with the activity of economic production units must be solved by that economic production unit. To a significant extent, it must be able to solve as well the problems of consequences which arise on foreign markets. But what it is not capable of resolving, and even cannot resolve, are the problems which arise outside of the framework of its area of influence. Take, for instance, the case when situations arise on foreign markets which have as their consequence that the economic production unit will not receive for its use material resources which have been accounted for. This then creates a task for the central agencies, who must answer the question of what to do in this situation. This means that they must be able to answer, what is to be done with the outputs. Are they absolutely essential? If yes, then resources must be obtained from other areas. We cannot, however, in such critical situations, come up against a situation in which the problem remains unsolved for a long time, or only resolved half way.

People Decide Success

[Question] The experiment has brought you more than a few findings, lessons, and qualitative changes. Which of these will find the greatest application in the near future?

Brabec: We can confirm what we stated 2 years ago, that the success of the comprehensive experiment is dependent on our ability to mobilize unused capacity and to get people interested. And this principle still applies. The improved system demands much more knowledge, consistency and responsibility in work. We have learned that the manager who succeeds in directing his work in the sense of these principles also gains in authority, that he is more successful in asserting his ideas, that he really becomes a "leading worker" in the true sense of the word.

Again I return to the fact that the comprehensive experiment and the improved system involves working with people. They have many faces, and many different metamorphoses. And because at the present time we are experiencing frequent and often even unpleasant metamorphoses, the ability to actualize findings in relation to the new level of knowledge, to new problems, the ability to extend them immediately and to react to them rapidly is one of the positive findings.

Current results confirm that people are malleable, that they are open to new ideas and are willing to share not only in work, but also in risk. The more or less spontaneous development of several activities, as for instance the development of the rationalization movement or work rationalization, which always has come up against a number of problems, shows that people understood that when they do more, or when the volume of labor value added increases, they have the right or the claim on higher compensation. I think that matters have led to something of a positive division of labor. On the one hand the leadership is asserting an increase in the overall level and thereby in efficiency as well, and on the other hand the people understand this, and show their understanding by simultaneously creating the conditions for greater material interest. We are uniting, then, the interest of the individual and the group with the interest of society. This is something of a qualitative change in management processes, in the relations between the managing personnel and the managed. And it is necessary to note in this quality the basis for additional raising of the quality and progressiveness of all work.

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INCREASED INNER-GERMAN TRADE RESULT OF HIGHER ENERGY COSTS

Bonn DIE WELT in German 22 Aug 80 p 4

[Article by H.-J Mahnke: "Inner-German Trade Owes Its Increase to Energy Prices; Before the Schmidt/Honecker Meeting: 'How Productive Is the GDR?'"]

[Text] Otto Wolff von Amerongen, president of the German Association of Industry and Commerce (DIHT), recently surprised a portion of the approximately 6,000 enterprises participating in inner-German trade: he called the interest-free overdraft credit (swing) granted by the FRG to the "GDR" simply a relic of the fifties which, in view of the development of "GDR" foreign trade, is now dispensable: "In the trade relations between two countries, a credit regulation of this kind is certainly not the most modern instrument."

It is a fact that "swing" is as old as inner-German trade, whose contractual basis is still the Berlin Agreement of 20 September 1951, in which Berlin is fully included. In its new form of 16 August 1960, the agreement still regulates today trade relations that have strictly bilateral directions. Accounting of all purchases and sales is done through central accounts with the German Bundesbank in Frankfurt and the "GDR" Staatsbank in East Berlin. From the beginning it was agreed that 1 West mark would be equal to 1 East mark as accounting units. Because the flow of goods was not always balanced, both banks allowed themselves interest-free overdraft credit. This "swing" was raised repeatedly. In 1968 it was even made automatic to the extent that it could amount to up to 25 percent of "GDR" production in any given previous year. In 1974, an upper limit of DM 850 million was imposed and this regulation will be in effect until 1981.

According to agreements, negotiations on the "future structure and reduction of 'swing'" should have been held "by the middle of 1980," but nothing has happened so far--in view of the Bundestag elections, as everybody assumes. And in the "GDR" too, there is little interest in any changes. For any upward revision the GDR would have to pay a considerable price, Bonn thinks.

Otto Wolff von Amerongen is even considering a gradual reduction. Considering a trade volume which the DIHT president estimates to be 11 billion marks

for this year, the question of whether a promotive instrument like "swing" is still timely is certainly justified.

However, the advantage of "swing" for the GDR is considerable. Since 1975, its average use has amounted to DM 700 million. Interest savings--depending on the international capital market--amounted to between DM 60 and 70 million a year, at an interest rate between 8 and 10 percent.

Total indebtedness of the GDR to the FRG amounted to DM 3.65 billion by the middle of this year. Four-fifths of this sum was made up of commercial, especially supply credits. At the end of 1979, indebtedness stood at only 3.91 billion. Reason for the reduction: compared with figures for the same time in 1979, the GDR was able to raise its shipments by 38.4 percent to DM 2.987 billion in the first half of 1980. Because its imports rose "only" by 30.1 percent to DM 2.714 billion, the GDR surplus rose from DM 72 to 273 million.

However, the GDR has considerably higher sources of income which are not included in this accounting. The GDR receives hard DM currency, amounting to a total of more than DM 2 billion annually, through transfer payments (lump sum payments for transit, traffic agreement), from tourist traffic (visa fees, minimum currency exchange) and from commercial transactions (Intershop, Intertank). These earning have so far been used only occasionally, and then only to a small extent, to repay GDR debts to the FRG. GDR indebtedness in the West is given as $8.05 billion (approximately DM 14.4 billion).

The reason that, since last year, the "GDR" has again been pushing the trade with the FRG especially is, according to experts, not based on the advantages enjoyed by the "GDR" through the inner-German trade. These advantages existed before: in the FRG, the GDR is treated like an EC member. There are no duties for commercial goods and no skim-offs for agricultural products.

However, "GDR" shipments of agricultural products, as well as commercial products, have not been fully liberalized. There are quotas, especially for textiles and clothing. These quotas have not been raised in the past 2 years because the "GDR" misused inner-German trade for bypass imports.

The "GDR" also receives privileged treatment through a special regulation in regard to surplus value taxes. FRG shipments are, as a rule, taxed with 6 percent, exports into other countries are covered by credit. In the FRG, buyers of "GDR" goods can claim a pretax deduction of 11 percent, and there is no import tax. It is not possible to give the exact quantity of these privileges.

The increase in inner-German trade this year is based primarily on the price explosion for raw materials. At last year's Leipzig Fair it was agreed that for 6 years the FRG should sell crude oil and coal to the GDR which, in turn, would supply, while using additional quantities of oil from

the Soviet Union, petroleum products, especially for West Berlin. Half of the increase of "GDR" sales, amounting to DM 829 million, is due to price increases for these products.

Otto Wolff von Amerongen considers the development in inner-German trade over the past 18 months as pleasing: "We are on the road toward normalization." But on the other hand he believes that inner-German trade does not correspond to the state of the national economies of the two countries. The range of selections from the "GDR" is insufficient, quality is often not satisfactory.

Another "sore point" is the compensation demand, the simple barter trade of goods for goods. This practice causes considerable problems from smaller and medium-size firms who set the pace for inner-German trade. With this practice the GDR thinks it can sell its goods and still preserve its foreign currency reserves. For it depends on Western technology imports if its economy is to continue to grow.

And all this in spite of the fact that 70 percent of the GDR foreign trade is directed toward the East bloc. Only one-fourth is conducted with Western industrial countries, and one-third of that within the inner-German trade. In relation to the total FRG export, inner-German trade amounts to barely 1.5 percent.

Balance of the Past Two Years

Development Of 1979 Inner-German Trade in

Comparison To Previous Year:

Shipments to the "GDR" (in accounting unit millions):

1978	1979	1978/79 (in percent)
4,754.4	5,092.8	plus 7.1

Imports from the GDR (in accounting unit millions):

1978	1979	1978/79 (in percent)
4,066.3	4,791.8	plus 17.8

Total Trade Volume (in accounting unit millions):

1978	1979	1978/79 (in percent)
8,820.7	9,884.6	plus 12.1

Source: Federal Ministry of Commerce

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NATIONAL AGRICULTURAL ASSOCIATION WEIGHS COMPETITIVENESS

Food Industry

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 36, 1980 pp 3-4

[Article by Janos Marton, director-in-chief of the Agricultural Economics Research Institute: "Further Development of Conditions for Competitive Foodstuffs Production"]

[Text] All essential conditions for satisfying the food needs of the populace have been created in our homeland. In connection with this the overwhelming majority of agricultural products marketed domestically go to a saturated market. This is a novel phenomenon in socialist countries and thus far it has not been evaluated from either the political or scientific viewpoint in a way which can be generalized theoretically. In addition it has been only a short time even in our homeland that supply has been proportional to demand in the basic foodstuffs--bread, fats, meat, milk, sugar and the chief gardening products.

Earlier, in the decades of the so-called "shortage economy," the Hungarian foodstuffs economy, like those of the other socialist countries, had to struggle primarily with the quantitative problems of production. In this struggle socialist agricultural economics could make use of generally valid laws in regard to both state guidance and enterprise leadership. Under the conditions of a saturated domestic market, however, new laws take effect. There necessarily appears a competition among producers which is turned into an economic constraint by the fact that the external market demands have taken a leading role in determining the growth of our foodstuffs production. And our agricultural export meets with "ruthless" competitors everywhere. Even in the socialist countries the increasingly severe value judgement of the international market sets the prices and quality requirements which frequently cannot be met.

We are only beginning to recognize and evaluate the constraints of competition in the socialist agriculture and food industry; we are only beginning to look for ways to accommodate to competition relationships. In this area--by the essence of the matter--we cannot count on the practical experiences

or scientific achievements of other socialist countries. So the task falls on Hungarian agricultural economists, the task of discovering the driving forces of competitive socialist foodstuffs production, demonstrating the economic interdependencies of it and formulating the conditions, characteristics and consequences of its competitiveness.

Competitiveness has entered our foodstuffs economy as a requirement of today, or more precisely of tomorrow, and has created new problems independent of the "change of epoch" in the world economy. It is primarily the healthy growth of our foodstuffs production which gave birth to the new problems, problems which we undertake more happily than the earlier ones. It is true that thus far agricultural marketing difficulties have not yet become general and in important branches (such as wheat, corn, hogs, sheep, etc.) they are not more serious than the problems of production or have not even yet appeared. But it would be a dangerous self-delusion to think that during the Sixth Five-Year Plan we will be able to save our branches from those marketing crises which we have bitter experiences of in the case of chicken, eggs, potatoes, cabbage, wine, apples and other products. With the exception of wheat and feed grain all our products will encounter competition.

The power of the double bind market has been realized for us. Agricultural producers must compete with one another in both sales and acquisitions and in regard to both quality and price. Acquisition prices continue to rise at a greater rate than sales prices. This is only partly due to the "energy crisis" and is much more due to the fact that there are not yet any competition constraints, or very few, in the industries supplying agriculture. In contrast to this, virtually every branch of the foodstuffs industry which buys from agriculture must bear the disadvantages of saturated markets both at home and abroad.

A controlled form of competition is being realized in the Hungarian foodstuffs economy. Central measures create the competition controls. Naturally they are effective only on the domestic market. We meet with many types of competition on the market receiving our foodstuffs products sold abroad, but even abroad we must sell our products on markets which are largely controlled. Naturally the foreign controls are not motivated by Hungarian interests and in the future it will be even more difficult to find conditions approximating our interests.

When we speak of increasing the competitiveness of our foodstuffs production we must start primarily from our external market situation. Here at home (for the time being!) even the controlled competition extends only to those products for which the state does not reduce the production costs of the producer or the price burden of the consumer. (Eggs, live poultry, fish, wine, raw vegetables, fresh fruit, potatoes, mushrooms, ornamental plants, horses, etc.) There is no import possibility for these products, which is explained by our external market situation--a position which I consider to be quite outmoded. So the consumers are frequently in a disadvantageous situation

and the small producers enjoy all the advantages of the exclusion of foreign competition. In the case of the large producers, on the other hand, income regulation, the tax system and not least of all moral considerations limit the acquisition of profit.

The competitiveness of our foodstuffs production can be measured exclusively by international standards or on the international market. Despite the well known methodological difficulties, an international comparison is necessary for three reasons. In the first place only the international standard can be regarded as truly objective. In the second place the growth of our foodstuffs production is expressly linked to the demands of the external market, since we cannot expect any considerable increase in domestic consumption. In the third place with the aid of the value judgment of the international market we can define more clearly the place of our foodstuffs economy in the rank order of economic branches.

As is well known the competitiveness of foodstuffs production is based on natural conditions, the tools of production, manpower and the way in which all these are used. Production cost is a combined expression of these four factors. If we put our costs on the international balance we can half-way measure the international level of the basis for our competitiveness. Our foreign trade and foreign policy constitute the other half of our basis for competitiveness. The role of these latter two factors is especially significant in every small country and can increase or decrease or even destroy the advantages we achieve in production.

According to a study by the Hungarian Academy of Sciences our natural conditions are sufficient to permit a doubling of our crop production. To this we must add that we have no plowland or gardening crop which might not find a more favorable ecological environment in another country. Our homeland lies on the border of the ecological zones of Europe. Thus the variability of climate is greater here, but the extremes are smaller than in northern or southern countries. When we add the variety of our soil and terrain conditions and water management tasks we can say that nature itself has condemned our foodstuffs production to a multiple branch fate.

Finally, the ecological environment can be both advantageous and disadvantageous to our competitiveness as a function of our material-technical preparedness, central guidance and enterprise behavior.

The technical level of our foodstuffs production is a good bit lower than in the developed industrial states where the value of fixed assets and circulating assets per producer is many times more than here.

Large numbers of modern machines in plowland crop production and gardening, well functioning equipment in animal husbandry, and technological equipment in the foodstuffs industry constructed from outstanding elements which are usually only a few years old increasingly characterize the foodstuffs economy not only of the rich capitalist countries, but also of the moderately

developed countries competing with us (Italy, Spain, and Yugoslavia). The difference is especially striking in regard to the final stages of production and in the area of the technical development of storage, classification, transportation, preparation, packaging, etc. directly linked to the market. Despite the undoubtedly great results which we have achieved in technical development in the past 10 years we should not forget that our competitors have progressed more quickly than we in modernizing the material-technical base.

The technical level of household plot and auxiliary farming, which represents nearly one-third of agricultural production, surpasses many times the technical level of most small farms in Africa and Asia. But for the time being there have been only reassuring initiatives to suggest that the Hungarian small farms will even approach the technical level of capitalist small farms. The lack of modern small machines and equipment holds back primarily the competitiveness of small commodity producing farms and limits the activity of the small producers who are willing to take the initiative.

The ample quantity, composition and training of the labor force is fully suitable for our foodstuffs production to be competitive even internationally. Considering the number and skills of the workers, we can expect substantially greater performance from our foodstuffs production even with the present equipment. There is a seasonal manpower shortage in a few gardening and foodstuffs industry branches, but this is a factor of little significance in regard to the competitiveness of our foodstuffs economy as a whole, given the domestic employment circumstances.

Because of the large degree of flexibility in manpower use in small production the quality of production may be moderated in some cases only because of a lack of expertise.

The way in which natural, technical and labor resources are used and the organization of production merit attention from the viewpoint of our competitiveness primarily in the large operations.

The organization of production can be considered absolutely exemplary, even by international standards, in large scale plowland crop production. The use of assets and the productivity of live work, especially in the wake of the spread of the production systems, offer a suitable foundation for our competitiveness. This is evident also from the fact that the costs of plowland crop production are substantially lower than the international price level of products deriving from this source.

The situation is reversed in animal husbandry where the harmony of production factors, and especially the organization of work, are criticized by professional foreign organizers and colleagues visiting our animal husbandry sites from the GDR, Western Europe and North America.

Such an internationally supported comparison cannot be given for large scale gardening production. In the course of organizing production the gardening branches of the state farms and producer cooperatives struggle with problems which differ from those of capital-rich foreign competitors and competitors who face no manpower shortage. We do not have sufficient developmental resources to harmonize their equipment levels with the quality requirements and they do not have sufficient interest in compensating for the technical deficiencies with employment discipline.

In regard to the utilization of foodstuffs industry resources, almost everything which I have said about the gardening branches is valid also.

The representatives abroad of the Ministry of Foreign Trade have made a profound analysis of the international competitiveness of Hungarian foodstuffs production from the aspect of costs. According to the evaluation published in 1979, Hungarian agriculture produces at a cost level which is a good bit more favorable than the European average, primarily as a result of the more modest assests. Similar results were obtained on the basis of a comparative costs analysis carried out jointly by Finnish, Polish and Hungarian agricultural economics research institutes. Assets use by Finnish and Polish agriculture is a good bit greater than that of Hungarian agriculture per unit of production and per unit of manpower. But the efficiency of live work in our homeland is lower as compared to both countries. Work intensity also is substantially lower than in Finnish or Polish agriculture.

Laszlo Vadasz, in his outstanding book comparing Danish and Hungarian agriculture, points out that Danish agriculture lags behind Hungarian agriculture only in the indexes for area use and assets efficiency. Danish agriculture ranks ahead of Hungarian agriculture in every other economic comparison, but especially in regard to the productivity of live work.

I must also call attention to articles by Jozsef Nemeth, our agricultural attache in Washington, which have appeared in professional journals. These show that area use and the return on one-time and continuing expenditures are substantially more favorable in Hungarian agriculture, but the productivity of live work is a good bit lower than in the United States.

Janos Nagy, analyzing the development over a number of years of the agricultural investment and production of CEMA countries, came to the conclusion that among CEMA countries the production increment per unit of agricultural investment was greatest in our homeland. But the productivity of live work is higher in a number of CEMA countries than it is in our homeland.

The international comparisons suggest that we cannot attach excessive hopes to increasing assets efficiency and we cannot expect any considerable improvement in the productivity of live work from this. So we cannot avoid the tasks of technical development and we cannot replace them with the results which undoubtedly do spring from leadership, organization and enthusiasm.

Meat, Grain Production

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 36, 1980 p 8

[Article by Dr Vilmos Marillai, scientific deputy director of the Agricultural Economics Research Institute: "Where is the Grain and Meat Economy Going?"]

[Text] A few figures well illustrate the social significance of developing the grain and meat branches. It is enough simply to note that grain production takes place on two-thirds of the plowland area and provides almost 60 percent of the value of plowland crop production. Taken together the proportional value of hog, poultry and beef branch meat production comes to almost 30 percent of agricultural production. Thus the grain and meat branches account for almost 60 percent of all agricultural production. The importance of the two branches in the foreign economic area is even more striking. Grain and meat account for 60 to 62 percent of all exports of the foodstuffs economy and for 78 to 80 percent of it in the dollar relationships--depending on annual variations.

The socially justified developmental trends and magnitudes of the next plan period can be weighed realistically only if we start from a basic analysis and evaluation of our natural and other conditions. It is important, however, that in formulating our ideas we not stick exclusively to present conditions, but rather, as in all planning work, that we select the method of tracking a "moving target." This must be interpreted in the broadest economic sense, as a uniform whole or complex, ranging from production factors through internal and external conditions to quantitative, qualitative and structural changes in needs. What sort of changes can we think of when developing the grain and meat economy?

A Task for the Processing Industry Too

The significance of grain production is illustrated by that approximately 3 million hectares from which we harvested each year 12 to 14 million tons of product in the plan period now ending. This covers secure domestic supply and it also covers the related fodder needs of the animal husbandry branches. The foreign economic significance of grain export is also very noteworthy. The increasing need for grains, with the generally decreasing consumption of cereals, appears most of all in the manufacture of fodder mixes. Calculations permit the conclusion that the producing area needed will not change substantially in the coming decade; so there will be about 3 million hectares on which to improve the present 56-58 percent utilization of the genetic potential. Under large-scale conditions a utilization of the potential of up to 70-75 percent is possible with wheat. So we can count on an average yield of 4.6 to 4.9 tons per hectare for edible wheat, and 5.2 to 5.6 tons for fodder wheat. The candidate varieties for fodder barley may bring yields of 4.0 to 5.5 tons. In the case of corn the potential could increase to 9.0 to 12.0 tons, depending on the expansion of

hybrid varieties, so we can realistically predict large-scale average yields of 6.1 to 6.5 tons. It is important to know that these yields will bring with them an increase in expenditures but still they should improve the efficiency of production.

Among the industries directly linked to grain production the milling industry will have increasing grinding tasks and this will require development of the present deficient conditions. (More than 60 percent of the milling industry fixed assets are worn out.) Improving the grain industry conditions for storage and transportation will require even greater expenditures. The transportation need of the branch can be put at about 18 million tons by the mid-1990's when the emphasis of transportation developments should be placed on improving the ratios of special body vehicles and water transportation. It seems necessary to improve the storage capacity of the milling industry by about 50 to 60 percent, thus by 4.5 to 5 million tons, during the Sixth Five-Year Plan.

Grain products provide 68 to 70 percent of the ingredients of fodder mixes. The system of repeatedly transporting them is outmoded. The modernization of production capacity is unavoidable in the fodder manufacturing industry, but at the same time the increase in capacity is justified primarily in the large agricultural operations (or in associations thereof). Extra capacity for the manufacture of concentrates might be prescribed largely in industry, and to a lesser extent among the large agricultural operations which are prepared for it.

The developmental variants published thus far and still debated today agree on one question of theoretical significance: namely, that any development of the meat branch must be judged primarily from the aspect of increasing export performance, simultaneous with an improvement in the quality level of domestic consumption. The satisfaction of domestic needs is tied to meeting the quality demands of increasing exports. The two cannot be separated from one another.

Dynamically or Maintaining the Level?

Two developmental variants should be considered on the basis of figures for recent years. Naturally there could be more or less characteristic transitional versions between these two involving smaller or greater compromises in the interest of strategic realizations under the given conditions. Development aimed at maintaining the level reckons on meat production which is not quite 3.5 percent higher in the next 5 years; dynamic development reckons with an increase of nearly 14 percent. If we improve conditions for exporting raw material the quantity of meat with bones could increase more than this, by 6.0 and 21.5 percent respectively. The value of exports between these two production limits can be expanded from 4 percent to nearly 60 percent--these are not grandiose statistics!

The structure of meat production could develop as follows:

--the hog branch maintains its ruling position in the production of slaughter animals (slaughter hogs having a share of about 56 percent);

--the 23 to 25 percent share of poultry production requires greater market flexibility in the projected plans;

--beef production, with a 16 to 17 percent share, changes little; and, finally,

--the foreign exchange earning significance of lamb and mutton production increases.

The structural ratios will probably stir debate among many experts. First of all, there are questions about the possible or desirable increase in the ratio of ruminants. One can justly compare the ratio of the starch value and the digestible protein of the fodder used to the animal protein produced, which is smaller for animals eating grain. The picture is different if we compare it to the area producing fodder where the animals eating grain produce more animal protein than the ruminants. In any case some of the most exciting questions of the developmental conception are meadow and pasture management, discovering further possibilities for using byproducts and producing better conditions for this than at present.

The technical level of the industrial phase of the meat branch, the meat processing industry, is in a disadvantageous situation as compared to agriculture. It is unfortunate for any realistic development that the possibilities of the international division of labor have not been realized or have been little realized thus far, so that laying the foundations for an internationally coordinated industrial development policy is an urgent task. We can seek the reason for the backwardness in the technical level of the meat processing industry in the undeveloped food industry machine manufacture.

Grain or Meat?

The first strategic question in the development of the grain and meat economy is: Which is it more advantageous to export, grain or meat? It is obvious that put this way we cannot agree with the question itself. The export as grain of the grain branch is favored by its increasing strategic significance on the world scale and by the favorable foreign exchange yield. But neither can we ignore the transportation, storage and development aspects of a large volume product and the corresponding developmental ideas of the receiving countries. Increasing meat production for export is favored by the increase in the amount of foreign exchange taken in, over the longer run by the smaller import ratio for processed meat products, the lower energy content, the more favorable land use, the fact that more domestic labor is turned into foreign economic performance, and the more modest developmental needs for more even transportation tasks. In regard to time,

the conditions already developed for grain export give priority to the solution of these tasks, while creating an export base for competitive meat production will require deliberate work for the entire ninth decade. From the viewpoint of long-range export strategy, the development of meat production is unambiguously more favorable.

As for us, we favor the strategy of a dynamic development of the grain-meat branch as opposed to maintaining the level. Naturally this will require improved leadership of economic policy and presumes that quality work (optimal expenditure structure, market information, overcoming organizational deficiencies, etc.) will become general in the producing areas and enterprises of the foodstuffs economy.

Guidance must synchronize the complex regulation developed for the domestic economy (its enterprises) with the requirements of the sharpening foreign economic competition situation. Simply copying the foreign economic mechanism for domestic conditions is not possible; rather, by perfecting the regulators (using planned market mechanisms) we must create a real competition situation. Naturally a viable competition can exist only among real enterprises. For example, the material interest in these enterprises should not be mixed with official permits and factors of administrative power superiority should not deform relations among enterprises in the role of a personification of the state will. We are presuming that the needs of the external market and the performance thereon will become the unambiguous and direct measure of enterprise achievement. These are not questions of size, of "large" or "small" or "medium" operations, but rather lead to the necessity of a viable and competitive enterprise network and structure for the foodstuffs economy. In this system the chief role will be played, within enterprise frameworks, by the developmental level of the concrete forces of production, the regional viewpoints of ecological factors, the many-multifaceted but primarily suitable forms of activity in the chain extending from the producing fields to the tables of the consumer or the warehouses of the importer.

Horticultural Products

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 36, 1980 p 9

[Article by Mrs Gimes Anna Burger, university professor, Horticultural University: "The Competitiveness of Horticultural Products"]

[Text] The steps taken in the past decade in the interest of gardening production brought noteworthy results. The production of some types of vegetables--for example peas and red pepper--was completely mechanized, thus largely solving the earlier problems connected with labor intensity. Mechanization and chemicalization made progress in the case of other horticultural products also. Vegetable yields increased significantly; the average yield per hectare for some types of vegetables has increased 2 to 2.5 times since the end of the 1960's. Average yields for grapes

have increased considerably also, by more than 50 percent on the large farms. This cannot be said about fruits because with the exception of apples, and one or two other types, there has been a decrease in average yields and total crop. Small production has been consolidated. The small farms produce 45 percent of our vegetable production, 52 percent of our fruit production and nearly 60 percent of our wine production. Forced vegetable production, primarily in plastic sheet greenhouses, has developed especially strongly in recent years on both large and small farms. By this means and with the significant development of vegetable and fruit processing and storage domestic consumption has become more even throughout the year and the branch has been able to satisfy the demands of foreign trade to a greater degree.

The capacity of the processing industry has increased considerably also. The Hungarian canning and deep freeze industry processes 46 percent of our vegetable production and 28 percent of our fruit production.

During the 1970's various associations multiplied in the production, processing and marketing of garden produce. There are 34 gardening systems in operation, the majority of them in some integrated form for the production, processing and marketing of some product. Various associations and undertakings have been formed for joint investment and development and for joint marketing and one of the four experimental agricultural industry associations is a horticultural one. The combine form, which has proven itself in wine production, continues to work well.

A More Marketable Product Structure

It is well known that the production of many vegetable and fruit types is still only partly mechanized and that some of it--primarily harvesting and pruning--is very labor demanding. Mechanization--keeping good quality in mind also--is in part unsolved and in part is import-demanding and expensive. The average yields of a number of vegetable types--primarily those for which there has been progress in mechanization and the modernization of production--have increased considerably, but most of them still lag behind the yields of more developed countries. The situation is similar in regard to fruit types.

Thus although there is no longer any danger, as a result of favorable measures and development, that vegetable production will not be able to satisfy domestic needs and have something for export, the satisfaction of needs today largely takes place with a narrower product scale than earlier. A significant place in this is occupied by the vegetables of the preserving industry. The situation is similar in the case of fruit supply, where the variety has become poorer. Nearly 40 percent of our domestic fruit consumption consists of apples and tropical fruit. Apples make up 90 percent of our fresh fruit export. The production of several sought after fruit types which could be sold well abroad too is decreasing or is not sufficient.

Because of the labor requirements for production, the relatively low yields, the increasing costs and the low profitability the large-scale fruit area has been decreasing for years, there is not enough replacement and the plantation plans are not being fulfilled.

The preserving industry is struggling with problems too. Our refrigeration industry, which is modern and has sufficient capacity, does not receive the variety of raw materials which could be sold well at home and abroad after processing. The canning industry frequently does not have sufficient receiving capacity in peak season and its equipment is not modern enough.

The expenditures for trade in fruits and vegetables are high. The goods frequently go through too many hands and there are many reloading costs. It is not only that there are large numbers of buying and selling transactions, frequently the goods themselves travel too much. Thus, as a result of the still frequently inadequate packaging, shipping and storage, there are large commercial losses. There is still very little trade in modernly processed, cleaned, sorted, packaged, kitchen-ready goods; it is as if their number has even decreased in recent years. Trade does not have enough refrigeration-storage capacity or enough money for development.

Fresh and processed gardening products--vegetables, fruits, spices and wine --make up 45 percent of our foreign trade in foodstuffs. We export about 40 percent of the vegetables and fruits produced in fresh or processed form and we export nearly 40 percent of our wine production also.

But the export economicalness of the majority of the horticultural products is low.

It seems self-evident that there is need for the development of gardening production in Hungary, both to better satisfy domestic needs and in the interest of export. It would be desirable for there to be a more even supply of a greater variety of better quality goods and for there to be more processed, modern products.

Interest and the Enterprising Spirit

Thus far our large agricultural operations have been interested primarily in the production of well mechanized products which require little manpower, can be organized simply, and provide adequate income. This has hindered specialization, whatever the natural conditions of the farms otherwise.

But there are very many reserves--including manpower which can be mobilized --for further specialization in the producer cooperatives in the traditional vegetable producing areas of the north and south great plain, Heves and Pest megyes and the areas developed for fruit and grape production. But interest in it must be created. In my opinion what is needed to encourage

production and export is not a better regulator system, but rather substantially less regulation than at present and simplification of the withdrawal system. More should be left to the intiative and business sense of the enterprises. This includes support for free undertakings by enterprises striving for greater profits and for greater personal interest dependent on better performance.

Private producers farming on small farms, household plots, gardens and weekend places produce nearly 50 percent of the domestic gardening products on a fraction of the large-scale areas. It is obvious that their yields are a good bit higher than those of the large operations too. It should be possible to achieve this on the large farms too and profitability would increase with the increase in yields. This is supported by the fact that even at present there is a large income spread in proportion to yields. Very great differences hide behind the average profitability figures, to the benefit of farms with greater average yields. In addition to better utilization of manpower we must naturally increase mechanization too, insofar as possible, because fewer and fewer people today will undertake hard physical work. This is shown by the mechanization efforts of the small producers too.

Processing and Trade

The enterprising spirit should be increased not only in production but also in the area of processing and trade. We should support the creation of freely chosen froms of cooperation based on the common interest of producing, processing and trading enterprises. We might include here small undertakings as well. There is need for more flexibility in the present situation in both domestic and foreign trade; the goods should appear quickly where they are needed, we should fill the gaps, find new markets, offer new products and quality, and withdraw goods from places where they cannot be sold or have a poor market. Such a flexible trade policy could often be conducted more easily and more profitably with small volumes--and to the greater satisfaction of the customers--than with large volumes moved by large organizations.

In the interest of increasing enterprising spirit the industrial processing and commercial enterprises should be made more sensitive to interest. Much has been written already about how the large enterprises here, in a monopoly situation, are not sensitive to costs. This applies to both income and market sensitivity. The present megye divisions strengthen the secure position of the ZOLDKER [Trade Enterprise for Vegetables and Fruit] enterprises which conduct a significant part of the domestic vegetable and fruit trade and serve to eliminate competition. The foreign trade enterprises also have strong positions. It depends only on their good conscience whether they find those gaps in the present foreign market situation which could be filled by their products, whether they search out new markets and carry out good marketing activity, whether they order new products and

goods which could be sold well from the delivering enterprises, whether they sign contracts with them based on common interest and risk, or simply try to sell the goods offered on well proven markets to well known customers. In the latter case, too, they are satisfying their obligations and no one can blame them.

So, first of all, if we are to be competitive we must create in the enterprises competition and real interest in competition.

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COAL MINING INVESTMENTS DESCRIBED

Budapest FIGYELO in Hungarian No 37, 19 Sep 80 pp 1, 7

[Article: "Coal Mining Investments"]

[Text] The medium-range plan period which we shall complete within several months has brought a significant change of attitude in our judgment of the role played by certain energy sources. Increases in the price of hydrocarbons, which began in 1973 and have grown since then by leaps and bounds, in addition to the political maneuvers linked to hydrocarbon production and consumption, ended at one blow the era of cheap energy sources. Around the world this made way for the renewed development of coal production as well as for an accelerated rate of development or research in atomic energy and other energy sources.

Hungary could not escape the effects of this "world trend" either. Since 1974 there have been many party and government resolutions on the intensified exploitation of domestic resources and the halting of the cutback in development of coal mining which was begun earlier, and, in fact, in support of the development of our economic possibilities.

Backward and Forward

With about 10 years of planned cutback in development in the coal industry, the peak production of 31.4 million tons in 1975 fell to 24.9 million tons, and manpower decreased from 120,000 to 86,000 workers. It was not the extent of our coal resources that justified this cutback development (indeed our reserves assured us production possibilities for 100 years), but the fact that the low import prices for hydrocarbons, which we acquire largely by way of import, made it impossible for the costs of our coal production--which is carried out under geological conditions below that of the world average and is of poor quality--to withstand competition. Advantageous economic effects also accompanied the planned cutback in development: with the shutting down of the most uneconomical mines and the general introduction of the wall method of mining, there was a significant increase in the concentration of

production; with the centering of a significant portion of the limited development sources on mechanization, the results improved and the safety of mine work was intensified.

An overview of the expansion of development possibilities is presented in the following table:

Coal Mining Investments in the Fourth and Fifth Five-Year Plan Periods (in millions of forints)

	Fourth Five-Year Plan Period (actual)	Fifth Five-Year Plan Period (anticipated)
Large state investments	1,473.4*	5,950**
Enterprise investments	6,386.9	11,300
--of this coal resource supplements	2,496.4	2,720
--machine supplements, technical development	2,545.4	5,810
Total state and enterprise investments	7,860.3	17,250

*Largely the concluding investments at the Visonta Thorez surface mine.
**Largely the building of new mines at Markushegy and Nagyegyhaza, as well as preparation for the building of the Many, Lencsehegy and Mecsek mines.

It is characteristic of coal mining that because of the limited number of mine construction works that can be established (in common language, the relatively few points of attack that are available) it takes, even with intensified development possibilities, 5 to 10 years to turn around a declining production trend. Thus, despite the additional investments of the Fifth Five-Year Plan period, the production level in the branch still remains unchanged.

The Eocene Program

The bulk of the large state investments during the present plan period are threatened by exhaustion; but in comparison to the domestic average, good quality (eocene) coal is offered by two new mine openings in the Oroszlany and Tatabanya basin (Markushegy and Nagyegyhaza). Because of the rapid capacity decline of old mines operating in this area, the main task now is to start by the middle of 1981 the mechanized front excavation of production in both mines.

In the framework of the Markushegy investment which has been proceeding now for 4 years, in domestic record time they sank the 1.8 kilometer-long inclined shaft, and made ready the so-called central entrance shaft and one airshaft. They built the underground delivery and air passages, the central dewatering site, and the electric energy basis. On the surface, work is in full swing on construction or fitting of the central shaft and the facilities planned for the inclined shaft yard as well as the implementation of the 9-kilometer long rubber-strip track. Producer and delivery equipment is also continuously arriving. It also seems certain that the deadline will be met for starting production, although in order to run production up to full capacity mining construction work will proceed continuously through the Sixth Five-Year Plan. The Markushegy mine will be Hungary's first truly modern coal mine with its annual planned capacity of 2.4 million tons, its 8-ton per shift overall operational performance, its 4-to-5 ton full mechanized excavation work, and its mechanized delivery line. The cost of the entire investment program will come to 4.8 billion forints, of which 60 percent will be used up to the beginning of production.

Mining construction at Nagyegyhaza, which has been under way for 4 years, is also proceeding at a satisfactory rate. One of the 1,000-meter long inclined delivery shafts--in very hard rock--also was ready in record time as well as the central, so-called F1 perpendicular shaft. Work on the driving-on line of the second inclined delivery shaft is proceeding beneath the coal bed and leading to good quality bauxite production.

Combined with new water entries, the tapping water protection against the well-known danger of the mine area to water penetration is based on the water resistant areas to be formed in the various gradients of the mine and on the V1 water shaft below the driving-on line. The advanced preparation in the implementation of the shaft area facilities and the underground mine areas give hope that the beginning of production in the Markushegy mine will be followed within 3 to 4 months in the Nagyegyhaza mine as well. Here the mine building operations will be continued into 1986. In part, these will increase the capacities for coal production; and in part, they will create the conditions for bauxite production to be started in 1985, as well as the construction of an elevation system for mine water.

The mine with an annual coal production of 1.6 million tons and an annual bauxite production of 0.5 million tons as well as the production of 3,600 cubic meters of drinking water per hour will become, after it enters into full production, a highly productive 3-product operation. Most of the quality coal will be delivered by truck to Tatabanya, the bauxite will be delivered by rail to the Almasfuzito alumina factory, and the drinking water will be supplied to the regional water piping system to be built at Bicske-Tatabanya. The cost of the entire investment program comes to 6.6 billion forints, of which about 45 percent will be used before the start of production.

A Shortage of Cokable Coal

As a large state investment, planning as well as local preparation is proceeding on the new mines at Many which are linked to the Bicske Thermal Power Works and the Lencsehegy II beside Dorog. (Because of the limits nowadays on investments and the uncertainty of long-term energy requirements, no decision has been made as yet on implementing the Bicske Thermal Power Works.)

The worldwide shortage of cokable coal and the annually increasing cost of its import is imposing an unbearable burden on our domestic metallurgy which is constrained to rely on imports for 70 percent of its needs. For this reason the decision was made that by relying on the cokable coal resources of the Lias deposits in the Mecsek we should investigate the conditions for doubling domestic cokable coal production by 1990, which would reduce the import ratio to below 50 percent.

The almost 3 billion forints of Mecsek (enterprise) investments for the Fifth Five-Year Plan are already being adjusted to this development goal. This represents the first phase in the so-called Lias program which is presently being implemented and requires about 18 billion forints in investments. The essence of this program is the forming of new producer levels and their partial merging underground, the significant raising of capacity in the Pecs and Komlo mines, the modernization of technology, intensified protection against the danger of gas outbreaks characteristic of Mecsek coal mining, a comprehensive arrangement of surface deliveries, and the reconstruction of the Pecsujhegy coal dressing and capacity expansion.

Modernization and Its Sources

For the most part, enterprise investment in coal mining between 1976 and 1980 served 3 goals:

--it supplemented exhausted coal resources, that is, solved certain bottlenecks of production;

--machine acquisitions served the modernization of mining technologies, the replacement of obsolete machinery, the easing of labor tasks, and the countering of the constant slow decline in manpower;

--those developments which are directed at the modernization of repair-production-fitting workshops make it possible to implement investments in time, to manufacture certain means indispensable for technical modernization, and to a limited extent to export mining equipment or carry out manufacturing cooperation.

In the sphere of nonproducer investments we are devoting significant sums to purchase protective and health defense gear to guard against dangers that threaten mining (gas, fire and water) and to modernize certain social, cultural and work supply facilities (baths, rest homes, houses of culture, and so forth).

To implement the investments the coal mining industry has received--in addition to a 100-percent amortization withholding subsidy--3.5 billion forints' worth of state support in the plan period. With this help, most of the outlined enterprise investment goals can be realized.

In investment activity, we must improve cost planning, and as the first condition thereof the organization of implementation. The fragmentation of investment sources is evident particularly in enterprise investments. A higher level of technical control work, a more consistent accountability for planning-implementation errors, and if necessary enforcement by legal recourse, is indispensable that the planned technical content should be fully realized from available financial resources. We must also devote greater attention than heretofore to see that with these investments we achieve not only the technical goals, but also the economic achievement goals, to the planned extent and at the planned rate.

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DEVELOPMENT, PRODUCTION OF CEMENT, LIME, GYPSUM INDUSTRY DESCRIBED

Warsaw CEMENT WAPNO GIPS in Polish No 5, May 80 pp 116-119

[Article by Karol Watola, Manager of Investments and Development, Association of the Cement, Lime and Gypsum Industry in Sosnowiec]

[Text] Introduction

The 120-year-old Polish cement industry has passed through various development phases, based on changes in engineering and technology as well as on the siutational changes that occurred during this time.

After World War II, as the construction industry developed, the cement industry developed rapidly, expanding particularly intensively by 1965.

Mistakes in estimating the demand for cement in the 1960's resulted in a weakening of the growth rate. Because growth of new production capacity came to a halt, existing cement shortages became more acute, which in turn not only made it necessary to discontinue exports, but even made it necessary to import considerable amounts of this material.

In the past ten years, due to construction of a series of new cement plants and modernization of several older ones, the Polish cement industry increased its production capacity 100 percent in relation to 1970, attaining an engineering production capacity of 25 million tons annually. However, internal conditions permit utilization of only 84-88 percent of production capacity, or 21-22 million tons of cement annually.

The lime industry gained some modern plants during the last decade, in Tarnow Opolski, Kowal near Kielce, Bielawy and Trzuskawica. The Polish-design shaft kilns, 140 tons per day capacity, and the Maertz counter-current shaft kilns that were built, increased the production potential from 2.7 million tons of lime in 1970 to 3.8 million tons in 1979. The most obsolescent oval kilns were eliminated entirely and the old chimney-draft shaft kilns were partially eliminated.

The gypsum industry expanded its product range, mainly by modernization, adapting it to construction requirements. Production of special plaster

binders, wall elements made of dry gypsum plasters, and sound-absorbing, fire-resistant and decorative gypsum panels, was undertaken. Industrial production of "honeycomb" type gypsum partitions began. Gypsum panel production increased from 2,645 thousand square meters in 1970 to 6,565 thousand square meters in 1978.

State of the Art

Despite the tremendous progress made recently, the Polish cement industry still has a greatly varied stock of machinery. Along with the new cement plants ("Gorazdze," "Ozarow"), there are in operation clinker kilns dating back to the turn of the century, kilns that lack dust-collection systems, are very harmful to the environment, and require a large share of direct labor.

Today in the Polish cement industry almost 63 percent of the clinker produced is obtained by the wet method for preparing the raw-material charge, a method that is very fuel-intensive.

In highly industrialized countries, the wet-method share is 20-30 percent. For some time now, particularly because of the energy crisis, the less energy-intensive dry method is used, and, in some cases, the semi-dry method.

The small share of dry-method clinker production in the Polish cement industry can be attributed to several reasons, including the following:

-- in the immediate post-World War II period, production potential was increased by rebuilding and expanding existing cement plants, most of which operated by the wet method,

-- during the 1950's and the first half of the 1960's, construction of new cement plants was based on deliveries of equipment from the socialist countries, and these had installations that operated only by the wet method. Using equipment from the second-payments-area countries [capitalist countries], the following cement plants were built: "Nowa Huta," with a production capacity of 300,000 tons of clinker annually, and "Rudniki," 600,000 tons of clinker annually, both operating by the dry method; "Pokoj," with a production capacity of 300,000 tons of clinker annually, and "Chelm," 720,000 tons annually, both operating by the wet method, which in this case was made necessary by the high dampness of the raw material, as much as 25 percent ,

-- stagnation of the Polish cement industry during 1965-1970 caused a backing-up of investments during the 1970's, thus creating a very large demand for equipment for the seven cement plants being built during this period. Limited foreign-exchange funds for purchases in the capitalist countries resulted in the purchase of dry-method equipment for two cement plants, "Gorazdze" and "Oczarow," during this period.

In the lime plants, production equipment is even more varied than in the cement industry. There is still a chimney-draft kiln operating in this industry. About 25 percent of the plants are technically and physically obsolescent, making general modernization impossible.

The possibilities of intensifying production are also minimal due to the fact that reserves were totally depleted in the prior years, during which investments in the industry ceased. As a result, production shortages in relation to demand increased still further, particularly in the industries which grew rapidly after the mid-1970's: the metallurgical industry, the chemical industry, agriculture, the food industry, and the construction industry. These shortages can be alleviated only by investments.

Although Poland has very rich deposits of rock gypsum and large quantities of calcium phosphate (waste materials from artificial fertilizer production in plants in Police and Gdansk), the gypsum industry still has only one gypsum and gypsum products plant, in Gacki near Pinczow. This plant, despite constant expansion and recent modernization, does not satisfy the steadily increasing demand, especially for various types of gypsum mixtures and gypsum prefabricated wall elements.

Estimated Demand for Products of the Cement, Lime and Gypsum Industry During 1981-1985

The demand for cement, lime and gypsum products is a function of the size of construction-assembly production and also of the growth rate of such branches of industry as metallurgy, chemistry, road construction and the farm-food industry. Assuming 14 to 18 percent growth in national income during 1981-1985, and 20 to 24 percent growth in industrial production, including:

-- 18 to 23 percent growth in the mineral industry,
-- housing construction increase to 1.7 million higher-standard dwellings,
-- 14 percent increase in steel production (to 24 million tons),
-- 28 to 34 percent increase in chemical industry production,
-- 12-13 percent growth in agriculture,

then the size and growth rate of demand for basic products of the cement, lime and gypsum industry can be determined. These values are given in Table 1.

Expansion assumptions were based on full coverage of these demands, taking into consideration mainly:

-- the greater growth rate of construction's demand for lime and gypsum products (on the order of 20 to 50 percent) as compared to cement (13 percent growth rate, with export increased to 3-4 million tons annually). This is necessary because the structure of the consumption of mineral binders has to be changed so as to further reduce the use of cement and replace it

Table 1. Demand for Cement, Lime and Gypsum Products

(1) Produkt	(2) Jednostka miary	(3) Zapotrzebowanie w roku		(4) Dynamika wzrostu zapotrzebowania 1985/1981
		1981	1985	
(5) Cement	(14) mln ton	24,0	27,0	113
(6) Kamień wapienny	mln ton	10,2	12,8	125
(7) Wapno budowlane przemysł.	mln ton	6,0	7,2	120
(8) Mączki wapienne	mln ton	1,5	2,8	187
(9) Nawozy wapniowe (CaO+Mg)	mln ton	3,5	3,8	108
(10) Spoiwo gipsowe	(15) tys. ton	330	530	157
(11) Ścianki gipsowe i płyty Pro Monta	(16) mln m²	5,7	7,6	133
(12) Kreda techniczna	tys. ton	105,0	150,0	139
(13) Kreda pastewna	tys. ton	185,0	220,0	119

Key:

1. Product
2. Unit of measure
3. Annual demand
4. Demand growth rate
5. Cement
6. Limestone
7. Commercial construction lime
8. Lime powder
9. Lime fertilizers (CaO+Mg)
10. Gypsum binders
11. Gypsum partitions and Pro Monta panels
12. Industrial chalk
13. Fodder chalk
14. Million tons
15. Thousand tons
16. Million square meters

to a larger degree with binders that are cheaper and less energy-intensive, particularly in dwelling, single-unit and farm-building construction

-- increased demand for lime industry products by metallurgy and chemistry, agriculture and road construction,

-- changes in product range demand for cement, resulting from realization of the "Wisla" program and highway construction.

Basic Courses of Action for 1980-1985

Resolutions passed at the Eighth Congress of the Polish United Workers Party bind the personnel and managers of the industries to take action necessary to improve work effectiveness, reduce fuel, energy and materials consumption in the production process and reduce the impact of industry on the environment.

The strained material balances of previous years plus the simultaneous discontinuance of large imports of cement and the initiation of traditional exports, did not allow the cement industry to attain full production. The

present very high level of production capacity, which satisfies the demands of the construction industry, the market and export, has made it possible to undertake a broad modernization program aimed at greatly improving the industry's effectiveness.

The following courses of action must be undertaken:

-- implementation of the 1979 program for modernizing the "Kujawy" and "Warta II" cement plants, which operate by the wet method, thus achieving considerable savings in fuel with simultaneous increase in production (reducing heat consumption in clinker burning from approximately 75,000 kJ/kg [kilojoules per kilogram] to approximately 4,600 kJ/kg),

-- elimination of imported liquid fuel in the "Kujawy," "Warta II," "Nowiny II," and "Malogoszcz" plants, replacing it with low-calorific-value fine coal,

-- gradual elimination of technically and physically obsolete production units that are energy-intensive, low-productivity, and harmful to the environment. These are:

in the "Pokoj" cement plant -- Plant "A", kilns No 1 and 2,
in the "Wiek" cement plant -- Plant "A", kilns No 1 and 2,
in the "Groszowice" cement plant -- kiln No 3,
in the "Saturn" cement plant - kilns No 1 and 2,
in the "Wysoka" cement plant - kilns No 1, 2 and 3,
"Goleszow" cement plant -- the entire plant,
"Podgrodzie" cement plant -- the entire plant.

-- reconstruction of certain rotary kilns to obtain a reduction in rotary-kiln temperature (replacement or reconstruction of the chain zone) and further reduction of water content in the sludge,

-- elimination of obsolescent installations for pulverizing cement, lime, raw material and coal, and installation of roller-pan mills to pulverize raw materials,

-- use of good quality grinders and linings in the mills,

-- expansion of the "Kujawy" cement plant by one production line with a capacity of one million tons per year,

-- construction of a clinker pulverizer in the "Wiek" cement plant, with a pulverizing capacity of 1,100 thousand tons of cement annually,

-- conversion of the closed-down cement plants into pouring-cement stations,

-- continuance of the construction of the "Przyjazn II" cement plant, at the same time providing for dry-method production and installing decarbonizers, which will allow use of 50 to 60 percent of low-calorific-value

coal (up to 12,500 kJ/kg) and reduce heat consumption for clinker burning from 7,800 to 3,300 kJ/kg.

-- automation of technological processes,

-- continuance of construction of the Aluminum Oxide Plant,

-- construction of a marine cement-pouring station, enabling export of cement in established amounts by using waterways.

Obviously, discontinuance of any of the above should be synchronized with the size of demand for cement and implementation of the cement plant modernization program.

Modernization will result in:

-- a yearly increase of 1,700 thousand tons in cement production,

-- a yearly savings of fuel, in terms of coal, of 1,122 thousand tons,

-- discontinuance of use of fuel oil for cement production, making it possible to use 630,000 tons of heavy fuel oil annually in the national economy, mainly in chemistry,

-- utilization of approximately 700,000 tons of slag from the "Katowice" Steelworks,

-- improvement in environmental protection,

-- significant reduction in employment,

-- reduction in amount of haulage by rail.

Expansion of the lime industry is indispensable to satisfy the demands of the rapidly growing metallurgical industry (with second-stage construction of the "Katowice" Steelworks, demand for limestone for this plant alone will increase in 1983 from 1,800 thousand tons to 2,500 thousand tons, and demand for ground quicklime will increase from 240 thousand tons to 300 thousand tons annually); the chemical industry (limestone and quicklime); road construction (bituminous powder); agriculture (fertilizers); and construction (different assortments of lime, particularly pulverized and hydrated).

The ability to utilize raw materials resources as well as the infrastructure of plants in operation justifies the expansion of existing lime plants: "Gorazdze," "Bukowa," "Ostrowka," "Tarnow Opolski," and Rudniki."

Within the framework of so-called substitutional investments, we intend, during 1980-1982, to build ten type 100 C kilns (four kilns in the

"Gorazdze" Lime Plants, three in "Otmet," and three in "Tarnow Opolski"), which offer low productivity and high thermal consumption per unit of production.

The gypsum industry has no further potential for increased production. Investment enterprises now being conducted in the "Dolina Nidy" Gypsum Prefabricated Elements Plant, to only a small degree satisfy the constantly growing requirements for gypsum and gypsum products. The range of use of gypsum products in construction in Poland is still far different from other European countries and remains very disproportionate in relation to our country's raw materials resources. And thus the construction of the "Stawiany II" Gypsum Plants, which will manufacture high-grade factory-finished elements, is anticipated, as well as the construction of five gypsum prefabricated elements in those places where there is a great demand for gypsum elements.

The chalk industry must be expanded to meet the demands of the artificial fertilizer, rubber, plastics and paints and lacquer industries for industrial chalk; the agriculture industry for fodder chalk; and the construction industry for whiting.

There are shortages in all production types of chalk in relation to demand, which in 1985 will amount to:

-- industrial chalk, 40.00 thousand tons,
-- fodder chalk, 50.00 thousand tons,
-- whiting, 59.00 thousand tons.

It is anticipated that these shortages will be covered when the plants in Kornica and Mielnik are modernized and the chalk plant in Checiny-Sobkow is built, which will also ensure deliveries of rock for production of precipitated chalk in Matwy and white cement in Wejherowo.

Development of Product Assortment in the Cement, Lime and Gypsum Industry

The assortment structure of cement, lime and gypsum products is dependent on, among other things, the development of construction.

Cement occupies an important place among construction materials and continues to affect the country's socioeconomic growth rate. Together with the increase in cement production, resulting from modernization of active plants, and to a limited degree the activation of new investments, it is anticipated that there will be an increase in production of high-grade cements and special cements; for example, grade 350 SP, 450, 550 portland cements, quick-hardening Super 400, road 450, pozzolana and white cements. The share of these assortments grew from 6 percent in 1970 to 19 percent in 1980. During 1980-1985 there will also be an increase in the amount of grade 350 portland cement, but the share of grade 250 will drop significantly in the total amount of cement produced.

The following growth in medium-grade cement is envisaged for the respective years: 1970, 308.3; 1979, 325.0; 1980, 330.0; and 1985, 335.0.

It must be noted, however, that the basic grade of cement in Poland will continue to be portland 350.

Table 2. Percentage Share of Production of Various Grades of Cement

(1) Marka cementu	1970	1980	1985
250	45,5	33,0	28,0
350	48,0	34,4	38,0
SP 350 i 350	—	3,4	3,0
450	3,6	8,0	10,0
Super 400	—	0,7	1,5
(2) Cement biały	0,2	0,2	0,5
(3) Inne	0,7	0,3	1,0

Key:

1. Grade of cement
2. White cement
3. Others

Thus the development of cement product assortment is directed at satisfying construction requirements, both dwelling and industrial.

The use of special and high-grade cements in construction, and particularly in production of concrete elements, should, as production of these cements expands, bring important engineering and economic effects. The assortment program of cement production takes into account the types of cement needed for the industrialized methods of production used in construction, as well as the types that meet the special requirements of different consumers. Independent of the development of cement product assortment, the industry strives to partially replace the expensive and energy-intensive clinker with hydraulic additives, i.e., granulated blast-furnace slag, and pozzolana additives, i.e., fly ash (metallurgical and pozzolana cements). Large savings in energy and coal are thus obtained. Aside from the economic effects, use of additives also brings technical effects, for the cements containing additives, in many fields where they are used, reveal not only equal but even better properties than pure cements. But it should be emphasized that the amount of cement produced with additives should be synchronized with the domestic construction program and cement exports.

As has already been mentioned, the production of lime for construction purposes is low in relation to total lime production, and is as follows:

-- 700,000 tons for cellular concrete,
-- 400,000 tons for the ceramics industry,
-- 200,000 tons for construction.

The envisaged expansion of lime production by 1985 should take into account the stipulation that cement consumption be reduced in favor of the use of pulverized lime for mortar and for production of cellular concrete and lime-sand bricks. This is linked with the changes in assortment structure of lime production, given in Table 3 (only within the framework of the Association of the Cement, Lime and Gypsum Industry).

Table 3. Changes in Assortment Structure in Lime Production During 1970-1985 (in thousands of tons).

(1) Asortyment wapna	1970	1980	1985
(2) Wapno w bryłach tys. ton	1671	1360	1360
(3) Wapno hydratyzowane tys. ton	693	1200	1900
(4) Wapno mielone tys. ton	203	1014	1900
(5) Inne asortymenty tys. ton	65	76	200

Key:

1. Lime assortment
2. Lump lime
3. Hydrated lime
4. Pulverized Lime
5. Other assortments

The development of gypsum products will be aimed toward greatly increasing the amount of manufactured gypsum binders and prefabricated gypsum elements for construction. The planned assortment structure of gypsum products is shown in Table 4.

Table 4. Planned Assortment Structure of Gypsum Products During 1980-1985

(1) Asortyment	(2) Jednostka miary	1980	1985
(3) Spoiwa gipsowe	(18) tys. ton	180	550
w tym:			
(4) — gips budowlany	tys. ton	138	360
(5) — gips tynkarski	tys. ton	16	65
(6) — szpachla gipsowa	tys. ton	21	60
(7) — mieszanki gipsowo-anhydrytowe	tys. ton	5	55
(8) — klej gipsowy	tys. ton	—	10
(9) Płyty gipsowe	(19) mln m²	3,0	8,8
w tym:			
(10) — płyty gipsowo-kartonowe o grubości 9,5 mm	mln m²	1,7	2,8
(11) — płyty gipsowo-kartonowe o grubości 12,5 mm	mln m²	1,3	4,0
(12) — płyty gipsowo-kartonowe zbrojone włóknem szklanym	mln m²	—	2,0
(13) Ścianki działowe	(20) tys. m²	6100	7600
w tym:			
(14) — ścianki działowe gipsowe 60—100 mm	tys. m²	3340	3200
(15) — bloki Pro-Monta	tys. m²	2600	4000
(16) — wielka płyta	tys. m²	160	300
(17) Opaski chirurgiczne	(21) tys. szt.	600	5600

[Key on following page]

Key:

1. Assortment
2. Unit of measure
3. Gypsum binders
4. Construction gypsum
5. Plaster gypsum
6. Gypsum putty
7. Gypsum-anhydrite mixtures
8. Gypsum glue
9. Gypsum panels
10. Gypsum-boxboard panels, 9.5 mm thick
11. Gypsum-boxboard panels, 12.5 mm thick
12. Fiberglass-reinforced gypsum-boxboard panels
13. Partitions
14. Gypsum partitions, 60-100 mm
15. Pro Monta blocks
16. Large panel
17. Surgical bandages
18. Thousands of tons
19. Million square meters
20. Thousand square meters
21. Thousand pieces

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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2057

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23 October 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2057

CONTENTS

INTERNATIONAL AFFAIRS

CEMA Nations Undertaking Oil Exploration in Baltic Sea
(Harald Steinert; DIE WELT, 19 Aug 80) 1

BULGARIA

Family Contract--New Form of Economic Reform Suggested
(Ivan Mironov; NOVO VREME, Aug 80) 3

CZECHOSLOVAKIA

Briefs
Mercury Self-Sufficiency Planned 19
New Coal Mine 19

GERMAN DEMOCRATIC REPUBLIC

Impact of Polish Events on GDR Labor Morale Assessed
(Michael Mara; DER TAGESSPIEGEL, 29 Aug 80) 20

West German Evaluation of GDR Housing Construction Program
(Walter Osten; VORWAERTS, 7 Aug 80) 23

West German Commentaries on GDR Agricultural Situation
(DIE LANDWIRTSCHAFT DES OSTBLOCKS, 1 Sep 80,
IWE-TAGESDIENST, 21 Aug 80) 26

Results for First Six Months
No Shortage of Agricultural Workers

[III - EE - 64]

HUNGARY

First Half 1980 Economic Statistics Released
(HETI VILAGGAZDASAG, 30 Aug 80) 29

Official Comments on Restructuring of Production
(Laszlo Horvath Interview; MAGYAR HIRLAP, 21 Sep 80) 33

New Energy Sources for Meeting Energy Demands Described
(Karoly Szendy, Istvan Szergenyi; ENERGIAGAZDALKODAS, Jun 80) 36

Food Industry Makes Progress in Energy Conservation
(Laszlo Szobel; ELELMEZESI IPAR, No 7, 1980) 44

POLAND

Urgent Problem of Merchant Fleet Modernization Discussed
(GLOS WYBRZEZA, 11 Aug 80) 57

YUGOSLAVIA

Hard Currency, Dinar Savings Discussed
(BORBA, 25 Sep 80) 62

Briefs
Agricultural Production 63
Fertilizer Shortage in Kosovo 63
Aluminum Production 64
Coal Imports 64

CEMA NATIONS UNDERTAKING OIL EXPLORATION IN BALTIC SEA

Bonn DIE WELT in German 19 Aug 80 p 10

[Article by Harald Steinert, Kiel: "Petroleum--USSR, Poland and GDR Starting Exploration in Mid-Baltic Sea, However: Chances Are Good Only For Small Finds"]

[Text] In the Western Baltic plans for the first off-shore oil production in the Kieler Bucht are taking shape. In the area of the Eastern bloc countries in the mid-Baltic exploration is also beginning through the off-shore consortium Petrobaltic, of which the USSR, Poland and the GDR are members. A platform, which will operate out of Danzig for the time being, will carry out the first drilling operations--where was not known. The installation can drill in up to 90 meters of water and should be able to operate in almost the entire Baltic area.

The chances of finding oil in the area of the Eastern bloc exploration are extremely good--which is not to say that these discoveries will be profitable according to Western standards. In these countries, with their centrally controlled economies, exploration costs without great economic success can be justified by overriding criteria. Consequently, one can calculate "with a probability bordering on certainty" that some time in the next few years Petrobaltic's activity will give rise to an off-shore area, even if this is based on only very small deposits of oil.

The geological situation suggests clearly that the chain of small oil fields which were opened up during the postwar period, principally on the coast of the Soviet province of Kaliningrad (formerly northern East Prussia), in the Memel area and in Lithuania and Latvia, extends into the Baltic. Poland and the GDR have also tapped apparently only modest oil deposits on the Baltic coast, the location and formational type of which offer further opportunities. On the "opposite" side of the Baltic, several small deposits of oil from the island of Gotland are known from Sweden, which produce only tons of crude oil per day, but are said to be in production. The heart of the "south-Baltic off-shore area" is the present province of Kaliningrad, where there are at least 12 fields. The

total usable reserves there are estimated at 20 million tons. That is not very much if it is kept in mind that the annual production of the USSR is already far above one-half billion tons. Almost all the fields in this region are on the water, near the water or in the Kaliningrad or Kurische Bucht. There is little information about current production. According to OIL AND GAS JOURNAL, the five most important fields together produce about 1.3 to 1.4 million tons from 80 wells. The oil is mostly of excellent quality, light in color, light in weight and low in sulfur. It is currently taken by rail to White Russia. A refinery in Lithuania will be in operationin the near future, supplied by pipeline from the Kaliningrad fields.

The chain of Baltic oilfields stretches to the northeast, far into Latvia. In Lithuania alone seven different deposits have already been discovered. To the southwest along the Baltic coast a few deposits of oil of probably even smaller capacity have come to light. The most important discovery is probably the Zarnowitz field near Leba (Eastern Pomerania), which is likewise directly on the coast. Two additional small fields on the island of Wollin are in production. On the GDR side one oilfield on the island of Usedom is known, which also seems to extend out to sea and could be developed into an off-shore field, as well as three fields in Western Pomerania.

The positive expectations for the exploration campaign now beginning are based not only on the existence of these occurrences but on the geological structure of the bedrock of the Baltic shelf and the distribution of the highest-yielding formation, the Cambrian: 17 or 22 of the deposits opened up on the Baltic coast of the East bloc countries alone are are located in it. The oldest of all geological formations that can be oil-bearing--about 600 million years old--it is widespread in the bedrock of the central and eastern Baltic--as has been known for a long time.

The formation lies at a relatively shallow depth and is accessible with moderate effort (to judge by the drillings about which details were made known, it is found at a depth of about 1,000 to 2,500 meters). It shows no signs of subsequent folding through the formation of mountains. This means that from the occurrences discovered on land one can deduce with a high degree of certainty a broad extension of this formation under the adjacent Baltic Sea.

However, it would be astonishing if the off-shore drillings of the Petrobaltic consorium did not open up additional deposits in the Cambrian strata under the many tens of thousands of square kilometers of the high-yield Baltic Sea region, in addition to the seward continuations of the Lithuanian coastal fields and the Usedom field. But it would be almost as astonishing if this exploration turned up more than small or medium-sized deposits.

9581
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FAMILY CONTRACT--NEW FORM OF ECONOMIC REFORM SUGGESTED

Sofia NOVO VREME in Bulgarian No 8 Aug 80 pp 26-39

[Article by Ivan Mironov: "Labor Behavior and Its Control"; **passages enclosed in slantlines printed in boldface**]

[Text] The problems of labor control have a permanent theoretical and practical significance, for the development of society depends, above all, on labor activities. The gravity of such matters becomes particularly great when it becomes necessary to review methods of control and control decisions with a view to the elimination of one or another shortcoming in the organization of the work in individual production areas and sectors.

A tremendous amount of practical work is being done in our country to improve labor management and organization by making changes in the principles and mechanisms through which labor behavior is affected. Their purpose is to develop the necessary atmosphere for the most effective possible manifestation of the work capabilities of the people and for high economic and social effectiveness of public labor. A number of problems arise in this connection considered of essential significance in improving labor behavior control. The present article will be discussing some of them.

Need for Systematic and Profound Study of Labor Behavior

Labor behavior is determined by a number of factors. Each factor has its importance in combination with all others and, above all, with the basic factors operating in the corresponding area. Their influence is exercised indirectly as a result of their reciprocal combination and the ways in which they are accepted by the working people. This circumstance gives labor behavior a strong sociological content. Hence the need to study labor behavior through sociological interrelationships among needs, motives, incentives, and satisfaction from labor, weighing economic, social, labor-law, and administrative actions in accordance with the requirements and possible reactions on the part of those on whom they will be applied. This insures the greatest possible combination between social objectives and private interests.

Awareness of the motivations which govern aspirations and manifestations in education, vocational training, choice of a profession, type of work and place of work are the most necessary factors in choosing the means for influencing labor behavior and controlling various activities. In such choices we must be familiar with the readiness on the part of the working people to compromise in the implementation of their various aspirations. The latter are always placed in a specific order. For this reason, inevitably the tendency appears to "sacrifice" those closer to the bottom of the scale for the sake of implementing more essential objectives. Thus, for example, every person aspires to reach the possibly most acceptable working conditions: high wages, good production and living conditions, convenient shifts, normal physical and mental stress, advancement possibilities, respect of the labor collective, the group, and society related to the usefulness of his labor, and so on. At the same time, however, the characteristics of the various professions are quite different in terms of said indicators, as are the problems which the individuals must resolve. Therefore, a univeral satisfaction from the work may be achieved in exceptionally rare cases. As a rule, in certain living and working circumstances, the aspiration is to achieve an overall satisfaction which always contains a certain amount of dissatisfaction with one or another condition of the work. The essential feature from the viewpoint of society is for dissatisfaction to be of such a nature as to insure high readiness to work and corresponding labor activity. The social environment can influence this objective only when possibilities are present for converting dissatisfaction into a work motivating and stimulating factor.

The gradation of objectives in individual plants determines both the gradation of labor motivations as well as the satisfaction from the possibilities provided by the work for resolving the problems of the population and its individual groups, differentiated on the basis of the most essential characteristics of their labor behavior. The overall status of these indicators offers possibilities for a gradation of the means used for exerting an influence on the scale of the society. However, it is only the knowledge of the condition prevailing in the different groups that would make it possible for such means to be defined on a differentiated basis and yield factual results. The characteristics such as level and type of education, income, property, sex, function in the family, outlook, and so on, combined with objective living and working conditions through the various periods of social development, cannot fail to influence the significance ascribed to the various characteristics of the work. However subjective assessments of the attractiveness or nonattractiveness of a possible type of work may be, they possess a social significance merely because of the fact that, expressing a specific position, they control quite tangibly the work feeling and factual work behavior, thus substantially affecting the effectiveness of social labor and development. Whether agreeing or disagreeing with such assessments and with their factual influence, the

individual institutions in charge of social management, whose decisions and actions are directly or indirectly related to the control of labor behavior, must objectively be forced to take them properly into consideration, for in the opposite case their control activities would be ineffective and the decisions themselves would be subjected to frequent changes. Society can resolve its problems in the interest of the entire population only by involving the individual interests in the work and applying a system of incentives consistent with the scope and gradation of labor motivations, providing that a state of harmony, closeness and unity exists among them.

The systematic and profound study of labor behavior could provide social control with the necessary information as to its condition and, on the basis of the conclusions of such studies, help to choose the direction and specific solutions for the elimination of shortcomings. These possibilities are based on its multiple-factor determination which give it the content of an integral indicator and, consequently, make it a source of exceptionally valuable information on sociological interaction in the training for and application of labor and their reflection on labor results.

Basic Factors in Influencing Labor Behavior

Like any other behavior, labor behavior is a means to react to specific circumstances. Its nature, in the final account, is determined by the influence which the circumstances and the various changes in circumstances have on achieving specific interests. Consequently, the factors which control labor behavior and may be used to influence it are socioeconomic, individual, and social-mental.

For understandable reasons socioeconomic factors have the strongest and broadest influence on labor behavior. They include the following:

1. Production and labor relations based on the nature of the ownership of productive capital and current labor legislation (the hiring and layoff system, amount of wages, social and pension matters, and others).

2. The specific labor situation, characterized by the level of employment, possibility to find and choose employment and place of work, degree of consistency between the necessary and the existing professional and skill structure of cadres on a social and regional scale, ratio among the different characteristics of the most essential indicators of individual activities, enterprises, professions, such as wages, working and living conditions, regimen of work and recreation, and possibilities for advancement in labor career and wage.

3. Living conditions related to the development of needs, the possibility to satisfy them from the viewpoint of the purchasing power and

the condition of the market, changes in living costs, shaped by the simultaneous influences of the development of nominal incomes, consumer prices, prices of durable commodities, taxes, pensions, social benefits, and so on.

There is a permanent link between socioeconomic and sociomental factors. They are reflected on labor behavior in accordance with their condition and the intensity and nature of changes. The factual labor behavior is shaped in the course of the active attitude of the working people toward objective living and working conditions. This is a willful act, the result of the analysis and synthesis of information regarding one's own needs and the possibility for their satisfaction through labor, as well as the objective circumstances. Any condition or more significant change in objective reality is assessed by the people comprehensively and triggers a certain feeling which is of importance in terms of their factual directly or indirectly labor-related actions.

Through their behavior at work and through labor results the working people at large influence control institutions which decide on matters related to the development of jobs, working and living conditions, wages, pensions, labor relations, pensions, and social matters, creating one or another type of condition for the use of the income and the satisfaction of needs. This interaction is manifested also within the individual enterprises. Its nature is not determined exclusively by factors under their control but also by factors which operate on a national and regional scale.

The individual institutions influence labor behavior through their decisions and actions. In the same way, through their production activities and their reflection on the development of society in the various labor areas, the working people influence the behavior of the individual institutions and enterprises. This interaction is constant and constantly creates the need for the individual parties to take into consideration possible reactions and their consequences in terms of the implementation of objectives.

The social practice of socialism, our own practice included, indicates that the public ownership of productive capital does not, by itself, create an identical attitude toward labor among all the people. There is labor and there is labor: There is labor under favorable working and living conditions, considered highly satisfactory because of its content and other indicators; there is also labor under adverse conditions, hard, unattractive and which, because of its nature, does not offer great possibilities for prosperity in the work and in terms of the social hierarchy. Some types of labor require high skills and even lesser and no more than basic responsibilities. At the same time, the conditions under which the people live and the problems they must resolve in accordance with their own plans may be quite different in

nature. Also different are the possibilities of the individuals to perform various types of work and so are their inclinations.

Under such circumstances, it is objectively inevitable and legitimate for labor motivating factors to affect individuals differently. This also creates differences in the influencing power of individual incentives in resolving problems concerning the choice of a profession, job, and place of work, the shaping of an attitude toward individual types of work, labor activeness, and involvement with one's profession and enterprise.

Society and individual enterprises may experience an acute need for cadres possessing a specific type of training and practical qualities. As a rule, however, this requirement cannot lead individuals/mandatorily/ to train themselves for a corresponding type of work and find jobs where there is need for cadres. Even though the general status of employment conditions cannot be ignored in resolving problems of education, vocational guidance, and so on, for it is this condition that predetermines the possibility to find work and achieve said objectives,/in the course of their decisions and actions in the field of labor the population and the individuals are guided essentially by their personal interests. These interests are related to the needs which are the basis of labor motivations, while the decisions and actions themselves are the result of the inevitable conflict among different motivations/.

In some cases a given profession and job may be considered acceptable from the viewpoint of the nature and content of labor, working and living conditions, or advancement possibilities. At the same time, however, they may be less acceptable or, in general, unacceptable from the viewpoint of the wage level. In other cases, the size of the wages may be acceptable and even quite satisfactory while the other labor conditions may be unsatisfactory. A number of combinations of such characteristics are possible. Each one of them is assessed by the individual through a certain lens which, in this case, is a type of measuring device for the sacrifices made and the benefits extracted. Good production and living conditions, lower work stress, a favorable labor system, possibilities for growth in the hierarchy, and the high social prestige of a given profession or type of work may be considered by some strata as the "price" for lower wages, whereas higher wages may be considered the "price" of less favorable types of work, generally or in part. The multifactorial determination of the labor behavior demands of the factors determining it to be in a ratio which, put together, will provide the desired status of the various components in such a way as to insure the following: a) great industriousness; b) desire to develop labor capabilities; c) full availability of necessary cadres in various labor areas and sectors; d) high labor activeness; and e) strong interest in individual and collective results of labor activities.

We could definitely consider that said desired results may not be obtained unless the labor interests of the population become properly involved and organized in harmony with objective laws governing social development under socialism. In turn, such laws could operate and be implemented only through human activities. It is precisely in this connection that the knowledge of the individual importance of labor in the implementation of the individual plans of the population, the satisfaction or dissatisfaction with various types of labor activities, and the readiness for changes in labor behavior as a result of the application of one or another approach and of specific control decisions is of great theoretical and practical value.

Position of Labor in the Individual Plans of the Bulgarian Population

In recent years a number of studies of labor collectives and students and of broad population and working strata were conducted in our country.* A study has been made of the power of the factors influencing the orientation of the working people in selecting a type of education and profession, the significance ascribed to the various labor characteristics and applied labor incentives, the satisfaction from labor, job turnover, and others. The incentive for the intensification of such studies was provided by the effort to find more successful solutions in the respective areas as well as the direction of the research itself was substantiated in the decisions of the February 1974 BCP Central Committee Plenum on ideological work.

The results lead to some general conclusions regarding the overall system, gradation of labor motivations, and the power of the influence of various incentives and of the social environment. Since the information provided by the labor active population contains socially more significant and more reliable information on the factors which control labor behavior, the respective conclusions are based essentially on it.

/At present the aspirations and actions of the working people in the fields of education, vocational self-guidance, choice of profession and place of work, labor activity itself, assessment of labor accomplishments,

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* The description that follows is based on studies conducted by the Institute of Sociology of the Bulgarian Academy of Sciences, the Institute for Scientific Studies of Young People, the G. Dimitrov Scientific Research Institute of Trade Union Problems, the Scientific Research Institute for Labor of the Elprom Industrial Enterprise in Troyan (1976), the comprehensive study of the labor collective in the Bulgarian People's Republic (1974), the study of manpower turnover (1972), the study of the labor collective of Blagoevgrad Okrug (1971), and the Vocational Orientation of Students and Other People, for 1972-1977.

and so on, are subordinate mainly to considerations of their reflection on the development of the family and the satisfaction of its current and long-term requirements/. Due to the fact that the main factor which determines, to the greatest extent, the development of a prosperous family is labor, the problems in these areas will inevitably be resolved mainly from the viewpoint of the consequences to the family of the respective decisions and actions. These problems are not the target of independent solution by the individual but of the respective family.

It is precisely within the family that the most lively discussions take place and problems are resolved regarding the education of the children, the choice of profession, the place of work, cases in which changes in the type of work, place of work, or profession are necessary, and how to rate the various needs in accordance with their urgency and available family resources.

Under socialist conditions as well the Bulgarian family retains a number of typical characteristics developed in the course of the centuries-old history of the Bulgarian people. The family has an emphatically labor organization. The aspirations of the Bulgarian people have always been to give their children a type of education and vocational training suitable for their work, insuring the development of a prosperous family and characterizing them as good citizens. The socialist conditions introduced a number of changes in their lives, mainly in terms of ownership of productive capital, and the method for the distribution and formation of the family income. Indeed, no longer are funds for production accumulation withheld from such income. It is a fact, however, that most of the family's requirements, including the needs whose satisfaction requires considerable funds, such as housing, furnishing, and so on, are the target of the individual incomes of all family members. On the other hand, even though considerable successes have been achieved in improving living conditions in the course of the socialist development of the country, a number of prime needs are met, on an average, at a level below rational norms. At the same time, under the general influence of changes in living standards and in the cultural development of the population, and the development of production and scientific and technical progress, a number of new requirements have developed whose satisfaction has rapidly turned into a mass necessity. Under such circumstances, as a social organism, the family cannot fail to develop interests which would mold an exceptionally active attitude and play a strong role in resolving problems in the field of labor and in terms of the factors which determine the satisfaction of family needs. Efforts to free the family from its economic and labor function and just about treat it like a type of club under conditions in which its prime requirements are satisfied on the basis of the principle of distribution according to labor and its expansion and intensification, bearing also in mind the existing deeply rooted mental feeling, conflict with objective circumstances. Their implementation, even though on a limited scale, necessarily triggers adverse consequences in the field of labor activity.

/It is established that our population is most categorically expressing its belief that material prosperity is the main motive force for its work activities/. This logically stems from the already mentioned considerations concerning the needs satisfied by the population through its private incomes and the level reached in their satisfaction. The size of the income earned from the individual professions, enterprises, and types of labor activity has and will have an influence of first rate strength and scope on labor behavior. Under such circumstances, sectors, enterprises, and areas of activity which fall behind in terms of providing income for the working people cannot fail to and, as a rule, do experience difficulties in finding the necessary cadres. Skills which are underestimated in the setting and factual payment of wages are, all in all, underattractive and, in most cases, are experiencing a shortage of cadres as well as a higher potential and factual personnel turnover. At the same time, a substantial correlation between labor qualities (high skills, labor creativity, high productivity and high quality work) and the income earned encourages labor exploits and upgrades the attractiveness of such activities and professions. A number of examples may be cited from our own reality, proving this correlation on a social scale, used in the area of social control to influence labor behavior. However, there are also grounds to believe that the existing mental feeling in the labor area has been properly taken into consideration, as a result of which the organization of the incentive has not been developed in accordance with the scope and gradation of labor motivations and of the significance ascribed by the population to material labor incentives. Reliance on more labor incentives and on administrative methods for controlling labor behavior has been excessive.

/The results of sociological studies convincingly prove that there are no reasons to believe that as the living standard rises the power of material incentives in basic labor manifestations will be declining/. Comparisons between the new and old wages of those who have changed jobs indicate, on a national scale, that the average wage level in the new job is about 20 percent higher than in the old. Readiness to change jobs for the sake of higher wages is quite high among all groups regardless of their level of income and property status. Indeed, willingness to change jobs declines as the income of a family member rises if a job change would bring no more than an insignificant wage increase. However, such readiness becomes substantially higher should the new job pay a higher wage.

The influence of the property status on the readiness to change jobs for the sake of higher wages is not so clearly manifested as that of the income level. In groups with the best property condition this tendency is substantially weaker compared with the other groups and the average status. However, in such groups readiness to change jobs for the sake of considerable wage increases is even higher. The not so clearly expressed correlation between material labor motivations and the property

status, compared with the income level indicator, is entirely natural. Households with a good property status could have a great variety of incomes and those with high income may have very varying property levels. Hence the conclusion that /the working people are quite sensitive to the possibilities provided by their current income in the satisfaction of their prime daily requirements, for which reason their size and purchasing power have and will have a rather strong influence on their labor behavior/.

Even though in the gradation of labor motivations considerations as to the type of income will be provided by the individual professions or the work done in various areas, activities, and enterprises assume a central position, in the case of a number of strata and groups they are differently related to other essential characteristics such as, for example, working and living conditions, the usefulness to society, the interesting nature of the work, the possibilities for displaying labor abilities, the extent to which conditions for autonomous activities are insured, and so on. All in all, this is the average condition of the gradation of labor motivations and requirements which, put together, determines the level of satisfaction from the work. The significance ascribed to said conditions or characteristics of the work both in terms of averages and individual groups confirms a strong and increasing struggle waged by labor motivations. This is also confirmed by the sequence of the reasons for dissatisfaction among the working people. In 1977, for example, their significance could be rated as follows: a) wage; b) difficulty; c) working conditions, followed by indicators such as insufficient prestige, impossibility to advance in one's labor career, absence of qualifications for a specific job, uninteresting work, impermanent work, and others.

Changes in the status of the educational-qualification level of cadres achieved through the use of various means of influence are of substantial importance in controlling labor behavior, for this factor largely influences their job requirements. It has been established that /as the educational level rises so does the significance ascribed to professional considerations--doing work consistent with the training of the individual and advancement in one's labor career/. Specialists with higher, semi-higher, and secondary specialized training require to a far greater extent compared with categories with a lower educational and vocational level, work in their profession. In their case higher wages paid for performing work not consistent with their training cannot reduce their dissatisfaction or successfully counteract manpower turnover. /In this connection the need arises to seriously discuss and quickly resolve the problem of establishing and maintaining a high level of approximation between requirements concerning the quality of cadres and their structure in terms of their qualifications/. Whenever work requiring qualifications lesser than those possessed by the individual is performed, dissatisfaction arises naturally and to the fullest extent, for the efforts, money, and time spent for gaining such skills are not justified and the

implementation of the objectives set by the individual for himself is hindered. On the other hand, the existence of a surplus of cadres with high skills objectively hinders the assessment of the skills themselves through wages, thus creating dissatisfaction also among those who work in their field. In both cases no conditions are created for high labor activeness, to the detriment of both society and the individual. It cannot be denied that, in turn, such factors inevitably affect the social prestige of the different professions, types and levels of education, and acquired skills, deforming them from the viewpoint of their true social value related to the usefulness of the corresponding work and the need for such cadres. This also leads to the deformation of the individual's self-guidance in education and vocational guidance, creating difficulties in securing cadres for various activities and cadres employed in jobs consistent with their training.

Bearing this in mind, our current education structure, broken down by age groups, should result in a number of considerations as to its influence on labor behavior and on the trends and specific decisions to be made for the elimination of shortcomings. According to the December 1975 population census data, this structure has the following characteristics:

Education Structure of the Labor Active Population*

1) Възрастови групи	2) Възрастова структура	3) Образователно равнище и структура						
		4) Без начално	5) Начално	6) Основно	7) Средно		Полувисше 10)	Висше 11)
					общо 8)	специално 9)		
12) Общо	100	5,[illegible]	18,7	42,0	12,7	12,8	2,5	6,2
13) в т. ч.								
25—29 г.	14,3	2,0	7,6	41,6	17,1	20,9	3,3	7,5
30—34 г.	12,4	2,5	10,9	44,4	12,9	16,0	4,1	9,1
35—39 г.	12,2	4,1	11,3	43,6	10,7	15,2	2,8	8,5

Key:
1. Age group
2. Age structure
3. Education level and structure
4. No grammar
5. Grammar
6. Primary
7. Secondary
8. General
9. Specialized
10. Semihigher
11. Higher
12. Total
13. Including

* "Demographic and economic characteristics of the population in the Bulgarian People's Republic," Vol 1, p 96. Committee for Unified Social Information System of the Council of Ministers.

These data indicate that the young age groups of the working people have far better indicators in terms of education which, in all cases, is a

basic component in professional qualifications. This circumstance enables them to apply the achievements of technical progress more successfully. The problem which arises here is that the average level of the educational structure remains unsatisfactory. This cannot fail to hold back the development of technical progress and, on the other hand, the fact that the ratio between specialists with secondary and higher skills has parameters which hinder the existence and maintenance of a substantiated ratio between these two groups of specialists, and does not allow a proper division of labor. Whereas the optimum ratio between them is considered to be 3:1 for the country at large, it is currently 2.4:1 and is even worse in the young age groups. The situation in this area is further worsened by the circumstance that, for a number of reasons related to the condition of the cadres initially and the tasks to be implemented in the first years of socialist reorganization, a number of positions which should have been held by highly skilled specialists are still being held by people of lesser qualifications. The following data provide a certain overall idea of this situation:

Structure of Personnel Employed in Managing and Senior Positions by Educational Level*

a) Занятие	b) Общо	c) Степен на притежавано образование					
		d) Начално	Основно e)	Средно общо f)	Средно специално g)	Полувисше h)	Висше 1)
1. Ръководен персонал на държавни и кооперативни учреждения и организации	100	2,1	17,8	15,7	14,9	4,0	45,5
2. Ръководители на предприятия и техните структурни подразделения	100	0,8	13,3	22,1	30,5	4,1	29,2
3. Инженерно-технически персонал	100	0,6	9,6	16,7	51,2	3,2	19,7
4. Главни счетоводители	100	—	2,1	18,1	38,0	1,6	40,2
5. Началници на планово-икономически отдели	100	—	1,7	16,7	32,5	3,3	46,8

Key:
a. Job
b. Total
c. Educational level
d. Grammar
e. Primary
f. General Secondary
g. Secondary specialized
h. Semihigher
i. Higher

1. Managing personnel of state and cooperative institutions and organizations
2. Heads of enterprises and their structural subdivisions
3. Engineering-technical personnel
4. Chief accountant
5. Chiefs of planning-economic departments

* "Demographic and Economic Characteristics," Vol 1, pp 334-336.

Consequently, on the one hand, highly-skilled specialists cannot be hired in jobs consistent with their skills due to the fact that there are either less job openings than the number of corresponding specialists or that, at the same time, such jobs are being held by underqualified individuals. On the other hand, as a result of the requirements that a number of positions are opened to people with higher education only, even though the same could be successfully and even more successfully held by a specialist with secondary skills, the desire to acquire a higher education is artificially enhanced. At the same time, however, a feeling of worthlessness is created among cadres with secondary skills. It is precisely this condition in the field of cadres and their jobs that adversely affects labor behavior and the effectiveness of labor activities. Under such circumstances no convincing arguments may be found for preserving the existing situation. The expenditure of funds for training cadres who cannot be used subsequently in accordance with their training or may be used incompletely from the viewpoint of their acquired skills and willingness to work and to display their labor capabilities is the equivalent of making capital investments for the development of new productive facilities which are subsequently not included in production-economic activities or not used fully and effectively. In this case it is a question of the basic production force--the human factor--whose attitude toward the work and factual labor behavior determine, to the highest extent, the effectiveness of any type of production. In this connection a number of complex problems arise: How to eliminate disproportions; how to act in the future to prevent new disproportions; what should be the role of the social management organs and of the population itself in the field of development of jobs, planning the training of cadres, and insuring their full utilization; what functions should be left to economic and administrative methods and levers, what changes are necessary in the field of labor relations and labor legislation in the conclusion or termination of labor contracts, in the field of social and pension activities, and so on.

As in the past and, particularly, under socialist social relations, to the Bulgarian population work has been, to an ever growing extent is, and will remain the basic means for the solution of its priority problems. Its system of values and related labor motivations and attitude toward applied and possible labor incentives determine the possibility for its labor behavior to be controlled on the basis of giving strong priority to economic factors such as income and its real role in satisfying requirements, the influence of market conditions, the organization of social and pension systems, and so on. At the same time, there is greater exactingness concerning labor conditions in terms of the content of the work, working and living conditions, possibilities for advancement, the social prestige of the profession, and so on. Such higher and growing exactingness objectively determines the increased complexity of the process of influencing labor behavior. Whereas in the past it sufficed to use mainly the size of the wage, today, and even more so in the future, this lever will be able to exert its influence through a

closer connection with all other factors. /The enrichment of labor motivations requires also the enrichment of the means influencing labor behavior, applied as a system which insures the highest possible labor activity and conditions for achieving the socially necessary mobility in labor/. Consequently, the successful application of the economic approach in controlling labor behavior is largely predetermined by the extent to which the specific solutions of various problems of an economic nature will take into consideration sociological interrelationships among "society-enterprise-individual" in both directions, and the extent to which the combination of interests will be simultaneous and coordinated from the top of the social pyramid to its foundations and vice versa.

Basic Problems of the Application of the Economic Approach in Controlling Labor Behavior

The BCP Central Committee pays exceptionally great attention to problems whose proper solution determines the high effectiveness of social labor and, on this basis, the improvement of living conditions. Such problems pertain mainly to the organization of production-economic relations, and methods for planning and assessing labor activities and providing material incentive to working people and enterprises. Essentially, the need for applying in these and other areas a systematic economic approach was substantiated as early as October 1963 in the Basic Principles of the New System of Planning and Management of the National Economy, adopted by the BCP Central Committee Politburo, and drafted under Comrade Todor Zhivkov's guidance. The subsequent time was a time of application of a number of alternatives of the economic mechanism, reorganizations of the organizational-management structure of the economy, the search for more successful solutions in the areas of prices, wages, the organization of cost accounting, relations between enterprises and the financial-credit system, and so on. Social practice itself confirmed the accuracy of the adopted line for resolving the respective problems. At the same time, it raised with exceptional urgency new problems whose solution largely determines the implementation of the advantages inherent in the economic approach compared with the administrative approach which inevitably hinders the display of high initiative in labor and economic activities. These problems assume prime significance in the light of the decisions of the National Party Conference on improving the planned management of the economy and the socialist organization of labor, and, particularly, in Comrade Todor Zhivkov's report to the 30 January 1980 National Conference of the party, state, economic, and social aktiv.

/The conclusions from the experience acquired so far and from the sociological studies conducted on the influence of the various factors on labor behavior determine the need to focus attention and efforts, above all, on the creation of circumstances in which the economic approach will be applied in a way which will insure the active interaction among the parties in distribution relations: the state--the enterprises--the working people and the population/. Essentially, this means that their

interests which are totally manifested in terms of budget income for the state, cost accounting for the enterprises, income and possibility to satisfy needs for the working people (household budget) to be related in a way which will properly take into consideration both the interconnection between the national income and the incomes of each of the indicated parties, as well as their relative autonomy. In order for this interaction to be achieved, the organization of budgetary income should be such as to insure conditions preventing the economic approach from converting into a fiscal approach in which financial interests will be met to the detriment of enterprises and the population and would essentially twist cost accounting and material incentives. In turn, the enterprises applying the economic approach from the viewpoint of their specific interests should be placed in conditions which will enable them to take into consideration to the highest possible extent the interests of the working people in resolving the most important problems of labor relations: labor rating and norming, wage setting, conclusion and termination of labor contracts, and resolution of labor disputes.

It is particularly important in resolving problems in such areas and in seeking more successful solutions to proceed from the understanding that /both enterprises and individual workers and, even more so their households, are specific sociological systems which interact, guided by and not forgetting their most essential interests. The enterprise and the labor collective have a number of things which unify their interests. At the same time, however, these interests cannot be unconditionally interlinked/. The fact that the wage fund is strongly dependent on end economic results and, above all, on profits should not be considered in the least to mean that it automatically makes the size of the individual wage totally dependent on such results.

The need /to review labor relations and labor legislation/ arises in direct relation to the requirements of the economic approach to management in general and the organization of labor relations. /Such relations should be organized on consistently economic foundations, insuring both a strong labor discipline as well as conditions for high mobility of cadres in the field of labor, including, in particular, the conclusion and termination of labor contracts/. Wages, basic wages, means for determining gross wages, paydays and penalties in such areas must become components of individual labor contracts and, at the same time, assume the status of mandatory stipulations in collective labor contracts. On the other hand, there are sufficient grounds for reviewing a number of legal acts in the field of labor relations which place the enterprises in a privileged position in terms of the labor collectives and do not contribute to the timely solution of problems directly related to the creation of a feeling of satisfaction with production and living conditions, the organization of labor and wages, interrelationships, and so on. Such activities should result in /placing individual enterprises under conditions in which they are not only socialist economic organizations but also specific employers within the framework of socialist production relations/.

Not least is the ever clearly realized need, under the conditions of an economic approach to management, to introduce the necessary variety in the organization of labor, considered from the viewpoint of its economic content. The forms of such organization must be developed by taking strictly into consideration the nature of labor activities and the labor feelings of the population. Under Bulgarian conditions, bearing in mind the existing value system, and the scope and gradation of labor motivations and the ascribed and factually manifested significance of labor incentives, /family contracts/ offer substantial possibilities. The family contract has practically confirmed that in a number of activities such as tobacco growing, truck gardening, and others, it is a far more suitable form of labor organization and material incentive compared with other forms. This type of organization, with some modifications, could be successfully applied in other activities such as, for example, animal husbandry and population services such as trade, production of household goods, public catering, fruit growing, viticulture, and others. In agriculture, along with the existing forms of organization, and using the experience of our past and that of other countries, positive results could be obtained by /leasing some sectors and farm crops/ either to individual households or groups of households, or to temporary collectives to farm the land, and so on. Great possibilities are also found in the /contract organization of labor/ and of wages. Unfortunately, this method is being applied to an ever lesser extent even though, like the other mentioned forms, it is far more attractive to the population and the working people and is of a nature which would prevent the appearance of bureaucracy in management and would trigger high labor activity. In resolving these and other similar problems we should always be guided from the viewpoint that /people work for income, whenever the income "works" for the satisfaction of their needs, and that properly organized and used interests in the field of labor are the primary necessary prerequisites for the creation of a highly effective organization of labor in all fields of labor activity/.

The use of the economic approach in management and in influencing the labor behavior of the population and the behavior of enterprises in economic life is an objective need for our development. Its systematic application will unquestionably contribute a great deal to the solution of the problems faced both by society at large as well as various labor organizations and the population. All forms of bureaucracy in management are alien to it. It is effective, for it is based on the objective laws and requirements and interests which shape up the factual labor behavior. Here the socioeconomic processes are more intensive. This circumstance requires and will trigger, to an ever greater extent, the need for the creation of a corresponding mechanism and organization which, under conditions of intensive labor, would be able to maintain the socially necessary balance among the basic labor motivating and stimulating factors and areas. In this connection the problems related to the utilization of the national income for consumption and accumulation purposes,

for the development of income and for the implementation of the role of the wages and the social consumption funds, for balancing the economy and, above all, of the purchasing fund and the stocks of goods and paid services, the development of production and the prevention of major gaps between developed needs and possibilities for their satisfaction, and in terms of the tracing and utilization of the indicator of living conditions generally and for the individual social, professional, and other groups in resolving problems of a socioeconomic nature assume exceptionally major theoretical and practical significance. It is precisely in such areas that new solutions should be sought, consistent with the objective laws of our society and contributing to the successful solution of the problems of the building of socialism under existing objective conditions.

5003
CSO: 2200

BRIEFS

MERCURY SELF-SUFFICIENCY PLANNED--Within 3-4 years mining of mercury-bearing ore should begin in Dubnik, Slovakia, producing about 1.5 million tons of ore. Currently extensive geological research for mercury-bearing ore also continues in the areas of Nasger, Luciva, Tancoska and Mernik. According to geologists, the CSSR will eventually become self-sufficient in production of mercury, ending its importation. [Bratislava SMENA in Slovak 1 Oct 80 p 1]

NEW COAL MINE--The first open-pit coal mine in Slovakia began mining operations on 20 September 1980. The mine, located in Lhota pod Vtacnikom, is expected to produce 1.3 million tons of brown coal, of this 36,000 tons in 1980 and 200,000 tons yearly thereafter. Coal mining operations are also anticipated in the Pukanec and Gbely areas. [Prague ZEMEDELSKE NOVINY in Czech 22 Oct 80 p 2]

CSO: 2400

IMPACT OF POLISH EVENTS ON GDR LABOR MORALE ASSESSED

West Berlin DER TAGESSPIEGEL in German 29 Aug 80 p 3

[Article by Michael Mara: "SED Willing To Consider Workers' Criticism--The Effects of the Polish Events and the Economic Situation of the GDR"]

[Text] The East Berlin party and national leadership has followed with increasing concern the events in Poland, the effects of which cannot yet be predicted for either the GDR, Poland's socialist neighbor, or the socialist countries that are strongly tied to Poland in politics and commerce.

In view of the closely attuned national economic plans of both countries, the GDR must count on the fact that the economic results of the Polish workers' strike will also show up in the GDR. East Berlin believes that Poland will not be able to keep all export deadlines and, on the other hand, will depend on additional imports from the GDR to improve its miserable supply conditions. All this at a time when the GDR is faced with problems that have not existed before.

In addition, the mood of the workers is anything but rosy. In addition to a total lack of sympathy for the chronic supply shortages, displeasure is now growing with production pressures and with faults in the economy. The 1981 national plan directive makes businesses responsible for raising production "far beyond the goals that have so far been considered normal." Some state collectives are expected to attain production increases of 10 to 20 percent over 1980. In view of the great problems connected with the fulfillment of present plans, quite a few workers consider such two-digit growth rates unrealistic under the given production conditions. At planning discussions in business enterprises, that were temporarily concluded on Monday (25 August), the statement was made again and again that these goals are "too large by one digit."

However, the SED thinks quite differently. It considers the high planning figures for the coming year simply "the obligatory national minimum goals." It is the primary goal of the planning discussions, that were held in business enterprises for several weeks, to uncover all reserves that might help to surpass planned goals. The SED rejected as unfounded skeptical and

critical arguments raised during the planning discussions that the planned production increases would in the end fall on the backs of the workers. "Nobody demands that businesses simply work harder," assured the Cottbus LAUSITZER RUNDSCHAU last week.

According to this SED newspaper, the problem is primarily one of utilizing science and technology for higher productivity and effectiveness, and of using production forces, materials and financial means in even more economical ways. In some places, working time must be better utilized, too. And in general, demands for an above-average production increase are in the "very basic interests" of all.

Workers in the GDR are feeling this more than ever before. In order to prevent decreases in work intensity, and to force all workers to observe "socialist work discipline," business managers are now using rigorous methods that used to be called "capitalist." State collectives, for instance, have introduced control clocks or "passes" in order to achieve "full utilization" of working time. Workers who do not comply are threatened with deductions in wages and bonuses. Other businesses are using unannounced working time controls. The controllers, often members of "management cadres," take count at factory gates of workers who come too late or leave too early.

Some of the workers have little understanding of, or even contempt for, such drastic steps. Workers in the Ruhla Clock Works (Erfurt Bezirk), for instance, objected to the introduction of control clocks by saying that such measures are "immoral" in socialist society. The Erfurt party newspaper DAS VOLK defended the measure: many GDR citizens have forgotten how much hard work is required for social progress. They must be reminded with control clocks "that social policy is no self-regulating automation but rather comes from the productivity of our economy."

In the Leipzig Industrial Armatures VEB a strict system of passes has angered the workers. The LEIPZIGER VOLKSZEITUNG commented that several workers in this enterprise believe that "they should loudly defend their rights whereas, in reality, they should make apologies for neglecting their duties."

In other businesses there were animated discussions on wage and bonus deductions. The workers concerned felt that they had been hit in the most sensitive place, the pocket book.

The employees of a Leipzig industrial enterprise which is in the red demanded publicly that "the management of the enterprise be fundamentally changed." The economic situation, they wrote to the local party newspaper, of their firm is "topsy-turvy." Because the management lacks overview, there is no continuity in production and a lack of working morale. Some 60 to 70 percent of the monthly production always has to be accomplished in the last 10 days. Workers borrowed from other branches of the firm then help out in the assembly process. The high point of this process is "celebrities night," when everybody including the manager tries to fulfill the monthly quota in one special night shift.

Even though working morale is not everywhere at such a low level, there is no question in the minds of production workers that quality work has to be done in the interest of the economy and their own high standard of living. However, they make economic functionaries responsible for the fact that "quality work" is often made impossible through interruptions in production and other failures. For instance, during the planning discussions criticism was voiced that "irregular material supplies" and other organizational mismanagement, for which the workers are not responsible, resulted in interruptions in production which could hardly be made up, and thereby in great losses in business effectiveness. Therefore, the workers are more frequently demanding, in the firms themselves and in the local SED newspapers, "better management."

Conditions of this kind stir up dissatisfaction. GDR workers are not thinking of joining the striking Poles. They know very well, and are proud of the fact, that economic conditions in their own country are essentially better than in Poland. Hardly anybody seems ready, therefore, to jeopardize the hard-earned standard of living through strike actions whose consequences are extremely grave in a socialist country, as experience tells. However, the "Polish example" could encourage GDR workers to insist more strongly on the elimination of deficiencies. It is probably for this reason that party, economy and union functionaries assured the workers at the end of the planning discussions in the past few days that their "good thoughts," their proposals and their criticism would be "carefully examined and if possible acted upon immediately."

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WEST GERMAN EVALUATION OF GDR HOUSING CONSTRUCTION PROGRAM

Bonn VORWAERTS in German No 33, 7 Aug 80 p 8

[Article by Walter Osten: "Elevated to a Matter of Prestige; GDR Construction Program up to 1990 Has Great Aims"]

[Text] The GDR government has raised to a question of prestige the realization of the SED promise "to find an answer to the housing construction question as a social problem by 1990." In 1980, 10 percent of the national income is to be used for housing construction, in the past decade 100 billion marks were expended for this purpose, according to Honecker.

The up-to-date results of GDR housing construction policies are quite presentable--in regard to their absolute quantity as well as in comparison with other Eastern bloc countries, and in some respects even in comparison with the FRG. The figures speak for themselves: from the beginning of 1976 until May 1980, 710,000 apartments were built or repaired, 60,000 more than were provided for in the plan. "Living conditions for 2.1 million citizens were noticeably improved," Construction Minister Junker stated at the Seventh GDR Building Conference. According to the 1981-86 Five-Year Plan, 600,000 new apartments are to be constructed and 330,000 older apartments are to be modernized.

The GDR does not have to be afraid of comparisons with other countries, even though the goal, already proclaimed under Ulbricht to "catch up with and even pass" the FRG in this field cannot be realized before the end of this decade. This is true in spite of the fact that in GDR statistics the number of apartments available at the end of 1978 had to be lowered from 24.7 to 23.4 million--with the number of households at 24 million--and to the same statistics had to be added that at that time 1.9 million apartments were still "insufficiently equipped with sanitary facilities."

The only statistics in which the GDR and FRG are just about even is the number of 400 apartments per 1,000 inhabitants. The average apartment size in 1978 was 58 square meters for the GDR, 78 square meters for the FRG. The GDR cannot compete with the FRG in new apartment furnishings, not even to mention the greater share of older apartments in the total number of apartments in the GDR.

The GDR does better in comparison with other CEMA countries. The speed of apartment construction is still greater in the USSR than the GDR, but the per capita quota in living space in 1979 already attained a useable space per family member that is as large as the USSR and Poland envision it for the end of this decade.

One field where the GDR is not behind the FRG is the cost of rent. According to Honecker, rents in the GDR have since 1972 "been lowered or fixed on their respective level and are not to be raised in the eighties." Rent for workers and employed persons with a monthly salary of up to M 2,000 is up to M 1.25 in East Berlin, and between M 0.80 to 0.90 per square meter in the GDR. In the FRG, rent for square meter increased from DM 3.11 in 1970 to DM 4.60 in 1978. The share of rent in the net income is in the GDR only a fraction of what it is in the FRG.

In order to fulfill the GDR housing construction program by 1990, far-reaching economic measures are needed. Minister Junker named the followed at the construction conference: investments for industrial construction are to be lowered by 15 percent in favor of housing construction. Construction times are to be decreased by from 30 to 50 percent. Work productivity must be increased by 4 percent annually, "in the decisive branches by 6 to 7 percent: 80 to 90 million work hours are to be saved through "promotion of work readiness, order and high discipline." Finally, "the energetic optimization of the construction process" requires a transition from increasingly expensive heating oil to solid fuel, that is soft coal.

Single home construction and building planning in the country were only of secondary importance at the Berlin conference. Their share is to be a total of only 10 percent of new constructions.

There are, of course, credits with from 1 to 4 percent interest available for construction projects of this kind, as well as for furnishings, and this interest can even be paid for in terms of an increasing number of children. The essential probelm, the lack of building materials, which has led to widespread black market dealings and thefts, was not discussed.

Oil Prices Slow Down Construction Program

The up-to-date share of about 40 percent of the Workers' Housing Construction Union (ABG) in new constructions is obviously going to remain the same. Members of this union are obligated to contribute their own work to the construction of apartments and houses.

Beside these calculable expenses there are many other incalculable factors which can have a negative influence on the completion of a housing construction program. Junker's program includes a "far greater productiveness in patents and licenses," but also "inventions which codetermine the world production level." Along this line, the GDR already tried in the past year to utilize West German and Western knowhow through contracts with apartment construction firms.

Prices for raw materials that have to be bought abroad are also beyond the influence of GDR planners. Oil prices have even stronger effect on construction programs. There is a limit to the extent in which oil can be replaced with soft coal with its polluting effects, and changes of this kind result in new problems for the environment. Taking all this together, the housing construction program in the GDR could have a shaky future, especially since the GDR growth rate has shown decreasing tendencies for years, even though it has recovered on occasion.

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WEST GERMAN COMMENTARIES ON GDR AGRICULTURAL SITUATION

Results for First Six Months

Bonn DIE LANDWIRTSCHAFT DES OSTBLOCKS in German Vol 18 No 31/32, 1 Sep 80 pp 11,12

[Unattributed report: "GDR Agriculture in the First Half Year"]

[Text] The GDR has entered this year's harvest with an increased grain acreage and has slightly increased its livestock during the first half of the year. These are the two salient points in the altogether concise data concerning the development of agriculture during the first six months of 1980. These data show that the grain acreage is now 2.56 million hectares, compared to 2.50 million hectares last year. As other data indicate, the increase in grain acreage corresponds to winter grains which cover 1.958 million hectares (1979: 1.890 million hectares); the summer grain acreage, 601,200 hectares, is a scant 9,000 hectares smaller than in 1979. For sugar beets (less 7,000 hectares, down to 258,000 hectares) and potatoes (less approximately 8,000 hectares, down to 519,300 hectares), too, cultivated acreages have been reduced this year; vegetables were cultivated on 73,800 hectares. Concerning the vegetative development of cultivated plants, the mid-year report of the East Berlin Bureau of Statistics notes that, especially in April and May, unfavorable weather has caused "damages to agricultural crops" which, however, have been offset by "renewed cultivation and attentive care of the crops."

No data are given on the supply of working resources to the agriculture during the first 6 months. The enterprises have received nitrogen, phosphate and potash fertilizers as well as lime "as planned." Nevertheless, the output of the potash fertilizer industry was only 1 percent higher than during the first 6 months of 1979, while 7.8 percent more agricultural machinery was produced.

Data concerning the anticipated yield of the grain harvest are not given in the mid-year report, nor are they to be found elsewhere in the GDR press. Western observers estimate the GDR grain production at 8.2 to 8.5 million tons. With a grain demand of approximately 12 million tons (12.5 million

tons according to other data), East Berlin should have to import at least 3.5 million tons; it will be hard to obtain all of that amount on the CEMA [Council for Economic Mutual Assistance] market where, in 1980, only an average harvest can be expected (1976-1979 average: approximately 289 million tons).

In the field of animal production, all animal stocks have increased, compared to last year's census date (20 May 1979), and the enterprises have delivered more animal products than last year during the same period. The volumes of state purchases during the first 6 months were higher than in 1979, by 1.5 percent for cattle (1.124 million tons), 1.8 percent for milk (4.014 million tons), and 5.7 percent for eggs (2.559 billion eggs). According to the official data, the animal populations have been expanded as follows (we have added data corresponding to 20 November 1979):

	Population on: (in 1,000)		
Animals	20 May 1979	20 Nov. 1979	20 May 1980
Beef cattle, all together	5,699	5,596	5,763
of which: cows	2,119	2,124	2,216
Pigs, all together	11,638	12,132	12,247
of which: sows	1,226	1,248	1,258
Sheep	2,315	1,979	2,396
Laying hens (million hens)	26.5	26.5	27.5

As for foods, including luxury foods, retail sales increased by 0.6 billion East German marks during the first 6 months, i.e. 2.4 percent. The "quantitative goods supply" during the first 6 months of 1980 increased by 2 percent for meat and sausages, 3 percent for poultry, 3 percent for whole milk cheese, it remained unchanged for whole drinking milk and increased by 30 percent for fresh fruit, compared to the 1979 reference period.

No Shortage of Agricultural Workers

Bonn IWE-TAGESDIENST in German No 125, 21 Aug 80 p 2

[Report from Berlin: "GDR Agriculture No Longer Has Trainee Problems; Many LPG's Have More Applicants Than Training Slots"]

[Text] While, for many years, agriculture was shunned by those leaving school in the GDR, it now seems to exert a growing attraction on youth. An increasing number of young people are applying for agricultural jobs. "Today, more students leaving school are knocking at our door than we can

accept. We can even make a selection. Fifteen years ago, however, we had to go from door to door, to drive to the schools and to keep asking, soliciting, persuading," recalls, for instance, Roland Struch, manager of a large LPG covering 38 villages near Gera. Then, even the children of cooperative farmers left the villages. After graduation, they went on to the industry, to a trade or to the construction sector. Today, not only do many children of cooperative farmers want to stay in the villages, but an increasing number of city youths are deciding in favor of a job in the agriculture. Therefore, those who have not finished the 10th grade have little chance of becoming, for instance, mechanizator.

There are a lot of reasons for this surprising turnabout. One of the most important: Agriculture is no longer as backward as it still was in the 1960's when the lack of trainees was especially acute. The change to industry-like production conditions has reduced the contrast between city and country. Agricultural work has become easier; hard manual work, to a large extent, has become a thing of the past. For many youths, driving combines and tractors has its appeal. Like working conditions, living conditions in the villages have also improved. Today, not a few young people also come to the village because they want to work outdoors and to escape the city "stink."

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FIRST HALF 1980 ECONOMIC STATISTICS RELEASED

Budapest HETI VILAGGAZDASAG in Hungarian 30 Aug 80 pp 4-5

[Article: "Our Economy in the First Half of the Year: What Does the Balance Sheet Show?"]

[Text] Statistics for the first half of the year reflect favorable trends in our balance of international trade. Production and productivity data are less favorable. It is true that the fall in industrial production is not large, but it still indicates slower than desirable adaptation to changing conditions.

The definite impression obtained from the recently published data on the first half of the year is that the measures adopted since last year with a view toward restoring economic equilibrium have proved successful.

Let us first look at the so-called nonruble trade balance. Although the balance continued to show a deficit during the past half year, the excess import (including the balance of transportation costs) was only $15.3 million. Considering that the deficit of the first half of last year was approximately $417 million, the improvement may indeed be termed spectacular. In the ruble accounting area (again including the balance of transportation costs) excess imports reached approximately 305 million rubles, i.e., substantially more than the 187 million ruble deficit of the first half of last year. These excess imports are in line with the goals formulated in the plan.

Finally, the combined trade balance shows an approximate deficit of 9.5 billion forints, which represents only 45 percent of the 21 billion forint deficit for the first half of last year. Imports not covered by exports (i.e., the deficit) have declined below the level of the first half of the last year. What is even more welcome, less than one tenth of the diminished deficit was in convertible currency.

While trade balance improved substantially, production indicators point to a slight slowdown. The volume of industrial production (with allowances already made for price changes) declined by 1.8 percent. Construction industry output was 3.5 percent below the level of the first half of 1979; agricultural purchases declined by 2.2 percent. Among the chief industrial sectors, output of the building materials industry rose by 4.3 percent;

output of the electrical energy industry went up by 2.7 percent. Light and food industry production essentially remained at last year's level. In other sectors, output has declined. The volume of domestic shipments, representing almost four fifths of industrial sales, declined in line with the guidelines of the plan. Wholesale and retail trade received more goods from industry than in the first half of last year. However, industrial sales for investment purposes declined by 15 percent, while those for production purposes went down by 6.7 percent compared to a year ago.

In analyzing the above data one must be mindful of the fact that they refer to gross indicators which measure production by the output of enterprises. There are indications that some enterprises are increasing their production operations even though their sales are stagnating or declining, by beginning to manufacture certain components in-house, instead of purchasing them as in the past. Therefore, it is likely that net industrial production declined less than gross output. (We can only speak in terms of probabilities since half-year statistics are not suitable for precise measurement of net production.)

No matter how we look at it, the output of goods and industrial sales remained below the first half of last year. There are good reasons for this. Restrictions on investment puchasing power (necessary to improve equilibrium) had the effect of substantially reducing demand for capital goods. This is why investment-related industrial sales went down. Due to the July consumer price increases of last year, the growth in consumption by the population, calculated in terms of real value, has slowed down. Finally, stagnating industrial production requires already existing or even smaller inventories. This eliminates production generated by the earlier general trend toward increasing inventories. A slowdown of final output has naturally been coupled with a decline in "productive consumption," since a smaller quantity of finished goods requires smaller quantities of semifinished goods and component parts. Declining domestic demand made it difficult for many enterprises to sell their products at home. This could be compensated for only partially by expanding exports. (This is because a substantial portion of products that are unsaleable at home because of declining domestic demand is not up to export standards.)

Still, exports have grown dynamically: we exported 8.5 percent more than in the first half of 1979. In particular, exports to advanced capitalist countries grew by 29.7 percent. Exports to developing countries went up by 13.3 percent. On the other hand, exports to socialist countries have declined slightly (by 2.8 percent).

These indicators have been calculated on the basis of current prices expressed in forints. If we eliminate the effects of changes in export prices, the volume indicators obtained show that our socialist exports essentially remained at last year's level; our exports to advanced capitalist countries went up by approximately 20 percent, while exports to developing countries increased by about 5 percent.

Data expressed in forints, calculated at current prices, show a 1.3 percent decline in imports. Behind this, however, there is a somewhat large

(2.1 percent) decline in the quantity of imports. Our socialist imports declined by 6.7 percent at current prices, or 1.8 percent at constant prices. Our imports from advanced capitalist countries increased by 1.4 percent at current prices, or declined by 5.1 percent at constant prices. Our imports from developing countries increased by 21.8 percent at current prices, or by 14 percent at constant prices.

Output per employee was about one percent higher than in the first half of last year. In the past we have been used to much more rapid improvements in productivity: for example, in 1979 the volume of production per employee grew by 5 percent. (If the assumptions regarding a more favorable dynamic for net production compared to gross production are correct, then the slowdown in productivity growth is also less than indicated by the gross statistics.)

The decline in the industrial workforce has accelerated: the number of industrial employees declined by 46,200 or 2.8 percent compared to the first half of 1979. (In 1979 there was a 1.6 percent decline in the workforce.) Following this decline in the workforce requirements of industry, there has been a measurable improvement in the balance of the "labor market" and service sectors have been able to fill more jobs.

Production of the construction industry declined by 3.5 percent relative to the first half of last year. The worsening of business trends in the construction industry led to a result welcomed by those needing construction work: compared to last year, there were fewer construction requests rejected by the construction industry.

In the area of agricultural products, purchases of plant products remained below the level of a year ago. This was in part due to later harvesting of vegetables and fruits. Purchases of live animals and animal products increased slightly.

Socialist organizations spent 67.1 billion forints on investments during the first half of 1980. This is 11.5 percent less than a year ago. Payments for investments by enterprises declined especially sharply (by 15.9 percent), while payments for state investments declined at a below-average rate (5.6 percent). Enterprises originated much fewer new investment projects. This is shown by the fact that some bank loan opportunities remained unused.

After the production data, let us now take a look at consumption statistics. Retail sales were 10.7 percent above the first half of 1979 at current prices, but consumer prices increased by 12.9 percent in the same period. Thus, retail sales declined by almost 2 percent, calculated at constant prices. Although the consumer price index shows a 12.9 percent rise, in this connection it might be useful to point out that this is an indicator of price rises since the first half of 1979. Compared to prices on 1 January 1980, prices at the end of the first half of the year went up by 1.9 percent.

The average monthly wage of employees, including supplementary payments, was 9.3 percent above the level of the first half of last year. Monetary social payments increased at a rapid rate and their effects have partially compensated for a decline in real wages. An evaluation of real wages and real incomes must take into consideration the fact that the real income of those with a low income has practically not changed at all, while that of high income groups declined as a result of the fixed amount of supplementary income, independent of income levels, paid as a partial compensation for the June 1979 price increases.

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OFFICIAL COMMENTS ON RESTRUCTURING OF PRODUCTION

Budapest MAGYAR HIRLAP in Hungarian 21 Sep 80 p 5

[Interview with Dr Laszlo Horvath, deputy chairman of OT (National Planning Office), by Jozsef Fahidy: "We Must Know the Market"]

> [Text] Dr Laszlo Horvath was born in 1921. He is a chemical engineer, candidate of economic sciences, winner of the Kossuth Prize, and an honorary university professor of MKKE [Karl Marx University for Economic Sciences]. He became managing director of the Taurus Rubber Industry Enterprise in 1966; in November 1975 he was appointed deputy minister of the heavy industry, and as of 1 July 1977 he was appointed deputy chairman of the National Planning Office.

Changing the production structure is a key job. Our growth, and in the stricter sense the rejuvenation of our economy, depend on how well we will succeed in accomplishing this multifaceted, complicated task.

Dr Laszlo Horvath, deputy chairman of the National Planning Office gave his views about this to Jozsef Fahidy, our reporter.

[Question] How is the reshaping of product structure progressing in our economy? Has this not become a campaign in the bad sense of the word?

[Answer] The question cannot be answered by a yes or a no, and mainly, it cannot be answered in a simplified way. Some of its exists, some of it does not. Some of it is there because in recent decades we have somewhat gotten used to campaigns. However, the new, more strict regulatory system, mainly the price system, works against the bad habits. This has "awakened" those managers who think that this campaign task also can be resolved by platitudes.

To make the answer even less simple: there are also some tasks of a campaign-character in this activity, such was for example the one-time inventory taking the enterprises and the directing organs carried out on the basis of the government's decree issued following the 1977 MSZMP Central Committee resolution, and which had to be updated this year--taking into

consideration also the effect of the already mentioned new regulators. I wish to mention that there were problems also with the work of taking stock. There was variation in the results in spite of the fact that the National Planning Office as well as the National Technological and Development Commission [OMFB] published guiding principles, and even some of the portfolios also worked out methods. Perhaps most of the correct evaluations were made by the Ministry of Heavy Industry's enterprises. As is well known, international comparative data have been collected and studied for several years in this ministry.

Familiarization with an understanding the tasks is progressing more slowly than required. This of course also has its own causes and reasons. We have been dealing with problems of structure for not only the last few years, but for a decade. But in the beginning those criteria were very difficult to develop on the basis of which the favorable, profitable products could be separated from the unprofitable ones. Decisionmaking was further complicated by the fact that the fate of products had to be decided not for the short-range, but for a long period of time since development, introduction and full-rate production of each product requires a very long time.

Our pricing system, the product's profit content, also has supplied little guidance so far for these decisions, particularly in the last decade when the world market prices changed rapidly. If our pricing system and financial regulators compensated for the effect of foreign price changes, that did not help this situation either: even though the enterprises made their calculations more easily, the national economy came out the loser. The material and parts which were cheap for the enterprise were very expensive for the country, and even though the enterprise could profit much from the export, the national economy lost. It is obvious that it is even more difficult to predict prices for as far as a decade ahead! The decisions based or profit content also proved to be in error, one after the other. This also helps explain that numerous uncertainty factors in connection with reshaping the product structure hindered the work of the enterprises. We have also experienced some doubts: even though the directing organs urge that the production structure be improved, no one can say how this is to be actually implemented. And this uncertainty greeted the new methods of evaluation mentioned earlier.

Yet, even in spite of the obstacles, some good results are appearing already. In heavy industry, for example, in 1980 production of 223 new product types is beginning and 153 products are being discontinued. The Taurus, the Kobanya Pharmaceuticals Factory, the Tiszamenti Chemical Works, the petroleum industry, etc. have promising new products. The ratio of products is shifting in the metallurgical industry, and a few new items have also appeared, mainly to replace imports. Significant modernization of the product structure is under way in the machinery industry also; for example at the Ganz-MAVAG [Hungarian State Iron, Steel and Machine Factories] where 45 percent of the products were classified as obsolete, but where at the same time significant new products are being made, among others some equipment for nuclear power plants. At the Hungarian Railroad Car and Machine

Factory the manufacture of railroad vehicles will come to an end this year, and the ratio of subunit production will increase. There is rapid growth in the telecommunication technology and instrument industry enterprises--here the products become obsolete in 5 to 6 years and have to be replaced by new ones. Rapid product turnover is also characterstic of light industry: this year a large number of its products are being replaced and even giving a list of examples would be difficult. All these are encouraging results, but they are only the beginning. The larger and more difficult part of the work is still ahead of us. This is even more so because industry and the foreign trade only in the cases of a few product groups have such a broad network which would be able to effectively "work" the foreign markets, to measure the demands, to do modern, high-efficiency selling. Great efforts were made in recent years to change this. One of the indications of this is that mixed enterprises were formed for quite a few foreign markets. (The expeditiously built-up network is very important because primiarily it is the one in contact with the customers and it is able to relay the demands and--perhaps even more important--the information about the price offers of the competitors, about their financial and other delivery conditions.)

But--and I wish to emphasize this--the process of growth in the right direction is only at its beginning. Intelligent handling of the markets, the so-called marketing activity taken in the broader sense, and building up the partnership relationships, also require work which takes a long time, and call for no less effort than developing each product and putting it on the market. And in order for us to be able to make the correct decisions in connection with developing the production structure, we must know what our competitors are offering today and what their capabilities are, what they are planning; what will they be offering in the future. How far we have to see ahead varies with each business; but today we know little about the world--often even about our own domestic markets.

Altering the product structure has another viewpoint which cannot be neglected: the modern product-pioneering technology requires well-prepared professionals in management positions as well as at the work benches. (Although it is true also that modern, automated technology assumes utilization of fewer technically trained personnel--automated machinery can be operated by merely pushing a button...) However, maintenance and correcting problems are complicated and require greater technical preparation, even if there are exceptions to this also. In general terms the standard still is that modern technology--including the competitive products--requires educated people in the professional as well as in the human sense. And we must always mention these two kinds of requirements together--and we have to satisfactorily fulfill them if we are to solve satisfactorily the tasks of reshaping the product structure.

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NEW ENERGY SOURCES FOR MEETING ENERGY DEMANDS DESCRIBED

Budapest ENERGIAGAZDALKODAS in Hungarian No 6, Jun 80 pp 241-244

[Article by Academician Dr Karoly Szendy and Candidate Dr Istvan Szergenyi: "Role of New Energy Sources in Supplying Domestic Energy Demand"]

[Text] 1. Introduction

Rising prices for crude oil, begun in 1974 and continuing since then, have an effect on all energy sources. Nuclear energy programs have been speeded up, and both coal mining and coal use are on the upturn. The lion's share of the potential utilization of hydrocarbons is concentrated on these two energy sources. This trend will be even more pronounced in the next few decades. Therefore, national governments have reevaluated their earlier energy policies. Coal and nuclear energy programs have received needed support and the necessary publicity. At the same time, in countries where this was possible, work has started on the exploration of hydrocarbon deposits with more expensive yields (Alaskan oil fields, off-shore oil deposits, etc.).

Throughout the world, a great deal of emphasis is being placed on attempts to conserve energy by increasing the efficiency of energy utilization processes and reducing losses. In a number of countries, primarily the energy-poor ones, steps have been taken to minimize the growth of total energy use by creating an economic structure that can generate a given level of production value with the minimum of energy use. Finally, they started to look for new energy sources; these, however, will produce only long-term solutions. These, on the other hand, require that the necessary steps be taken right now.

In addition to supplying increasing energy demands, with a view toward a relative reduction in hydrocarbon demand among primary energy sources, i.e., taking the above into consideration, the most important steps may be summarized under the following headings:

--increasing use of nuclear materials and coal;

--energy conservation in industry, agriculture, the household and communal sector, transportation as well as the creation of a less energy intensive economic structure;

--use of new energy sources.

In this article we will discuss new energy sources and, in particular, geothermal energy, biogas and solar energy.

Most of the new energy sources (solar, wind, geothermal energy, biomass) have been known, in fact, for a long time. Their importance, however, had declined in the age of cheap energy sources. Attention was focused on them once again at the time of the 1974 oil crisis. Initially they were overemphasized due to psychological factors; today it is possible to draw up a more realistic picture.

The name "new energy sources" does not always mean "new" in a literal sense. The point is that an energy source that has been used in the past is now in this category because the technology of its use and the methods of its application are new. This provides an opportunity for relatively rapid and widespread distribution of the energy source in question at a price that can compete with traditional energy sources, under conditions that are not obsolete or unfavorable in comparison.

According to realistic estimates, new energy sources, in an extended sense, cannot supply more than a few percent of the total energy demand by the year 2000. It is still necessary to take them into consideration because their use can contribute to reducing demand, primarily oil demand. Thus, their use is under consideration throughout the world. CEMA countries, in particular, plan to engage in joint efforts to utilize new energy sources within the framework of international cooperation and specialization.

In the coming years, cooperation and specialization will include a survey of the applicability of new energy sources, solution of emerging technological problems, manufacturing of equipment necessary to bring them into widespread use, and related cooperation as well as a survey of mutual deliveries. Various CEMA organizations have been assigned the tasks of ensuring smooth program implementation, avoiding duplication of efforts and expenses. Within the cooperative framework, individual countries can ensure that their participation is in line with their particular conditions mainly by working through the CEMA Permanent Committees.

2. Considerations for the Evaluation of New Domestic Energy Sources

Evaluation of the application and introduction of new energy sources should be based on long range considerations because research and development tasks for the medium term can best be defined on the basis of long-term considerations.

The following factors should be taken into account in defining the domestic role of new energy sources:

--geographical and production conditions of our country;

--research and development bases necessary for the introduction of new energy sources and providing scientific backup;

--development of new equipment (possible license purchases) and production startup;

--capital cost of production startup and setting up of new energy sources;

--operating costs;

--participation in international cooperation, including export of new equipment;

--degree of automation;

--useful life of new equipment;

--preparation of social acceptance.

Most of these factors are economic, although the desired utilization of new energy sources requires the solution of a number of engineering and, in some cases, basic research problems (e.g., electrical energy production from solar energy). Solution of scientific and engineering problems has been proceeding at its own rate in every country. In the future, scientific cooperation is expected to gather strength.

It is no simple matter to subject the use of new energy sources to economic analysis. Therefore, it is necessary to make some allowances that blunt the presision of comparison between the economics of using new or traditional processes. This is justified, on the one hand, by the variations in time among the economics of various energy production processes. A major role is played by uncertainty as to the future cost requirements of a process that is new and expensive at present, but may be widely applied in the future, or as to the extent of cost reductions due to the use of mass production methods. The difficulty of comparison is compounded by the discrepancy between the ratio of capital to operating cost as a percentage of unit energy cost obtained by traditional or new methods.

In spite of the difficulties sketched above, some kind of economic analysis is indispensable. It is necessary, however, to define the principles to be followed in the course of such an analysis. Under domestic conditions, there is justification for comparing unit capital cost of the use of new energy sources to the average unit capital cost of eocene mines. In this regard, there are estimates indicating the excess cost (or saving) associated with the creation of the same annual quantity of energy (heat) based on a new energy source when compared with the creation of coal production capacity. This data compares present capital cost, i.e., it neglects the presumably different variations in time in the unit capital cost of the two types of energy, leading to a distortion of the present estimate of this ratio. It should be pointed out that (although this does not affect the size of unit

capital cost) this compares unit costs associated with large scale installations to unit capital costs of small capacities dispersed throughout the country. A very important question with a major impact on economic benefit is the varying useful life of installations and differences in current operating costs of different energy (heat) production processes.

In this comparison we restricted ourselves to a rough estimate of capital costs. Comparison of highly important operating costs requires further analysis. In many ways, due especially to opportunities that must be used in a decentralized manner, there are similarities between new energy sources and energy rationalization investments. A comparative study, beyond the purpose of this paper, may be done on the basis of this recognition.

Examination of international experience shows that state support is being given to encourage the distribution of new equipment. This is to promote mass production of new equipment which will lead to a substantial reduction in production costs. As a result, the expectation is that with the reduction in or elimination of support, the accelerated spreading of new equipment will continue spontaneously.

Of course, each country must give preference among all opportunities open to them, to those new fields of application that can lead, in the shortest possible time, to a level of production technology where the use of the new energy source becomes economical through the application of mass production methods.

It has been stated that the use of new energy sources can be successful only if research and development activities are purposefully coordinated with startup of production and new types of application. Therefore, direction of research, development and production startup is assigned to a group within specialized institutes associated with each research topic, supported and encouraged by the central authorities involved.

3. New Energy Sources Discussed in the Article

Based on the above criteria, the following new energy resources must be considered in our country, for the period up to the year 2000:

--geothermal energy;

--biogas and

--solar energy.

Due to the geographical and geological conditions of the country, a number of other new energy sources are either not available for use, or can be used only to a negligible degree. It must also be remarked that there are very good reasons for the attention given by specialists to the question of producing liquid and gaseous hydrocarbons from coal. Yet, other countries are ahead of us in the solution of this problem because of more favorable conditions and available experience. In view of the long-term importance

of this topic, accomplishments abroad must be watched closely. We do not deal with this area in this paper because a mere survey of the results achieved thus far would require a separate article.

The three energy sources mentioned are found within the nation's territory in a dispersed, i.e., nonconcentrated pattern. Geothermal and solar energy may be used to supply low temperature (60 to 95 °C) thermal needs (heating, hot water supplies, drying). Although the use value of energy obtained in this manner is less than that of hard coal (since hard coal is suitable also for producing energy at higher temperatures), the advantage lies in avoiding the problems associated with the transportation of coal to small consumers and local burning (air pollution).

3.1 Domestic Utilization of Geothermal Energy

Due to favorable geological conditions, our geothermal energy sources can be obtained in about one half of the nation's territory from 1,000 to 2,000 deep wells bored through porous rock, in the form of water at a temperature of 60 to 85 °C. According to expert estimates, in areas where geothermal energy is feasible (from the standpoint of sources and application) the unit capital cost necessary for its use is approximately equal to the unit capital cost of eocene mines. Based on the present state of exploration, geothermal energy may provide the equivalent of 1 million tons of oil, i.e., 10 Pcal of thermal energy (1 Pcal=10^{15}cal=4.184×10^{15} joule) by the year 2000, increasing gradually. According to forecasts, this could be produced for 100 years, primarily for supplying the thermal requirements of buildings and agriculture. With exploitation started 18 years ago, the annual production of geothermal energy in our country now stands at the equivalent of 80,000 tons of oil. It is used to heat and supply hot water to buildings, to heat hothouses and dry produce in agriculture.

In addition to the further development of water treatment technologies and heat exchange devices, a major task is to provide the conditions and technologies required for public utility-type services. Organizational direction of these activities has been assigned to the Central Mining Development Institute working under the Ministry of Heavy Industry. The small group working on the "Geothermal Energy Plan" is keeping an eye on the use of low temperature heat, as well as the opportunities for extracting energy from deep layers of rock (at 3,000 to 5,000 meters) by so-called "heat mining," as described in U.S. and USSR research. Since this work is still at an initial stage and the associated cost is considerable, we can only aspire to an observer's role. However, it would be sensible to collect and process the deep drilling data of the Oil and Gas Industry Trust with a view to exploring the opportunities for domestic heat mining.

3.2 Domestic Utilization of Biogas

The raw materials forming the basis for biogas (agricultural and industrial scrap materials) are available in our country. The aerobic and anaerobic fermentation necessary for the chemical processes may be started by means of livestock manure. For as long as 30 years this energy source has been produced in our country and some small installations have been built. It is once again useful to look at the economics of establishing large scale biogas-producing installations in the new energy situation.

The organic fertilizer left as residue after the fermentation is highly valuable in agriculture. According to optimistic estimates, potential domestic production is equivalent to 1 million tons of oil, or 10 Pcal of thermal energy. This would require about 1,000 plants with 10,000 to 12,000 cubic meters of daily capacity. Therefore, it is sensible to count on only a fraction of the above-mentioned potential energy value. Unit capital cost is on the average 4 to 6 times higher than eocene mines. It seems likely that capital costs may be reduced by using mass-produced new types of concrete vats (e.g., using plastic foils). In view of investment problems, its importance may increase only in case such a cost reduction is possible in industrial applications.

The question of biogas production has been in the hands of the Energy Management Institute (and its predecessor) with minor interruptions.

3.3 Domestic Utilization of Solar Energy

In view of the geographical situation and meteorological conditions of our country, as well as the level of the technological development of presently available solutions, solar energy may be used as low temperature heat. Application of solar energy is shown by investigations to date to be a suitable solution for the air temperature control of buildings with light structural elements (housing estates, department stores, schools, nursery schools, etc.) combined with auxiliary hot water supplies and heating.

Solar energy collectors should be designed into the structural elements of new buildings. Favorable location of buildings may improve the efficiency of utilization. Other countries with largely similar geographical conditions are also considering low temperature use of solar energy. For example, swimming pools are heated by means of solar energy. This application however, can be considered only infrequently due to our relatively favorable balneological conditions (hot springs). It must be remarked that favorable solar radiation may be used in agriculture for drying of produce.

The first steps have been taken toward the utilization of solar energy in our country. Domestic production of collectors is feasible on the basis of local development, possibly with the use of foreign cooperation. Similarly, auxiliary equipment, heat storage facilities and regulators may be produced at home. On the other hand, exploratory analysis shows that the unit capital cost necessary for the utilization of this energy source is one order of magnitude higher than the capital cost of geothermal energy or eocene mines. Its advantage is that it may be set up in any area of the country. If production is started with a suitable technology based on institutional development work, then by the year 2000 it is possible to achieve production of thermal energy equivalent to 1 million tons of oil, but only with the following conditions:

Lacking suitable measurement data, according to preliminary investigations carried out to date, production of the heat equivalent of 1 million tons of oil per year will require approximately 15 square kilometers of collector surface. Therefore, the assumed target above would require the production of 15 square kilometers of collector surface by the year 2000. Of course,

this might lead to a substantial reduction in production costs. Nevertheless, it is questionable whether, even if the necessary technology is available in the last decade of the century, the domestic industry will be capable of producing in such quantities. This points out the need to be very careful in judging the ideas characterized in numeric terms above.

At present it is debatable whether domestic use of solar energy is economical in comparison with other energy sources. Only small progress can be expected in the medium term regarding the use of more advanced engineering solutions. Experience obtained from experimental plants established in the meantime, combined with a continuous watch over foreign solutions, will promote the design of new systems. In this area, favorable license purchases may be considered. The Construction Science Institute is suitable for directing development work, in view of its knowledge of techniques of utilization. This ensures that results achieved in other areas of solar energy utilization will be followed (solar generating plant via heat power plant or semiconductor photoelectric cells; chemical or biological transformation). The possibilities associated with the latter approaches that do not include direct heat utilization are unlikely to be utilized in our country. However, research activity should follow world trends in view of future opportunities for export of collectors, etc.

After the year 2000 thermal utilization of solar energy is expected to grow to 2 or 3 times the level predicted for the year 2000.

4. Conclusion

The role of new energy sources in our country in the long term can only be estimated approximately. Answers involving factors necessary for evaluation must be approximate because the needed detailed information on the utilization of new energy sources under consideration has not yet been formulated. In the interest of better evaluation it is necessary, even under these conditions, to compare the unit capital cost of energy conservation measures to the unit cost of eocene mines. The operating costs of eocene mines will certainly be greater than the operating costs of the utilization of new energy sources. As a result, the ratio of costs for producing a unit of energy are more favorable than the present ratio we formulated in terms of relative capital costs which, by the way, are expected to improve with the introduction of mass production methods.

We can conclude that under the conditions of our country, among the three new energy sources under discussion, geothermal energy is the most advantageous from every point of view. After that, the utilization of biogas may be regarded as a potential energy source. Solar energy takes third place.

The combined percentage of utilization of all three energy sources in the year 2000 cannot be put above a few percent of the total energy requirements of the country. Thus, it would be a mistake if nuclear energy and coal utilization programs were in the least affected by long-range expectations regarding their use. It is an undeniable fact, however, (and this is why we are considering these energy sources) that their utilization may ameliorate our energy problems as a whole.

We should not lose sight of the emerging international cooperation within CEMA over a range of subjects wider than the ones discussed here. In view of these facts, the necessary research and development activity must be organized, with maximum attention paid to the principle of specialization. Other useful solutions for implementing international cooperation must also be explored.

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HUNGARY

FOOD INDUSTRY MAKES PROGRESS IN ENERGY CONSERVATION

Budapest ELELMEZESI IPAR in Hungarian No 7, 80 pp 243-248

[Article by Laszlo Szobel of the MEM [Ministry of Agriculture and Food Industry]: "Energy Saving Measures"]

[Text] Summary

The author analyzes the situation of energy management, based on a study of this topic conducted at the ten economic operating units which are under MEM's supervision.

He also deals with the role the energy management organizations have at the trusts and enterprises.

He examines the way energy use has developed, and within this deals with the management of electrical energy, steam energy, and fuel management.

He covers the introduction and numerical evaluation of the 1979 energy saving plans.

Effect of the Energy Saving Measures in the Energy Management of the Consuming Trust and Enterprise

In the national economy's total output energy costs at the present time run around 10 percent. In coming years this ratio is expected to increase due to the large rise in the price of energy sources.

The specific investment costs for energetics establishments have increased. In the last plan period the proportion of energetics investments to industrial investments was 30 percent, but in the current plan period this proportion is 40 percent and in the next plan period it will approach 45 percent.

It follows from the above data also that rational economic operation is emphasized in the area of energy usage, and its significance in the national

economy will grow more and more. Everywhere in the world, energy management is being regulated by statutes, regulations and plans. And these urge frugal economic operation on the economic operating units. In its 1978 resolution the Council of Ministers obligated 50 significant energy user enterprises to prepare energy saving plans. The following large energy user trusts and enterprises under MEM's branch direction were required to prepare energy saving plans:

Livestock Sales and Meat Industry Trust
Trust of the Poultry Processing Enterprises
Trust of the Sugar Industry Enterprises
Grain Trust
Trust of the Canning Industry Enterprises
Trust of the Beer Industry Enterprises
Trust of the Dairy Industry Enterprises
Trust of the Alcohol Industry Enterprises
Vegetable Oil Industrial and Laundry Detergent Manufacturing Enterprise, and the Mohacs Wood Fiber Panel Factory.

It can be seen from the list that the trusts and enterprises include a significant portion of the food industry.

The conclusions made from the study of their energy management can be generalized for the entire food industry.

We took the following viewpoints into consideration in studying the situation of their energy management:

--structure and effectiveness of the energy management organization,
--the way energy consumption developed in the years 1976 through 1978,
--electrical and steam energy and fuel consumption,
--effect of the energy saving measures and fulfillment of the energy saving plans.

The Energy Management Organization

Creation and the operating conditions of the energy management organization, the energy management activity of the economic operating and supervisory organs are regulated by order No 8/1974. (XI. 20) NIM [Ministry of Heavy Industry] of the minister of heavy industry. Paragraph No 1 of the order decrees that the energy management organ be created,--based on the cost of energy sources accounted at purchase costs.

At each of the trusts and enterprises in the study, energy costs exceed the 20 million forints figure established in the order as the upper limit, at which a chief energeticist or an organizational unit under the direction of a chief energeticist must be instituted.

The energy management organizations were established at the economic operating units during the time period covered by the study. Due to the limits which

exist on manpower management at the trusts, and also to the rigidity of the organization, in the poultry, grain and alcohol industries the tasks of chief energetician are being carried out by people in related job assignments, which is contrary to the regulation.

Due to the importance of executing the tasks related to increasing energy savings, the MEM's Main Technical Department in its memorandum published on 10 August 1979 (No MEM. E. 14) again calls the attention of enterprises, cooperatives, institutions and establishments under the ministry's sectional direction to observe order No 8/1974 (XI. 20) NIM.

The energetics organizations or the energeticians in charge must be given more help and authority than they now have, to handle the increased tasks. The energy organization should everywhere be placed under the authority of the technical director or chief engineer, so that with his help it would be able to implement the economical and thrifty energy consumption measures on time and efficiently in all areas.

During the time of the study, 236 employees worked on energy-related tasks at the trust enterprises and factory units. Of the 236 people, 63 are under the direct supervision of a technical director or chief engineer (table 1).

Table 1.

Energy Organization of the Trust Enterprises and Factory Units, and the Units Obligated to Prepare Independent Energy Balances

Industries	Main Department Head, Department Head, Plant Manager, Group Leader	Chief Energetician	Energetician	Total	Number of units obligated to prepare independent balances
Meat industry	8	7	22	37	40
Poultry industry	3	2	7	12	11
Sugar industry	12	2	15	29	12
Grain industry	--	7	29	36	51
Canning industry	7	2	28	37	32
Beer industry	--	5	6	11	21
Dairy Industry	1	4	41	46	58
Alcohol industry	--	5	15	20	30
Vegetable oil industry	--	5	2	7	5
Wood fiber panel	--	1	--	1	1
Total:	31	40	165	236	261

Table 2.

Development of Total Expenditures and Energy Costs

Year	Total expenditures	Energy Costs
1976	100.0	100.0
1977	109.0	106.3
1978	112.3	115.8

An independent energetician cannot be given other assignments except for handling the water management and environmental protection tasks. The enterprises usually do not observe this directive, 38 people were also assigned other tasks in addition to those in the regulation.

The academic training of those working in the energy organizations complies with the regulation's requirements, 41.5 percent of them have college-level training.

Development of Energy Consumption in the Years 1976 through 1978

In 1976 through 1978 the cost of energy for the economic operating units was 2.5 to 2.6 percent of the total costs. There are significant differences in percentage distribution because of the differences in the value of raw materials processed by the various industries. Because of this, in terms of percentages the cost of energy is lowest in the meat and poultry industries, 1.1 to 1.5 percent. The sugar and beer industries occupy positions in the middle of the field with their 6.2 to 7.4 percentages, while the ratio is highest in the alcohol industry and in the wood fiber panel factory, 15.8 to 18.3 percent.

The low proportion of energy costs can be traced back to the fact that the additional energy expenditures used for eliminating production losses resulting from the lack of organization of production and from violating the technological discipline, are not being taken into consideration in some industrial branches.

During the three years covered by the study, energy costs increased by 15.8 percent; the increase in energy consumption measured in terms of equivalent joule value was 9 percent. For the most part the difference in the larger percentage growth can be explained by the price changes for energy sources which have occurred in the meanwhile. Table 2 shows the total and percentage changes in energy costs.

The structural composition of energy sources changed significantly in the 3 years of the study. The use of solid energy sources declined by about 10 percent, and this is unfavorable from the national economy's viewpoint. It can be considered favorable that within the consumption of hydrocarbons the consumption of natural gas increased more than that of oil in general.

Electrical energy consumption increased 14.5 percent, which is not favorable from the national economy's viewpoint, considering the limited capacity of the power plants.

The ratio of purchased steam did not change significantly; this at the same time also reflects the low level of energy cooperation among enterprises. Table 3 shows the development of energy consumption, while Table 4 shows the yearly changes in the percentage distribution of energy sources within this.

Energy standards are in essence regulations governing the energy use by the economic operating units. Their purpose is related to the planning of energy consumption. The energy standards must include production's total energy requirement, the characteristics of production technology and the degree of the technological equipment's efficiency. The energy standards can be determined by various methods.

Table 3.

The Development of Energy Consumption

Units: GJ

Year	Solid	Liquid	Gaseous	Electrical energy	Purchased steam	Total
1976	6,949.2	16,674.3	5,708.5	2,407.9	3,519.6	35,259.5
1977	5,775.3	17,427.1	6.998.5	2,601.8	3,651.5	36,454.2
1978	6,277.1	17,414.9	8,276.9	2,869.3	3,708.8	38,547.0
1978/76 percent	90.3	104.4	144.9	114.5	105.4	109.0

Table 4.

Structural Changes in the Consumption of Energy Sources

Year	Solid	Liquid	Gaseous	Electrical energy	Purchased steam
1976	19.7	47.3	16.2	6.8	10.0
1977	17.6	46.8	18.8	7.0	9.8
1978	16.3	45.3	21.5	7.1	9.6

Two kinds of practice can be observed in industry: technical estimating based on statistical calculations, and equivalent value calculation developed for the main product. In the meat, poultry, canning, dairy and vegetable oil industries, due to the broad spectrum of products, energy standards cannot be established based on measurements with the present level of instrumentation.

The Budapest Meat Industry Enterprise's efforts to fully implement the measuring of energy consumption, is worthy of attention. After two years of preparation the technological line is being equipped with a high level of instrumentation. With the experience thus obtained, they may create a good foundation to develop in-plant measurements for technologies with high energy requirements.

At economic operating units with homogeneous product structures--grain, sugar, alcohol and beer industries and the wood fiber panel factory--specific energy consumption can be evaluated on the basis of factual data. In these industries, instrumentation and the points of measurement have been developed to a significant extent.

At the present time the high cost of obtaining the instruments, and lack of solution for their maintenance and spare parts supply, are also placing limits on spreading the measurement of energy consumption. Considering the unfavorable price changes for energy sources, which we must expect also for the long range, in the interest of having more effective control on energy management, instrumentation and the foundations for automation are indispensibly necessary in order to accomplish optimum energy utilization. Identifying our energy use losses in the plants is also in close harmony with the measurement opportunities.

Experience gained in the investigation has shown that in general the measures taken to eliminate the identified energy losses take effect faster if they can be eliminated by organizational or maintenance activity. Those measures which require investments are implemented as a function of the given enterprise's financial condition, but always with low priorities.

Electrical Energy Management

Of the economic operating units studied, the sugar, beer and alcohol industries produce a portion of the electrical energy they need for their own use. The other enterprises obtain all their needs from the national electrical network. In the energy consumption of the enterprises--not counting the energy they produce--the share of electrical energy is about 7 percent. Taking the electrical energy into consideration also which they produce for their own use, this ratio is 8.5 percent.

Between 1976 and 1978, electrical energy consumption increased by 13 percent. During this time, production value increased by 9.6 percent. The meat industry's electrical energy consumption increased significantly, by 27 percent--in connection with the reconstructions and new investments. Table 5 shows the electrical energy consumption of the economic operating units.

The enterprises use electrical energy mainly for operating the technological equipment. The tight manpower availability also increases consumption's growth. The enterprises substitute for live work by using more electrical machinery. In the last 10 years the grain industry's electrical energy needs have increased significantly, since the transmission-driven mechanical mills are being replaced by individually driven mills equipped also with pneumatic material-handling systems which are more favorable from the work safety viewpoint.

Table 5.

Development of the Use of Electrical Energy
1976 = 100 percent

Industries	1977	1978
Meat industry	117	127
Poultry industry	108	110
Sugar industry	105	114
Grain industry	106	106
Canning industry	111	112
Beer industry	108	107
Dairy industry	113	120
Alcohol industry	104	102
Vegetable oil industry	114	116
Wood fiber panel	92	109
Total	108	113

The level of electrical energy management can be evaluated through the demand for output (daytime, peak time), the use derived from the demanded output, and by how much this demand is exceeded; also, on the basis of the value of price bonus paid for the performance factor, and the return this brings.

Regulation No 4/1977 (XII. 29) NIM-AH [Ministry of Heavy Industry--Price Authority] regulates the way electrical energy prices are set for the various types of consumption. The regulation which is now in effect, urges the economic operating units which enter into contracts, to make good use of the generated power they demand, and not to exceed their demands. In the interest of moderating the amount of electrical energy drawn from the lines in peak periods, the contracted performance fee is about double that of the daytime rate. For each case of excessive consumption above the contracted performance, a penalty equal to the yearly fee for excessive consumption must be paid. This provides the incentive for the enterprises to contract for power they will not exceed even in the case of maximum use. The fee paid for committing themselves to a certain amount of power provides the incentive for the enterprises not to overinsure for themselves.

The economic operating units endeavor to moderate the extent of peak-time commitments and one-time energy draw in the way they organize their work. The grain industry is a good example of this, where peak-time energy use is decreased by scheduling the shut-down shift of two-shift production operations for this time period. Table 6 shows how the committed power is being used.

Utilization of the committed power can be considered good in the grain industry and in the Mohacs Wood Fiber Panel Factory.

The low utilization percentage in the sugar industry is explained by the fact that the industry itself produces a significant portion of the electrical energy it uses. The enterprises contract for the decisive majority of committed power as auxiliary energy for the time of the campaign, to replace possible losses of production of their own power plants. Better utilization and decreased costs can be achieved at the other economic operating units by more accurate planning of the power commitments.

Table 6

Utilization of the Committed Electric Power

Units: %

Industries	1976		1977		1978	
	day-time	peak-time	day-time	peak-time	day-time	peak-time
Meat industry	--	--	81.0	82.0	83.0	85.0
Poultry industry	81.9	91.5	81.5	87.6	83.9	85.9
Sugar industry	74.4	79.7	65.4	75.8	76.3	81.9
Grain industry	97.8	100.0	98.2	98.5	95.6	96.6
Canning industry	92.3	92.1	87.5	93.9	91.8	91.3
Beer industry	87.0	90.0	87.0	90.0	86.0	90.0
Dairy industry	90.3	88.8	88.5	90.9	91.9	92.9
Alcohol industry	92.8	93.3	93.2	91.9	91.6	92.1
Vegetable oil industry	89.8	86.2	90.6	88.3	89.0	85.2
Wood fiber panel	98.4	98.4	99.7	97.1	99.8	98.5

In electrical energy management, unused generated power appears as a necessary loss. Therefore the power supplier encourages improvement of the power factor's value. It pays a rebate or charges a surcharge depending on the power factor's measured value. Reactive energy management can be improved in the plants in party by proper plant operation and plant organizing methods (for example, by replacing oversized motors, decreasing idling runs to a minimum, etc.).

The other way to improve operation is to use phase-improving condensers.

During the study's time period the plants were equipped with adequate phase-improving systems. A problem exists in the fact that the repair time for condensers which develop problems is very long, and a way has not been found to temporarily replace them during the time of repairs, because of the regulations currently in effect.

Reactive energy management can be considered good overall, since rebates increasingly exceed surcharges. Table 7 shows the development of surcharges and rebates. The overall effect of factors influencing the electrical energy

management is summarized in the specific electric rates. In Table 8 we have summarized the development of specific electric rates of the economic operating units covered by the study.

Table 7

Development of Surcharges and Rebates

Units: 1,000 Forints

Industries	1976		1977		1978	
	sur-charge	rebate	sur-charge	rebate	sur-charge	rebate
Meat industry	2,995	1,536	2,301	1,350	1,576	2,842
Poultry industry	568	894	257	1,018	290	1,314
Sugar industry	1,363	264	1,055	380	542	588
Grain industry	2,935	2,231	3,172	2,480	3,385	3,347
Canning industry	478	1,662	788	1,823	948	2,396
Beer industry	19	1,459	147	1,392	49	1,744
Dairy industry	1,444	1,187	1,103	1,517	1,058	785
Alcohol industry	383	622	309	529	388	865
Vegetable oil industry	--	1,500	--	1,500	--	1,500
Wood fiber panel	--	1,449	--	1,330	—	1,737
Total	9,885	12,804	9,132	13,319	8,236	17,118

Table 8

Development of Specific Electric Rates

Unit: Forints/kWh

Industries	1976	1977	1978
Meat industry	--	0.88	1.02
Poultry industry	0.70	0.68	0.86
Sugar industry	1.12	0.96	1.00
Grain industry	0.90	0.90	1.07
Canning industry	0.82	0.85	0.99
Beer industry	0.64	0.63	0.73
Dairy industry	0.92	0.86	0.99
Alcohol industry	0.82	0.90	0.96
Vegetable oil industry	0.32	0.77	0.93
Wood fiber panel	0.70	0,70	0.73

Steam Energy Management

The enterprises studied spend most of the energy they use to generate steam. The ratio of coal-fired boilers decreased significantly after the hydrocarbon

program was implemented. Table 9 shows the distribution of boilers according to energy source.

Table 9

Distribution of Boilers According to Energy Source

Units: %

Industries	1978			1977			1976		
	Coal	Oil	Gas	Coal	Oil	Gas	Coal	Oil	Gas
Meat industry	20.7	33.6	45.7	17.1	33.1	49.8	11.2	30.6	58.2
Poultry industry	58.4	9.9	31.7	58.4	11.2	30.4	55.7	12.7	31.6
Sugar Industry	13.5	78.5	8.0	11.8	80.2	8.0	11.7	75.5	12.8
Grain industry	--	100.0	--	--	100.0	--	--	100.0	--
Canning industry	37.4	6.1	56.5	30.8	7.4	61.8	32.9	9.7	57.4
Beer industry	19.6	64.5	15.9	18.6	67.8	13.6	19.4	65.4	15.2
Dairy industry	10.2	62.1	27.7	8.5	55.8	35.7	6.8	52.5	40.7
Alcohol industry	41.4	23.0	35.6	39.0	24.2	36.8	30.5	27.9	41.6
Vegetable oil industry	35.0	32.2	32.8	25.0	23.0	52.0	24.7	21.3	54.0
Wood fiber panel	73.7	26.3	--	75.8	24.2	--	76.7	23.3	--

Industry's average of boiler efficiency shows a trend of improvement. This can be connected with the fact that in the last 10 years the industries carried out significant boiler reconstruction which was accompanied by a shift in energy sources. Table 10 shows the development of boiler efficiencies.

Table 10

Development of Average Boiler Efficiency

Units: %

Industries	1976	1977	1978
Meat industry	75.6	76.0	76.2
Poultry industry	76.0	74.4	75.6
Sugar industry	81.9	82.2	82.2
Grain industry	80.0	80.0	80.0
Canning industry	72.0	76.2	75.0
Beer industry	74.7	74.6	77.9
Dairy industry	74.8	74.5	75.5
Alcohol industry	72.7	73.8	75.6
Vegetable oil industry	68.5	68.0	69.0
Wood fiber panel	67.8	72.8	72.8

During the course of examining the boiler operations we concluded that the current state of instrumentation does not fulfill the conditions of

economical operation. There are no stack gas analyzers; and carbon dioxide, oxygen carbon monoxide + hydrogen measuring instruments, with the selective installation of which the savings which can be achieved in the boilers could be increased. Supplying the existing instrument inventory with spare parts, and their centralized maintenance also have not yet been solved.

It should be made a goal in the future to improve the level of automation of the boiler plant operations, by which--based on the above mentioned instruments--significant energy savings could be effected in the industry.

Industry's experience with the introduction of chemical scrubbing of stack gases is favorable. More attention must be paid to water pretreatment. The poor condition our condensed water networks are in can be connected with this, since poorly treated boiler feed water has a corrosive effect which significantly decreases the network's lifespan. Therefore regular on-site testing of the water quality is very important.

Fuel Management

At the economic operating units studied, the transportation activity operates in the form of independent enterprises in the dairy and canning industries. Transport enterprises have not been set up at the other trusts transportation is handled in decentralized group organizations, or through motor vehicle managers. Fuel management is of outstanding importance at the two transportation enterprises, since 80 to 85 percent of the fuel costs are spent for motor vehicle fuels. Since transportation is their primary profile, the costs relating to operation and maintenance of motor vehicles fundamentally influence the enterprise's results.

An enterprise's fuel standards system has been developed at the TSZSZKV [transportation enterprise for dairy cooperatives], with attention given to the characteristics of transportation in the dairy industry. The standards system was put into effect on 1 September 1976, and it authorizes lower standards than the norms specified by the KPM [Ministry of Transportation and Postal Affairs] which is in effect. The enterprise's standards system covers 70 percent of the mileage driven. In the last 3 years the enterprise saved a significant amount of fuel. No standards systems of their own have been devised at the KOHUSZ [transportation enterprise for the canning industry] nor at the other enterprises; these conform to the KPM standards.

The motor vehicles are maintained by the two transportation enterprises at their own service centers. The repair shops are equipped with modern diagnostic equipment. Phased-out motor vehicles are being replaced, keeping in mind the advantages of standardization.

At the other economic operating units, the level of technical maintenance of their vehicles is less favorable than at the transportation enterprises --due to the adverse circumstances and poorer equipment. The same can also be said about the motor vehicle park's inventory. Repair costs are developing

unfavorably, there are many motor vehicles being kept on the books at their theoretical values. Replacements for the motor vehicle parks are being acquired without a plan--as a function of the financial position of the enterprises--and not built on standardization.

During the time period under study, the extent of providing financial incentives in the interest of making energy savings more efficient, was small. In the annual plans they determine the amount of energy needed to implement production, or in some places the specific energy rates. Management gave little consideration to the fulfillment of these when the overall annual bonuses were given out. The financial interests of people working directly in production have been partially resolved only for those who work in the transportation activities, and in bonuses for motor vehicle drivers.

Fulfillment of the 1979 Energy Savings Plans

Of the 103 energy savings plans of the trusts and enterprises examined, 92 were prepared in numeralized forms, that is, forms which can be evaluated. When the plans were set up, total energy savings were shown in terms of millions of kilocalories and thousands of forints. Of the total energy savings, electrical energy plans were also set up in natural units of measurement (MWh).

The economic operating units examined planned to save 11,623.8 MWh of electrical energy, which was fulfilled by 17,197.1 MWh, or 148 percent.

The plan's significant overfulfillment resulted in part from the fact that even though the sugar industry planned no savings, it was able to show a savings of 1,145 MWh. Five of the ten units did not fulfill their pledged obligations, while four significantly overfulfilled them. The beer industry's failure to fulfill its plan can be traced back to the decline in the amount of its own production of electricity, while in the other industrial branches, for example in the poultry industry, it was not taken into consideration that investments which begin operation during the year, and the process of bringing new plants up to full operating speed, will affect their abilities to fulfill the plans.

Total planned energy savings were 197,843.8 million kilocalories (828,371.8 GJ), which was fulfilled by 339,115.5 kilocalories (1,419,876.6 GJ). The industries overfulfilled the plan to 171 percent.

The enterprises planned 58,014,000 Ft savings in energy costs. Based on actual 1979 data, the result was 97,662,200 Ft, which means 168 percent fulfillment of the plan.

Percentage fulfillment of the energy savings plans of the trusts and enterprises is shown in Table 11.

Table 11

Percentage Fulfillment of the 1979 Energy Savings Plans

Units: %

Industries	MWh	10^6 kcal	1,000 Ft
Meat industry	213	333	434
Poultry industry	--	401	369
Sugar industry	--	251	193
Grain industry	433	122	182
Canning industry	98	107	125
Beer industry	56	187	123
Dairy industry	83	140	119
Alcohol industry	19	308	214
Vegetable oil industry	117	51	82
Wood fiber panel	245	233	271
Total:	148	171	168

When the plans are judged, the energeticist organizations of the trusts must pay more attention to realistically uncovering the reserves which exist in energy management, and to working these out in terms of numbers.

At the same time it can be concluded that the contingency plans for energy sources for the second half of 1979 provided incentives to the enterprises to improve their energy management.

It also can be concluded that the energy savings plans had a mobilizing effect on making energy management more effective. The results achieved look good, even though in overall terms the savings amounted to only about 2 to 3 percent of the energy consumption of the trusts and enterprises.

In order to achieve more significant savings it is important for the trusts and enterprises to prepare short and longer-range energy rationalization plans and to consistently implement these plans.

In order to create better energy management conditions, this will require a serious change in attitude on the part of those who direct the economic operating units.

Laszlo Szobel, senior official
MEM Main Department for Enterprise Control

8584
CSO: 2500

URGENT PROBLEM OF MERCHANT FLEET MODERNIZATION DISCUSSED

Gdansk GLOS WYBRZEZA in Polish 11 Aug 80 p 3

[Text] One of the first meetings of the Commission for Maritime Economy and Shipping in the new session of the Sejm was devoted to the discussion of a very important problem: modernization of the Polish merchant fleet.

The Ministry of Foreign Trade and Maritime Economy presented the deputies with matierals which show that the last decade has brought a significant increase in new tonnage of the Polish Merchant Marine. This increase is accounted for mainly by the bulk transport. The period 1971-1975 was a time of particularly intensive construction of vessels to transport liquid cargo (crude oil and its derivatives, liquid sulfur) and dry bulk (grain, feed, coal, and metal ore). Less dynamic was the tonnage increase to transport general cargo and to service regular shipping lines. As a result there was a 10 percent decrease in transport by the Polish liner fleet--from 5.1 million tons in 1975 to 4.6 million tons in 1979. The general bulk cargoes of the Polish foreign trade carried by this fleet decreased even more, that is about 20 percent. An additional reason for the small increase in the liner fleet was its significant aging. Consequently there was a loss of cargoes, especially of the more profitable ones, to foreign shipowners with modern vessels.

The average age of our general cargo ships is 14 years. In our liner fleet, the share of vessels less than 10 years old is only about 50 percent, while in the Swedish and Norwegian fleets, it is 83.2 percent; in the Japanese, 82 percent; in the West German, 79 percent; and in the French, Belgian, and Spanish above 77 percent.

The aging of the liner fleet has caused an increase in operating difficulties, for example because of the refusal in many ports of the world to service vessels which are over 15 years old. At present, the old vessels in our liner fleet constitute about 85 percent. The tonnage participation of cargo transportation by modern techniques, for example in containers, in our fleet is more than 50 percent less than the world average.

To continue maintaining the presence of the Polish liner service in a number of shipping conferences, it was necessary to build or buy special roll-on/roll-off, container roll-on or multipurpose vessels. Because of a steadily decreasing supply of new tonnage from our shipyards, connected with the

export goals of the Ministry of Heavy and Agricultural Machine Industry, it was necessary to employ other, economically justified, solutions. In 1974 a new system of buying vessels through a mortgage lien was worked out. Through this system 12 vessels of about 350,000 deadweight tons were bought between 1976-1980. Then, a Polish-British and a Polish-French company were formed to build vessels. As a result, our liner service will get a total of 26 vessels with a tonnage of about 250,000. The construction cost will be paid back with partial receipts from the operation of the vessels. In the opinion of the ministry, as far as the tonnage structure is concerned, the supplies from Polish shipyards should be mainly special ships of advanced design and technology. The ships of simple construction on the other hand, mainly bulk cargo ships, which because of limited production possibilities could not be built in Poland, should be ordered abroad (the cost to build 1,000 deadweight tons of the ro/ro ship of 20,000 deadweight tons is approximately 80 million zlotys, and to build a bulk cargo ship of similar tonnage, about 20 million zlotys). The advisability of further increase of the Polish maritime fleet stems from its high economic effectiveness and its role played in Polish foreign trade. The share in the balance of payments for shipping fees paid to foreign shipowners for general cargo is about $100 for each ton carried.

The liner fleet could properly serve the Polish foreign trade and export transport services if by 1985 the Polish Ocean Lines increases its tonnage by 550,000 deadweight tons and the Polish Baltic Shipping Company by 16,000 deadweight tons. To avoid aging of the tramp fleet, it is necessary to buy ships with tonnage of about 750,000 deadweight tons. It is necessary to obtain in the next 5 years ships with a total tonnage of about 1.3 million deadweight tons; that would put at our disposal, after scrapping, a tonnage of 5.2 million deadweight tons (in 1971-76 the increase in new tonnage was 2.4 million deadweight tons and in 1976-80 about 620,000 deadweight tons). A program of increasing the merchant fleet in 1981-85 by 1.3 million deadweight tons has been approved. Now we have to determine the sources where we can purchase ships and establish a balance between supplies from Polish and foreign shipyards. So far, eight ships with a total tonnage of about 176,000 deadweight tons have been contracted to be supplied by foreign shipyards, and in the near future an agreement is expected for the construction of five general cargo ships, each 38,000 deadweight tons, with an option for an additional five ships. If one negotiations are successfully concluded, five other, ro/ro ships, with a total tonnage of about 35,000 deadweight tons will be built. It is still an open matter in this situation to determine sources of supplies of about 900,000 deadweight tons. Failure to carry out this program would mean a loss of shipping fees, calculated according to the conditions of 1979, totaling $190-240 million. The losses in returns for the export of transport services would be twice as much.

Orders for the type and number of ships that may be built in our shipyards have been given to the Ministry of Heavy and Agricultural Machine Industry. Despite many meetings and discussions with representatives of the ministry, the ministry has not been able to determine till now the range of ship supplies for the Polish fleet in the years 1981-85. The ministry gives a

general estimate that it will be close to the level of supplies from 1976 to 1980, that is, about 276,000 deadweight tons. The reserves in the export portfolio of the shipping industry orders to the end of 1985 are about 2 billion foreign-exchange zlotys. In the opinion of the Ministry of Heavy and Agricultural Machines, about 30 percent of these reserves (tonnage of a value of about 700 million foreign-exchange zlotys) could be used for our liner service. In the opinion of the ministry, the above-mentioned tonnage of merchant ships should be considered in the plan for Polish supplies for 1981-85, with a possibility of increasing by additional vessels if there are no cash export contracts.

The Liner Services' Opinion

A representative of the Polish Steamship Company, Director Ryszard Karger, comments: "Calculating the practical needs of Polish foreign trade, one should conclude that in 1985 the Polish Steamship Company should have ships with a total tonnage of 4.2 million tons. It means therefore that it is necessary to increase the tonnage in the coming 5 years by about one million tons. Failing to reach these targets will put the Polish Steamship Company in a bad situation, comparable to the situation of the Polish Ocean Lines this year."

A representative of the Polish Ocean Lines, director Kazimierz Misiejuk, gives the following view: "The present situation of the Polish Ocean Lines is to a high degree caused by failure to fulfill the last two five-year plans in supplying new vessels. In the Polish Ocean Lines we are clearly short of adequate tonnage. There are delays in technological progress and physical wear and tear: 33 ships have been used for more than 10 years. As a result, our repair costs increase, and they are more labor-intensive and time-consuming.

"The Polish Ocean Lines do not know the size of new supplies in the coming 5-year period of 1981-85. Simultaneously, because of the results of significant physical wear and tear on scores of vessels, the possibility of retiring them must be considered. If then the new supplies in the period of the coming five-year plan will not allow the maintenance of the transportation potential the company has had up to now, we will find it necessary to eliminate some lines, and that would have a very negative impact on Poland's balance of payments."

The Ministries' Opinions

A representative of the Ministry of Heavy and Agricultural Industry, Director Andrzej Adamczyk, comments: "We have worked our plans for the development of the Polish shipping industry for 1981-85. It is planned, among other things, to increase production by 30 percent in comparison with the last 5-year period. We expect a dynamic development of exports. The ship supplies for our liner services will be maintained at the level of the last 5-year period.

"The possibility of maneuvering in the coming 5-year period is limited. The quantity of ship supplies to the Soviet Union has been settled in a binding way, as well as to a great degree the quantity of exports to the

second payments area countries. The value of production not yet contracted for does not exceed 2 billion foreign-exchange zlotys, and only in this area will it be possible to make a decision about supplies for the Polish liner services. Initially, we plan to export to the second payment area the value of 5.8 billion foreign exchange zlotys. If one third of the planned export could be earmarked for the Polish liner services, the supplies would reach a value of 10 billion zlotys. In the last 5-year period, the total value of supplies for the Polish liner services was 18 billion zlotys (for both merchant and fishing ships)."

A representative of the Ministry of Finances, Director Jozef Pieta, states the following opinion: "According to National Bank of Poland data, in the last 3 years shipping fees have been as follows: in 1977, in the second payment area they were 508 million foreign-exchange zlotys; in 1978, 461 million foreign-exchange zlotys; and in 1979 a sudden increase to 730 million foreign-exchange zlotys. It is difficult to evaluate what the reasons were. In the period under discussion the volume of the Polish foreign trade exchange, both in import and in export, has not changed significantly."

The Deputies' Opinions

Deputy Tadeusz Fiszbach gives the following comment: "We have to search for new possibilities of developing the Polish Merchant Fleet.

"The Ministry of Foreign Trade and Maritime Economy and the Ministry of Heavy and Agricultural Machine Industry in cooperation with the Planning Commission of the Council of Ministers should work out a program of new ship supplies for the Polish liner services from local sources. To achieve this goal all possibilities should be used. They are not at present great, but we can reach a position where they will increase. First of all we should modernize and develop the Polish shipping industry, and it is known that not many modernization measures have been taken. Having achieved modernization, we could achieve a significant increase in production. We should aim to build ships in longer series; with a decrease in the number of prototypes constructed, we will increase shipyard labor productivity. Another important element is to increase employment in the shipyards. For example, increasing employment in the Komuna Paryska Shipyard by 1,000 workers (present employment 10,000) would increase productivity by 40 percent. These are tremendous reserves. Additional possibilities can be found in stabilizing personnel. The present turnover in shipyards has reached 45 percent, and is most frequent among young workers. It could be sharply reduced by bigger allotments of apartments to shipyard workers."

Deputy Tadeusz Lodykowski comments: "The problems concerning modernization of the Polish merchant fleet occupy a crucial position in the deliberations on the future of Polish shipping. They are at the same time problems of considerable social importance. They attract the interest of the whole society, which expects unambiguous answers to existing questions. The importance of these problems found its expression during the precongress discussions as well as in the resolutions of the Eighth PZPR Congress, where the necessity to modernize the Polish merchant fleet was pointed out clearly.

"It is foremost in deliberations on the development perspectives for the Polish merchant fleet to determine the range of needs in the area. As can be easily shown, these needs are determined at present mainly by criteria of quantity: the size of cargoes that must be carried for the needs of foreign trade. Evaluating the long-range development directions of the maritime transport service, one should emphasize, however, criteria of value: first of all to determine the impact on Poland's balance of payments. Meanwhile, during work on the five-year plan, criteria of quantity are taken mainly, if not exclusively, into account. This is quite an essential error in the method of planning. It can be observed clearly in the materials prepared by the ministry for today's session. They are limited to a brief and rather general statement that the further development of the Polish merchant fleet will have essential impact on the balance of payments in Poland. What should be clearly determined is what specifically this impact will be. Two options should be considered: that is by establishing on the one hand what will be the result of meeting the needs of the fleet, and on the other hand determining what the results will be if these needs are not satisfied (that would be a peculiar program of renunciation)."

Deputy Jerzy Zygmanowski comments as follows: "there are various possibilities for increasing the number of vessels in the Polish merchant marine. An interesting proposal concerning this topic was presented during today's discussion by Deputy Fiszbach. We have to take both sides into account. We have to know clearly what we will gain if the proposals to increase the new tonnage supplies for our liner services are carried out and, on the other hand, what the results will be if this increase does not take place. Our country was forced to use foreign fleets to carry cargoes of 7.8 million tons; compared to 1978 this is an increase of 4 million tons. And this specifically is the cause of the shipping fee increase that a representative of the Ministry of Finance could not explain to us. We have to realize that because of insufficant supplies of new ships for the Polish liner services the shipping fees to foreign owners will grow each year. This is a very important problem on the eve of a discussion on the shape of the five-year plan."

After analyzing the materials prepared by the Ministry of Foreign Trade and Maritime Economy, after listening to the representatives of other ministries and after the discussion, the Commission for Maritime Economy and Shipping decided to prepare an opinion on the modernization of the Polish merchant fleet.

9272
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HARD CURRENCY, DINAR SAVINGS DISCUSSED

Belgrade BORBA in Serbo-Croatian 25 Sep 80 p 3

[Excerpt] Of the 162 banks in the country, about 90 have accepted the agreement on granting credits to citizens on the basis of selling foreign exchange, which went into force officially on 1 October of this year. According to this agreement, every citizen who sells foreign exchange receives four times more credits for building housing and developing his independent economic activity. In regard to foreign exchange savings deposits, which are the main source for selling foreign exchange, following the winter decline, these savings are again increasing. From 31 December 1979 to 20 August 1980 they increased from 146.7 billion to 211 billion dinars and surpassed dinar savings. Most of this increase (about 50.3 billion dinars) was the result of devaluation which automatically increased foreign exchange deposits expressed in dinars. But even when this sum is deducted, foreign exchange savings nevertheless increased by about 14 percent over last year. This is not much, but also not a small amount, when one recalls that it was falling at the beginning of the year. In contrast to this, dinar savings deposits are stagnating and in certain months such as March and May they even declined, but revived somewhat after the beginning of August. On 20 August they totaled 154.7 billion dinars compared to 152 billion dinars on 31 December 1979. Usually the reasons for stagnation in dinar savings is sought in inflation but there are also other reasons such as the decline in real personal incomes, the present psychosis on the market, etc. Dinars are being changed into foreign exchange more and more.

CSO: 2800

BRIEFS

AGRICULTURAL PRODUCTION--At the 25 September meeting of the FEC (Federal Executive Council) the draft program and measures for grain and industrial crop production in 1981 was examined. It is planned to produce 18 million tons of grain, including 6 million tons of wheat, or 18 percent more than in 1979, 11 million tons of corn (11 percent more than in 1979), 7.8 million tons of sugar beets (26 percent more than in 1979) which would yield about 953,000 tons of sugar or 19.8 percent more than in 1979. This amount of sugar would not only satisfy the needs of the domestic market but would make it possible to export certain quantities. In addition, 594,000 tons of sunflowers would be produced, or 18 percent more than in 1979, from which about 250,000 tons of oil could be produced; this, added to vegetable oil produced from other crops, would bring a total of 325,000 tons or enough to meet the needs of the domestic market and enable the export of certain amounts. In order to create conditions as favorable as possible for increasing production, the FEC has established new producer-sale and protective prices for basic agricultural products from the 1981 harvest, to go into effect by 1 October 1980. [Excerpt] [Belgrade BORBA in Serbo-Croatian 27 Sep 80 p 4]

FERTILIZER SHORTAGE IN KOSOVO--That which caused a late harvest in Kosovo (lack of spare parts for combines) is now happening during fall planting, only this time it is a lack of artificial fertilizers. When the winter crop plan was recently adopted in Kosovo, it was openly said that an arrogant attitude would no longer be tolerated by anyone or any organization in cases where planned planting tasks are not carried out; because Kosovo can produce enough grain not only for its own needs but also for export. Unfortunately, this has not been the case this year. As a result of the fact that more than 20,000 hectares of arable land were not planted, Kosovo will have to import about 8,000 railroad carloads of bread grain for which scarce foreign exchange must be paid. About 75,000 tons of mineral fertilizers are needed for planting in Kosovo; the "Agrokosovo" has only about 15,000 tons in reserve, while there is a very little in addition on private farms. But an additional 60,000 tons are needed to plant the over 105,000 hectares of winter crops; of this amount only "Agrokosovo" has about 20,000 tons. Some agricultural organizations and private farmers cooperating with

cooperatives, fearing for the quality of planting, rushed to purchase fertilizer from outside, which is more expensive and involves added transportation costs. [Excerpt] [Belgrade BORBA in Serbo-Croatian 2 Oct 80 p 5]

ALUMINUM PRODUCTION--Although bauxite production is growing, bauxite exports are gradually declining because of the increased needs of new alumina factories. In the 1981-85 period bauxite will mainly be processed domestically, but exports of alumina, aluminum, and the processing of this metal and its alloys will increase. It is estimated that by 1985, 50 to 60 percent of alumina production will be exported annually, or about 800,000 tons. This is twice as much as is exported now. Greater reduction in alumina exports can be expected after 1990 when the obligatory exports to the USSR cease and new aluminum electrolysis facilities are built in our country. Aluminum exports in 1985 are expected to rise to over 120,000 tons, or 2.5 times more than now. Aluminum will be exported on the basis of long-term business arrangements with the GDR, France, Bulgaria and Czechoslovakia. Also, certain quantities of aluminum will have to be imported to utilize processing capacities. Not until after 1990 will conditions be created to free us from aluminum imports. More aluminum manufactured goods are expected to be sold abroad. We now export 50,000 to 55,000 tons of aluminum and aluminum alloy products which is 40 percent of total production. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 30 Sep 80 p 12]

COAL IMPORTS--The FEC has approved the import of 200,000 tons of briquettes and approval for an additional 500,000 tons is expected, which nevertheless will not be enough to meet consumer needs. Mines would certainly have been able this year to produce at least 1 million tons more of coal if they had been given the foreign exchange to purchase spare parts and equipment on time. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 3 Oct 80 p 1]

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No. 2058

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CONTENTS

BULGARIA

Trade Relations With African Countries Surveyed
(Dimitur V. Khadzhinikolov; VUNSHNA TURGOVIYA, Nos 7-8, 1980) 1

Practical Way To Save Liquid Fuel for Heating Suggested
(Tsvetan Furenski; ZEMEDELSKO ZNAME, 23 Sep 80) .. 11

Losses in Agriculture Caused by Erosion
(Neycho Onchev; KOOPERATIVNO SELO, 19 Sep 80) 14

Editorial Calls for Gathering of Crops, Reducing Losses
(Editorial; KOOPERATIVNO SELO, 18 Sep 80) 17

Organization of Operations on Bulgarian Ferry Boats
(Anna Encheva, et al.; KORABOSTROENE KORABOPLAVANE, Jun,Jul 80) 19

Specifications of New Dual Purpose Ship
(KORABOSTROENE KORABOPLAVANE, Jul 80) 27

Ship Reconstructed Into Purification Station
(Kosta Kostov; KORABOSTROENE KORABOPLAVANE, Jul 80) 28

CZECHOSLOVAKIA

Use of Prices to Press for Conservation, Quality Viewed
(Vlastimil Boura; HOSPODARSKE NOVINY, 29 Aug 80) . 34

Key Construction Projects Progress Reviewed
(Jozef Hudec; HOSPODARSKE NOVINY, 19 Sep 80) 41

Progress in Metallurgy, Engineering Viewed
(Jiri Poelt; HOSPODARSKE NOVINY, 12 Sep 80) 44

GERMAN DEMOCRATIC REPUBLIC

Figures Provided on Development of Synthetics Industry
(PRESSE-INFORMATIONEN, 31 Jul 80) 47

Problems Related to Building Explosions Examined
(Johannes Pester, Thomas Wartner; CHEMISCHE TECHNIK, Sep 80) 51

HUNGARY

Development of Manpower Situation Discussed
(Jozsef Laczo; FIGYELO, 10 Sep 80) 64

Privately Financed Housing Construction Discussed
(Katalin Bossanyi; FIGYELO, 10 Sep 80) 69

Agricultural Price Changes Slated for Next Year
(FIGYELO, 27 Aug 80) 78

Current, Future Role of Food Industry Depicted
(Imre Kovacs; KOZGAZDASAGI SZEMLE, Jul-Aug 80) 80

Food Industry Related Activities of Farms Noted
(D. Tamas Horvath; FIGYELO, 27 Aug 80) 95

Hungary Developing as Producer of Meat
(Marton Lovas; FIGYELO, 27 Aug 80) 97

ROMANIA

Public Food Service Enterprises Move Toward Self-Supply
(I. Paunescu; REVISTA ECONOMICA, 29 Aug 80) 99

YUGOSLAVIA

Briefs
Reduced Steel Production 104
Reduced Heat in Belgrade 104
Foreign Invesment 104
Labor Accident at KRSko 105
Non-Economic Investments 105
Lag in Machine Industry 105
Kosovo Foreign Trade 106

TRADE RELATIONS WITH AFRICAN COUNTRIES SURVEYED

Sofia VUNSHNA TURGOVIYA in Bulgarian Nos 7-8, 1980 pp 9-13

[Article by Dimitur V. Khadzhinikolov: "Development of Foreign Trade Relations Between Bulgaria and the Countries in Tropical Africa"]

[Text] The establishment of long-term stable relations with the developing countries is a prime task of our foreign trade both from the viewpoint of Bulgarian national interests and of the active anti-imperialist policy pursued by these countries, aimed at surmounting economic backwardness and dependence inherited from colonialism.

The share of the developing countries in Bulgarian foreign trade has been rising steadily. Whereas it accounted for 2.9 percent in 1960, it rose to 5.6 percent in 1970 and 7.3 percent in 1978. Despite this, considerable unused possibilities remain for expanding foreign trade relations with these countries. A comparison with other European CEMA-member countries shows that developing countries account for 9.1 percent of Hungarian foreign trade and 6.6 percent for Czechoslovak foreign trade, ranging between 5 and 10 percent for most CEMA-member countries. This shows that, to a large extent, this is a common problem and that its solution should be sought both on a bilateral and a multilateral basis within CEMA.

The breakdown of foreign trade with the developing countries, by area, in the 1970s is approximately the same as in the 1960s: The Arab countries account for about 60 percent; South and Southeast Asia, 20 percent; Latin America, 7 percent; and tropical Africa, about 6 percent. The main reasons for this breakdown are Bulgaria's traditional trade relations with Middle Eastern countries, the economic backwardness of tropical African countries, inherited from colonialism, the relative distance, undeveloped communications, and others.

Bulgaria's foreign trade with tropical Africa is focused on several countries which account for over 90 percent of the total.

As shown in Table 1, Bulgaria has relatively greater relations with Nigeria, Angola, Tanzania, Mozambique, and Ethiopia. It is natural for a country such as Bulgaria not to develop its foreign trade on an identical basis

with the 46 states found in Africa south of the Sahara. On the other hand, a certain expansion of contacts with the other countries in the area would be useful. Relations are successfully, even though sporadically, developing with some new partners such as Uganda, Zambia and the Ivory Coast. Let us note that Angola and Mozambique are also relatively new partners.

Unquestionably, the attention is focused on countries which assume a leading position in the economic and social development of the continent. In this respect we shall intensify our relations with Nigeria, Angola, Tanzania, Ghana and others. However, the relatively rapidly developing countries in the area include some with which our foreign trade contacts are in their very beginning, such as the Ivory Coast, Senegal, Kenya, Liberia, Gabon and others. Some goods, manufactured on a license basis, could find their place in our imports, along with traditional goods. This would facilitate the access of other Bulgarian goods on their markets. Cooperation may be developed in agriculture, transportation, construction, and others.

The influence of noneconomic factors is a characteristic feature of Bulgaria's foreign trade geographic breakdown in the area. Bulgaria is displaying its solidarity with the struggle waged by the African peoples against neocolonialism and is assisting them in accordance with its possibilities. For this reason we could expect a more extensive development of foreign trade relations with countries such as Angola, Ethiopia, Mozambique, Benin and other socialist oriented countries.

Characteristic of the commodity structure of Bulgarian exports to tropical African countries is the predominance of finished goods--machines, chemicals, consumer goods, food items, medicines, shoes and clothing. Particular attention should be paid to articles such as automobile batteries exported to Angola, Ghana, Nigeria, Ethiopia, and others; electric hoists and gas operated lift trucks (Angola, Nigeria); pumps--to Nigeria and Mozambique; equipment for the construction industry (Tanzania), the textile industry (Nigeria), and the food industry (Senegal, Sudan). Pharmaceuticals are exported in greater quantities to Angola, Mozambique, Gambia, Togo, Ghana, Guinea, Senegal, Dahomey, Nigeria, Liberia, Sierra Leone and Uganda. This frequently occurs as different types of aid.[1] Data from "Vunshna Turgoviya na NRB 1960-1978" [1960-1978 Bulgarian Foreign Trade], Sofia, pp 36-119.

Table 1. Bulgarian Trade With Some Tropical African Countries (million leva in prices of corresponding years)

Country	1976	1977	1978
1. Nigeria	28.9	32.1	36.4
2. Angola	0.6	20.3	17.2
3. Tanzania	1.4	6.6	9.4
4. Ghana	0.1	1.8	2.1
5. Mozambique	0.1	2.0	0.5
6. People's Republic of the Congo	1.3	0.8	0.4
7. Ethiopia	0.2	2.8	0.4
8. Guinea	1.7	4.8	0.1

Raw material of agricultural and nonagricultural origin such as petroleum, iron ore, rare metals, cocoa, coffee, and others predominate among Bulgaria's imports from tropical Africa. This import structure is determined, above all, by the objective conditions prevailing in tropical African countries whose economy is of a strongly emphasized agrarian-raw material nature and in whose exports one or several items considerably predominate. This is the case of cocoa for Ghana, copper for Zambia, petroleum for Nigeria, and cotton for the Sudan.

An indicator characterizing as agrarian the economy of these countries is the participation of agriculture in the creation of the gross national product and the national income. Depending on the level of development of the economic structure, the share of agriculture, which is predominately unprocessed, in the newly created national income varies from 30 percent for the Ivory Coast to 50-60 percent or more for Mali, Nigeria, Tanzania and other countries in the group of the economically least developed countries.

Despite the great importance of agriculture to the economies of these countries, because of the primitive nature of the cultivation of the land they are unable to insure entirely their populations' nutrition. Hence the great attention which is being paid of late to the reconstruction and modernization of agriculture in the area. At the 10th FAO Conference for African Countries, held in November 1978 in Arusha (Tanzania), a plan was adopted according to which by 1985 agriculture on the continent should meet not 90 percent of its domestic food requirements as is the present case, but 94-95 percent. This called for capital investments totaling $27.3 billion.[2] This program involves drastic increases in imports of chemical fertilizers, herbicides, agricultural equipment, seeds, and purebred cattle.

The concept of "collective reliance on one's own forces," which, at the present stage of the development of the region's economy is related to a reorientation toward the accelerated development of agriculture, should not be considered separately from the global program for a redistribution of production capacities in industry in favor of the developing countries, including those of tropical Africa. Such structural changes, however, would be largely impossible to implement without increasing the share of finished goods in exports and without the diversification of the latter. That is why the efforts of the tropical African countries are focused precisely on increasing the participation of the processing industry in their exports and eliminating their single-crop nature.

Along with these two factors, which strongly affect the foreign economic ties of the countries under consideration, let us note another one: the geographic reorientation of foreign trade. Characteristic of this trend are the following features: 1) A lowering of the share of leading partners and broadening the circles of correspondents; appearance of significant "new" partners of the region's countries; 2) removal of the former

mother countries from their leading position or considerably reducing their share in the trade of the countries south of the Sahara; 3) intensifying integration processes horizontally and vertically (association with the EEC).[3]

As we pointed out, in a number of countries in the area the share of the leading partners is steadily decreasing in favor of new very active partners. The following table illustrates this conclusion.

Table 2. Share of the Leading Three Partners in the Foreign Trade of Some Tropical African Countries in Percent of Their Trade

Country	Imports		Exports	
	1970	1976	1970	1976
1. Nigeria	60	50	66	56
2. Ivory Coast	61	53	60	49
3. Senegal	60	54	67	69
4. Ethiopia	46	37	64	40
5. Tanzania	38	37	26	33

Source: Based on the United Nations Foreign Trade Yearbook, 1977.

The share of the leading partners in the foreign trade of some African countries is increasing as is the case, for example, with Tanzanian exports (Table 2) or Ugandan foreign trade. Here the first three correspondents are the following: Imports--Kenya, Great Britain, and the FRG; exports--United States, Great Britain and Japan which accounted, respectively, for 65 and 85 percent in 1976.[4]

A number of "new" and active partners are being added to the "traditional" partners of the countries in the area, most of them coming from the "small" developed capitalist countries such as Sweden, Norway, Austria, or Switzerland, or else large developing countries such as India and Egypt, and countries which have had relatively high rates of economic development in recent years, such as Singapore, Kuwait, and others. The share of the socialist countries has been rising as well. From 1950 to 1976 trade between the European CEMA-member countries and the tropical African countries has been increasing at the annual average rate of over 11 percent. Despite this, the share of CEMA in the region's foreign trade is consistent neither with the increased possibilities of the socialist countries nor the desire of the African countries to surmount their economic dependence on imperialism.

The integration processes occurring in tropical Africa have a very slight reflection on the intraregional trade and foreign trade relations of these countries for a number of mainly objective reasons. This includes the similar structure of imports and exports, strong dependence of foreign investment and financing sources, poor development of communications, and

so on. Intraregional trade in the West African Economic Community, where integration processes are the relatively most developed in Africa accounted in 1976 for no more than about 7 percent of the entire trade of the countries within the community.[5] The aspiration of the African countries to develop a system for "collective reliance on their own forces," however, proves the significance of integration processes in regional economic organizations of tropical African countries may rise considerably.

The association of most of the countries south of the Sahara with the Common Market plays a considerable role in the development of their foreign trade. The 1979 Lome Convention increased the list of goods which the African countries may export to the EEC on a custom-free basis. Even though such preferences are not reciprocal, through industrial "cooperation," foreign investments, and the unpublicized granting of visible and invisible tariff and nontariff preferences, the association with the EEC facilitates the access of Western European goods to the African market.

Such development of economic relations between the EEC and tropical Africa presumes the need for a more persistent policy on the part of the Bulgarian People's Republic and the members of the socialist comity, aimed at achieving the status of most favored nation.

The general processes of the economic development of the area are refracted through the national characteristics of the individual countries in accordance with the direction followed by their socioeconomic development. In order to clarify the specific possibilities for the intensification of foreign trade between Bulgaria and the tropical African countries we must study the conditions of economic development and objectives of the foreign trade activities of the main and more promising foreign trade partners of the Bulgarian People's Republic.

Nigeria

Nigeria is the seventh biggest oil producing country. It has considerable reserves of natural gas, coal, iron ore, nonferrous metal ores, bauxite, asbestos, titanium and other minerals. Raw materials clearly predominate in the country's exports. For example, in 1977 petroleum accounted for over 93 percent of total exports.[6] The import structure is as follows: food, 10 percent; raw materials and semifinished goods for industry, 28.4 percent; fuels, 2.8 percent; machines and equipment, 24.4 percent; transport facilities, 23.5 percent; and consumer goods, 10.9 percent. The more important import commodities are fish (fresh and frozen), wheat, fruits and vegetables, chemicals, pharmaceuticals, cement, ferrous metals and rolled metal goods, textiles, and clothing. The share of passenger cars and electrical equipment is particularly high as it is of equipment for the leather-novelty industry and the textile, petroleum extraction and mining industries.

Thanks to the considerable income from sales of petroleum, owned by the state, Nigeria is substantially increasing its imports of machines and equipment and developing its domestic industrial capacities. Of late the greatest emphasis has been on modernizing agriculture and the infrastructure, and the creation of a national metallurgical complex.

Despite the great increase in trade between Nigeria and the European socialist CEMA-member countries, their position on the Nigerian market is not consistent with their possibilities, due to a number of reasons: The strong positions held by foreign capital, historical traditions, unfamiliarity with the market, and so on. As Prof Dr A. Gromyko, director of the Africa Institute of the USSR Academy of Sciences, a noted Soviet scientist, emphasizes "Possibilities for economic cooperation are still not being fully used."[8] It is noteworthy that Bulgaria is one of the most active CEMA-member countries in developing trade with Nigeria. Between 1972 and 1976 Bulgaria's foreign trade with Nigeria rose by a factor of roughly 7. Yugoslavia and Hungary are among the European socialist countries whose participation in Nigerian foreign trade is growing at the fastest rate. Among the Western countries some new partners such as Norway, Greece and Spain are successfully developing their relations. Within the same period of time their trade with Nigeria has increased over tenfold.

Bearing in mind the structure of Nigerian imports and exports and the main directions followed by the country in its development, as earmarked in the third national economic plan for 1975-1980 (accelerated development of agriculture, including the creation of standard state farms, development of the canning industry and the production of agricultural equipment, chemical fertilizers, and so on, the development of light industry, the creation of a national metallurgical complex, the expansion of geological studies and modernization of the extracting industry, the diversification of exports, the development of the infrastructure and the building of a new capital of the country), a number of trends and ways of Bulgarian-Nigerian foreign trade contacts could be considered promising. They could include trade in agricultural machine building and food industry equipment, and equipment for the light and textile industries. The quantities of chemical fertilizers, rolled ferrous metals, electric motors, intraplant transport equipment, fresh and processed agricultural commodities, and so on, exported by Bulgaria, could be increased considerably.

The Afrocommers and Globfish mixed companies are favorably influencing the development of Bulgarian-Nigerian economic relations. Thanks to Globfish Bulgarian participation has increased in the fish and fish product markets not only of Nigeria but of other African countries as well.

Practical experience indicates that increasing the number of Bulgarian specialists working in Nigeria also leads to bigger Bulgarian-Nigerian

trade. The building of the metallurgical combine in Adjaokut, with Soviet help, could increase the number of Bulgarians employed there. This would have a favorable influence on the overall development of Bulgarian-Nigerian economic cooperation. The building of the new capital of the country offers additional possibilities for increasing the number of Bulgarian specialists.

Angola

Following the victory of the national liberation revolution of the Angolan people in 1975 good possibilities appeared for Bulgarian-Angolan economic cooperation.

Angola has rich natural deposits of oil (half the Nigerian amount), diamonds, iron ore, copper, lead, gold, nickel, mercury, and other rare metals. Under the Portuguese colonial system, Angolan exports, consisting of raw materials (four raw materials--oil, diamonds, coffee and iron ore account for 73 percent of total exports) went to the mother country, South Africa and the main capitalist countries, meeting their requirements for some valuable raw materials. Imports were used to develop the extracting industry and the infrastructure, and contributed to the extraction of Angolan national resources. Currently a reorientation process in the field of foreign trade is taking place, related to eliminating the dependence of the country on imperialism and the organization of total national control over natural resources and the struggle against the racist aggressive regimes in South Africa and Namibia.

The development of agriculture in the young country is a promising area for economic cooperation between Bulgaria and Angola. Imports of agricultural equipment are increasing. The Bulgarian enterprise Agrokomplekt is planning the development of vegetable plantations near Luanda on an area of 4,000 hectares. Machines, fertilizers, plant protection chemicals and auxiliary equipment will be imported from Bulgaria. The joint production of some models of agricultural machines and appliances is contemplated as well. The possibility exists to set up mixed companies for the production and marketing of electric motors, forklift trucks and gas-operated lift trucks and other items produced by the machine building industry. The Bulgargeomin DSO [State Economic Trust] has undertaken the construction of a pilot system for the production of 30,000 tons of phosphate meal annually.

Ethiopia

The Ethiopian economy has a clearly expressed agrarian character. This is reflected in its exports 80 percent of which consist of raw agricultural commodities, mainly coffee. Following the adoption of a socialist orientation by the country, everything possible is being done to develop a modern material and technical agricultural base. At the same time, proper attention is paid to the development of industry and the infrastructure.

Currently the emphasis is on the modernization of the light industry--textiles, shoes, and leather items.

Despite the fast growth of foreign trade between Ethiopia and the socialist countries, they remain weak and are focused mainly on trade in coffee and food products. This is largely due to the difficult economic situation of the country inherited from the monarchy, the export structure, which is of a one-crop nature, and the export traditions.

The successful economic development of the country and its gradual inclusion in the socialist international division of labor are factors which could increase possibilities for expanding trade between Ethiopia and the socialist countries, including Bulgaria. For the time being, in addition to importing coffee from Ethiopia, textiles, leather goods, some nonferrous metals and artisan products could be of interest as well.

Mozambique

In 1976 the country imported goods worth $417 million while its exports totaled $201 million.[9] The structure of Mozambican imports is approximately as follows: food and beverages, 10 percent; industrial raw materials, 15 percent; fuels, 11 percent; machines and equipment, 32 percent; transport facilities, 26 percent; and consumer goods, 6 percent. Raw and processed agricultural commodities predominate in the country's exports. The main items here are peanuts, sugar, fruits, cotton, copra, timber and coal.

The main items of Bulgarian exports to Mozambique are canned fish, wine and, above all, water pumps. In 1978 Bulgaria exported 2,000 electric water pumps to Mozambique.

The expansion of foreign trade relations between Bulgaria and the countries of tropical Africa requires the solution of some problems. One of them is the establishment of direct contacts with companies in the developing countries. The use of middlemen who are, most frequently, the representatives of big Western companies, is due, on the one hand, to the insufficient knowledge of the market and, on the other, to some difficulties in the financing of Bulgarian exports, i.e., the granting of credits to the partners in the area. Despite the difficulties, the Bulgarian foreign trade enterprises are strengthening their contacts with national and state enterprises in these countries.

Another important problem is that of properly combining short-term with long-term planning of foreign trade relations. Bearing in mind the difficulties experienced by some of these countries in connection with their balance of trade and the desire of the African countries to diversify exports, along with importing raw materials from them something could be done to promote imports of some finished goods. Trade development programs

could include some goods produced on licenses as well as those developed as the result of industrial cooperation with these countries. In this respect promising sectors include the timber processing, leather, pharmaceutical, and other industries. Two facts should be borne in mind: 1) the adamant desire of the developing countries, including those of tropical Africa, considerably to expand their exports of finished goods; 2) the contemporary trends in the international division of labor related to a considerable redistribution of capacities in these and other industrial sectors.

As a number of economists have noted, the process of interweaving trade relations with operations related to government credits, economic and scientific and technical cooperation, and direct industrial cooperation is intensifying. The comprehensive nature of foreign economic relations is expressed in the joint development of ore deposits, the extraction and processing of timber (Mozambique, Guinea, Ivory Coast), the creation of mixed enterprises for international trucking, the organization of joint fishing activities (Nigeria, Angola, Mozambique), the building of model agricultural enterprises (Mozambique, Tanzania), and others.

The assignment of Bulgarian specialists and the training of local cadres by Bulgarian specialists is of great importance in the development of economic cooperation with the countries in that area. Good possibilities exist for increasing Bulgarian participation in the development of the region's agriculture, implementation of design and construction operations, mining and geological surveys, and road construction.

Contacts at different levels have a beneficial impact on the development of cooperation with tropical African countries. The visits which the Bulgarian party and government delegation, headed by Comrade Todor Zhivkov, paid to Nigeria, Angola, Mozambique and Ethiopia in 1978 was particularly important. As was noted at the meeting of the BCP Central Committee Politburo and the State Council and Council of Ministers of the Bulgarian People's Republic, at which the visit was discussed, this was an important manifestation of the solidarity of the members of the socialist comity with the struggle waged by the young African peoples for strengthening their national independence and promoting their social and economic progress.

FOOTNOTES

1. Data taken from "Vunshna Turgoviya na NRB 1960-1978" [Bulgarian Foreign Trade for 1960-1978], Sofia, pp 36-119.

2. MEMO, No 8, 1979, p 27.

3. In economics horizontal integration is integration processes among countries with a similar socioeconomic development; vertical integration means integration between developed and developing countries.

4. "Africa South of the Sahara," Europa Publications LTD, London, 1979, p 1042.

5. UNCTAD, "Foreign Trade Manual," Geneva, 1979, p 54.

6. Based on the United Nations Foreign Trade Yearbook.

7. In 1973 foreign investments in Nigeria totaled $2.1 billion--more than in any other parts in the area together. BIKI, Appendix No 3, 1979, p 69.

8. A. Gromyko, "Nigeria in the International Arena." AZIYA I AFRIKA SEGODNYA, No 3, 1979, p 19.

9. Based on United Nations Foreign Trade Statistical Yearbook, 1977, pp 668-670.

5003
CSO: 2200

PRACTICAL WAY TO SAVE LIQUID FUEL FOR HEATING SUGGESTED

Sofia ZEMEDELSKO ZNAME in Bulgarian 23 Sep 80 p 2

[Article by Tsvetan Furenski: "Petroleum, Electric Power or...Small Steam Boilers?"]

[Text] What would be easier and more practical than living in one's house in town or country without central steam heat, pouring every morning two buckets of coal into the furnace of the small steam boiler in the basement and have even heat throughout the day in all rooms!

However, it is not merely a question of the ease with which heating could be provided with a small steam boiler, even though this is quite important. The problem lies, above all, in the saving of liquid fuels and electric power whose prices have immeasurably risen in recent years on the international market. In Vratsa Okrug alone at present over 30,000 kerosene stoves are being used in private homes. Every year over 10,000 tons of kerosene are used for household heating. Multiplying these approximate figures by the number of okrugs throughout the country we would reach quantities which could fill up a riverbed the size of the Iskur. All this could be saved and used by other economic sectors should the individual houses have small steam boilers using solid fuel.

Having realized the advantages of such heating, many people in town and country are looking for such steam boilers. They look but do not find and, failing to find, seek... experts, whether self-taught or with a diploma. Few people know that in our country small steam boilers are already being produced. For the past 18 months this assignment has been assumed by the Racho Kovacha DPP [State Production Enterprise] in Gabrovo.

I telephoned Ivan Bechev, head of the enterprise's marketing department:

"It is true that for some time we have been producing small steam boilers meeting the requirements of single family houses of no more than three floors. They are based on our own design which has already passed the

tests for three separate sizes. The most practical for small or medium-sized houses are steam boilers with 2.8 square meters of heating area developing a capacity of 19,000 calories per hour. For bigger two- and three-story buildings and smaller offices, more powerful steam boilers generating 45,000 and 69,000 calories per hour are produced. All three sizes use solid fuel and coal outlays per day do not exceed two bucketfuls. Currently our enterprise has an annual production capacity for 1,500 small steam boilers. However, we are encountering exceptional difficulties in finding iron castings and some types of steel sheets...."

Without discussing now the difficulties of the Racho Kovacha DPP in procuring materials, let us point out a few other curious features of this production. Usually, steam boilers are installed in the basement or in a small shaft in the courtyard, below the level of the radiators, while an expansion container is placed on the roof (the ceiling); heat exchange water moves along the pipes and the radiators and does not have to be under pressure. The water volume of the first and second models are 60 and 125 liters while coal expenditures range from 20 to 40 kg daily. With one charging the boiler operates 7 hours 30 minutes.

Why is it that small steam boilers are still unavailable on the market?...

Veselin Dimitrov, deputy director of the Vratsa Wholesale Trade Okrug Enterprise:

"So far we have not been offered for sale small steam boilers neither in contracting nor in writing. I believe that we could undertake an obligation in this respect. As to the radiators which are also necessary for this purpose, they are not [illegible] em we produce."

Yortan Bratanov, director of the Combustion and Construction Materials Okrug Enterprise in Vratsa:

"We have been repeatedly asked to sell such boilers and it was suggested to us to submit a request. However, we are still not confident of the possibility to sell them, due to the lack of radiators on the market."

As we may see, along with this restraint, in both statements the question is raised of the radiators which so far have not been available to private individuals. Furthermore, another question arises of equal significance: Who will undertake to assemble and service the small steam boilers and the related installations? It is true that Vratsa has the Assemblies Enterprise of the Construction and Installation Combine whose collective has undertaken the obligation to install steam, water, electrical, air conditioning and ventilation systems. However, it does this only in new housing blocks with central heating, communal service buildings and industrial construction. No services are provided to private individuals. Panel and cast iron radiators received from

Strazhitsa Village, Veliko Turnovo Okrug or from the G. Dimitrov Plant in Burgas are used only for public or big residential buildings and cannot be sold to private individuals. What then?...

"People are seeking small steam boilers and radiators driven by need," said Engineer Slavcho Zlatkov, director of the Promishlena Energetika Economic Enterprise, which was recently created precisely with a view tc promoting conservation of fuels and materials. "However, no one can easily deal as a private individual with this problem of acquiring materials and installing and maintaining small steam boilers and systems. In order to make this work orderly from the very beginning, I believe that a specific performing enterprise must be found. Decree No 23 of the Council of Ministers, dated 11 May 1979, mentions the organization of a subscription service. Even though the collective of our enterprise is engaged in the repair of steam boilers and thermoelectric power plants, we could provide such services in private homes as well."

In the past decade liquid fuels have become a strategic problem and our country is experiencing its effect. The small steam heating boilers for separate houses or floors, using solid fuel, would facilitate the situation to a certain extent. In order to achieve this sooner, we must as of now resolve problems related to the production, sales, installation, and servicing of steam boilers and systems. Providing steam heat this way should be considered a significant social gain which will bring the villages even closer to the cities.

5003
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LOSSES IN AGRICULTURE CAUSED BY EROSION

Sofia KOOPERATIVNO SELO in Bulgarian 19 Sep 80 p 2

[Article by Dr Neycho Onchev, senior science associate at N. Pushkarov Institute of Soil Science and Crop Programming, Sofia: "Easy to Waste, Hard to Harvest--More on the National Erosion-Control Program--Many Questions Await Solution"]

> [Text] Without minimizing the part played in erosion control by technical engineering and forest melioration, it is known that without the agricultural technology of erosion control arable lands cannot be protected against the destructive effect of water and wind. Moreover, agricultural technology also creates conditions for maximum accumulation and long-term retention of rain water in the arable stratum. Obviously, such agricultural technology is needed most of all on eroded lands in order to raise and maintain their fertility.

The unsatisfactory results from the considerable funds appropriated every year for erosion control in our country are due mainly to the limited agricultural technology which does not measure up to requirements in this area. This results in huge soil losses. About 130 million tons of soil out of the total agricultural area are carried away on average per year by reason of water-induced sheet erosion. And this means a loss of about 130,000 tons of grain annually. If all this continues, losses in the next 10 years will average 700,000 tons of grain per year. We are not referring here to the losses which our agriculture sustains annually from lands already eroded, whose fertility has dwindled greatly. As a result of improper use last year, some soils on sloping terrains are in such condition that their effective use is limited under the present system of farming. Excluding these from the total tillable area must not be regarded as the soundest decision. From abandoned lands alone the country has been deprived of about 10 million tons of grain in the past 20 years.

The scientific studies of the National Long-Term Erosion-Control Program are the basis for the further application of erosion-control agricultural

technology. For all agroindustrial complexes the program indicates suitable technologies that will limit the destructive effect of water and wind.

Progress in this direction is favored by the fact that the envisaged activities are within the competence of the agricultural specialists and are increasingly in line with the capabilities of the technical equipment of our agriculture. They are, above all, measures requiring only that the generally accepted methods of applying agricultural technology that are incompatible with soil-protection requirements should be changed.

For all lands in the total arable area which are subject to water erosion (lands having a terrain slope of more than 1 percent), these boil down to the following:

--Basic soil tillage, preplant tillage, tillage during growing season, application of fertilizer by ground equipment, planting and crop harvesting must be performed in the direction of the contours with slope deviation not exceeding 1-2 percent for soils of light mechanical composition and up to 3-4 percent for soils of heavy mechanical composition. Thus, by this measure alone water erosion can be reduced from 40 to 50 percent on most arable lands. But to achieve a good result, buffer strips or channel terraces shortening the length of the slope must be built on all lands with sloping terrains.

--Deep tillage must be initiated on flat territories, moving gradually to croplands with greater slopes. Tillage methods are subject to the following requirements: the greater the slope of the terrain, the narrower the beds must be in order to form more of the channels and ridges that play a significant water-retention and erosion-control role in contour cultivation; instead of the usual deep tillage, furrow-and-ridge tillage must be employed. This is done by removing the moldboard of one of the plow bodies; shallow soils with a light mechanical composition and lands with predominantly highly eroded soils are tilled with moldboardless plows or by subsurface cultivators in order to save the post-harvesting plant residues as a means of controlling water and wind erosion.

--In the case of croplands subject to active erosion, reduced tillage, including zero-tillage planting, is to be preferred, the aim being to save more plant residues on the surface.

--When row crops are raised on land subject to water and wind erosion, the elimination of tillage during the growing season through the use of herbicides should be practiced in cases where enough post-harvesting plant residues have been saved. In other cases tillage during the growing season is to be preferred, with simultaneous formation of furrows between the rows to hold back the runoff.

--On lands with a slope of more than 1 percent that are occupied by crops with a compact surface, immediately after planting the runoff-drainage

furrows, familiar in our agricultural practice, must be dug, with longitudinal slope not exceeding 1-2 percent for soils of light mechanical composition or 3-4 percent for soils of heavy mechanical composition.

Wherever tobacco is raised as a single crop (and especially in the case of irrigated areas), as well as in the case of fruit orchards, a catch-crop of rye for fodder (winter peas) must be put in so as to conserve the soil from erosion and as a source of green fodder.

In regions subject to wind erosion the danger can be avoided altogether by means of agricultural technology if the following measures are practiced:

--First and foremost, tillage and planting must be carried on in a direction perpendicular to the direction of the prevailing winds.

--Priority must be given to tillage that increases the roughness of the soil surface (such as furrow-and-ridge tillage) or increases and holds the quantity of post-harvesting plant residues till the end of May.

--On the most threatened croplands, strip rotation of crops in a direction perpendicular to the direction of the prevailing dust-carrying winds must be introduced.

--On croplands of sugar beets and newly planted alfalfa, windbreak rows of cornstalks or rye must be provided, planted in September of the year before in strips (of 3-4 rows each), at a distance apart equal to the width of the seeder with which the crop is planted.

When we talk about the necessity of erosion-control agricultural technology, we must emphasize also certain unsolved problems. First and foremost, the obvious need for tractors to operate on more markedly sloping terrain and for reversible plows has not been met. Nor are the imports of subsurface cultivators, harrows and seeders for planting in untilled soil sufficient. Nor has the production of an implement for making runoff-retaining furrows, halted in our country more than 10 years ago, been reestablished despite the great advantage of this measure. Without the procurement or production of suitable grain combines for sloping terrains there will be no possibility of organizing highly effective production of crops with a compact surface, which crops, to a maximum extent, protect soil against erosion on sloping terrains.

A deficiency in the training of the specialists and machine operators employed in agriculture has still not been made good. Even now they are not taking a course on soil erosion and control, for which reason instances are not rare where the tremendous damage done by erosion makes no impression on the immediate organizers and performing personnel.

6474
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EDITORIAL CALLS FOR GATHERING OF CROPS, REDUCING LOSSES

Sofia KOOPERATIVNO SELO in Bulgarian 18 Sep 80 p 1

[Editorial: "Countryside and City Shoulder to Shoulder in a Great Battle"]

[Text] For days in a row now, nimble pickers have been active in the vegetable gardens and in the golden-leafed tobacco. Harvesting machines have invaded the corn and sunflower fields on an ever wider front. The corn is beginning to ripen, the soybean fields are starting to turn yellow, large grapes fill the vineyards. For agricultural workers the decisive days have arrived--days of great responsibility, of loss-free harvesting and fullest utilization of everything our land has yielded in order to fulfill the agricultural plan for 1980 and for the Seventh Five-Year Plan.

Appreciating that at the present moment the most important and crucial task of the party and people is harvesting and making full use of the crops, for its fulfillment the BCP Central Committee calls for mobilization of the forces of the entire party, of the Bulgarian National Agrarian Union, the Fatherland Front, the Bulgarian Trade Unions, the Dimitrov Communist Youth Union, all the country's labor and material resources. The working class, office workers, intellectuals, school-children and students, pensioners, all strata of the population must, with utmost energy, join with the agricultural workers in harvesting and utilizing the crops.

Field work so far shows that the farmers in many agroindustrial complexes have made good preparation for this great and crucial task. At the same time, the situation is alarming in some okrugs, agroindustrial complexes and processing enterprises where work is still not proceeding at the necessary pace. Less output than targeted on the daily schedule is being harvested from the field; enterprises' farm equipment and capacity are still not being fully utilized; considerable amounts of vegetables and fruits are spoiling. And the delay in maturation of the harvest and the danger of early frost make it imperative to move up target dates and start working on a wide front. One cannot help but be disturbed, for example, by the fact that this year in Mikhaylovgrad, Vidin and Vratsa okrugs and, to a certain extent, in Plovdiv too, the necessary measures have not been taken

to use combines in tomato-picking. Also alarming are the signs at some complexes of spillage and waste of sugar beets as they are harvested and hauled away, as well as the failure to provide--on time and in sufficient quantity--transportation, spare parts etc. And this is happening now, when working conditions are exceptionally favorable, but what would happen later when the rain is pouring down? These and other warning signals show that measures must be taken without delay to tighten up organization and discipline. A situation must be created of strict exactions and uncompromising intolerance of weaknesses; the quality of work must be decisively improved.

Even the most modest observations show that spillage during corn harvesting every year amounts to 40-50 kg of grain per decare. The situation is not much different with sunflowers and soybeans. Considerable quantities of cornstalks, soybean straw, sugar-beet leaves and tops, and sunflower cakes are wasted too, instead of being fully used for cattle feed. Agriculture now has considerably more and better machinery, as well as improved technologies for gathering and making the fullest use of plants "from root to tip."

The tasks that farm workers have to perform this autumn are many and complex. The basic and decisive condition for successful work, however, is that every complex and every enterprise of the food industry should set up the organization for multishift operation with its entire machinery and that live labor and working time should be used most effectively. Socialist competition must be launched among labor collectives on a wide scale. Advanced experience must be applied on a mass scale. "The experience of front-rankers and pacemakers," Comrade Todor Zhivkov points out, "must become the norm of work and action for the masses."

Gathering in the crops is a nationwide task, a concern not only of agricultural workers, but also of all citizens of the country. That is why now that the husbandmen of the land have been roused to action in the great offensive to gather in the crops, not a single enterprise and not a single labor collective must be left without a precisely defined and fulfilled pledge to agriculture. For, to set up an exemplary organization for highly efficient use of the entire machinery, for loss-free harvesting of the crops, for the processing and sale of output, as well as for on-time and high-standard planting of autumn crops, we need scrupulous maintenance of field machinery and punctual delivery to agricultural and processing enterprises of spare parts, components and assemblies, as well as packaging and other materials. There must be scrupulous concern for the living conditions of the machine operators, manual laborers, schoolchildren and students, and office workers who will lend a helping hand to the agricultural workers.

The hot autumn has come. The pre-congress enthusiasm of the labor collectives and the decision of the Political Bureau on nationwide mobilization for timely harvesting and full utilization of the crops have roused young and old to action. In the great battle to gather in the crops, countryside and city stand shoulder to shoulder.

6474
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ORGANIZATION OF OPERATIONS ON BULGARIAN FERRY BOATS

Varna KORABOSTROENE KORABOPLAVANE in Bulgarian Jun, Jul 80

[Article by Anna Encheva, Panayot Bobev, Atanas Andreev and Ventsislav Momchilov: "Organization of the Work of the Crews of the Bulgarian 'Geroite na Odesa' Class Ferryboats"]

[Jun 80, pp 5-6]

[Text] 1. Characteristics of the Round Trip and of the Technical Servicing of the Ferryboats

The importance of the Varna-Il'ichevsk Ferryboat Line is well known. The ferryboats servicing this line have the biggest railroad car capacity in the world. Their main technical parameters are the following:

Maximum length	185.40 meters
Maximum width	26.00 meters
Design draft	6.50 meters
Deadweight	12,160 tons

Fully loaded, the boat can hold 108 four-axle cars or 193 truck trailers of the ZIL-130 model.

The maximum continuous power generated by each of the two main engines is 8,800 horsepower at 227 rpm. The speed attained in tests of maximum continuous capacity of the main engines is 19 knots. The ferryboat is of the A2 class in terms of machine section automation as per the specification of the USSR Ship Registry.

These are modern and highly automated boats designed for intensive exploitation. The organization of the work of their crews is of prime importance from the economic and social viewpoints. That is why the Water Transport Institute in Varna has paid particular attention to timely work in this area.

The basic aspects of the methodical approach adopted by the Water Transport Institute in developing contemporary forms of organization of the work of

the crews are the following: determining the characteristic features of the line using the specific type of boats; the quantitative and qualitative study of the necessary labor outlays for the overall running of the ship; the most adequate breakdown of such labor expenditures between operating personnel aboard and ashore; efficient distribution of the available manpower of the crew among the various activities for insuring high labor productivity; defining a suitable working and resting schedule with a view to avoiding navigation safety risks or endangering the work capability and health of crew members. The solution of such problems on a contemporary scientific level also requires the use of the results of labor-physiological studies conducted by the Transport Medical Institute in Sofia with members of crews under specific working conditions. It is almost always necessary to formulate alternatives for the organization of the work aboard ship. A comparative analysis among such variants is indicative in the selection of the optimum variant for specific work conditions.

The article by St. Ivanov "Technology of Transportation by Ferryboat," published in issue No 1 for 1979 of this source describes the basic characteristics of the organization and technology of ferryboat haulage between Varna and Il'ichevsk.

Starting with 1 April 1979 a work schedule requiring a 72-hour round trip was applied. The characteristics of the trip, based on statistical operational data, were the following:

Coasting	29:00 hours
Pilotage and maneuvers	7:00 hours
Loading and unloading operations	20:30 hours
Technological delays in loading and unloading operations and takeoff	5:00 hours
Total	61:30 hours

Since the schedule stipulates 41 hours for the crossing and 31 hours for idling in the berth, a 5 hour reserve in crossing and a 5 hour 30 minute reserve for moorage at both ends exists.

Computations and studies were conducted to determine the characteristics of the line with a 60-hour round trip schedule. The schedule was adopted as of 1980. Its characteristics are the following:

Coasting	29:00 hours
Pilotage and maneuvers	7:00 hours
Loading and unloading operations	20:30 hours
Technological delays in loading and unloading operations and takeoff and idling for other reasons, totaling	3:30 hours
In other words: crossings	36:00 hours
Mooring	24:00 hours
Total	60:00 hours

We must bear in mind that the duration of the crossing, loading and unloading operations, and technological delays in loading and unloading operations and takeoff are based on assessments and averages of the gathered operational data. Usually they are shorter than the indicated figures which include a certain amount of spare time.

The 60-hour round trip faces the organization of the railroad transportation, navigation in the Varna channels, and all coastal services of the ferryboat system and, not least, work aboard the ferryboats, with strict requirements. The high level of technical readiness of the ferryboats is strictly mandatory.

The 72-hour and the 60-hour round trip have already been achieved. For this purpose the Water Transport Institute developed four alternatives for the organization of the work of the crews--two per round trip length. The first calls for completing loading and unloading operations and fastening and unfastening the freight cars by the crew; the second calls for the performance of this work by a coastal brigade.

The necessary labor outlays for ferryboat operations are subjected to quite precise computations, for the round trips have a specific duration and characteristics. The same applies to the breakdown of the worktime of the members of the crew for performing the various activities.

The necessary labor outlays for the technical servicing of the ferryboats between repairs are established through documents on the organization of continuous technical services, as shown in Table 1.

Table 1

Parts of the boat	Planned labor outlays for technical servicing of a ferryboat in man/days over a 2-year period	
	72-hour round trip	60-hour round trip
Machine section	51 812	55 034
Deck section	24 611	26 051
Electrical wiring and automation	16 580	16 520
Electrical radio navigation systems	1 147	1 147
Radio systems	1 478	1 478
Total for the boat	95 328	100 230

The following model for the operational-repair cycle has been suggested on the basis of the specific operational conditions and repair-preventive operations as stipulated in the documents:

- Plant repairs every two years; a minor 30-35 day repair is made on the third year of the commissioning, and a 60-65 day repair is made on the fifth year for the purpose of restoring the boat's class;

- The boat is withdrawn from sailing for 9 to 10 days for cleaning the main engines, cleaning and painting the deck, and other operations which require withdrawing the boat from work at the end of years during which no planned repairs are stipulated;

- Once every three months the boat is docked for the duration of one trip for so-called "preventive" work which involves technical servicing which the crews and the coastal technical service bases are unable to provide when the boat is sailing or docked.

With this model the average length of the operational period of the ferryboats total 328 days per year or 335.5 days per year with the first 2-year operational repair cycle. In the 72-hour round trips over a 2-year operational-repair cycle it totals 218, compared with 262 for the 60-hour round trips.

[Jul 80, pp 6-8]

[Text] 2. Required Labor Outlays for the Overall Exploitation of Ferryboats and Crew Variants

A basic schedule for the work breakdown of the crew members for various activities, within a single round trip, has been drafted for each one of the four variants of the labor organization aboard ship under the following conditions: working the stipulated amount of time on the basis of a 12-hour workday, carrying out all necessary activities related to the regular running of the ship, and foresight of substantiated shortage of work time for technical servicing, distributed among the various coastal services.

Meeting the regulated amount of work time by the crew members in a 12-hour workday aboard ship involves the following working and resting schedule: alternating periods of work aboard ship with equal amounts of free time ashore. There are two crews per ferryboat. This is based on the intensive exploitation of the ferryboats and the need for a great deal of nightime work. Rest ashore is better than on the ship. The great social advantages of this work and leisure time system are known.

Currently the crews alternate each 15 days. The Transport Medical Institute in Sofia conducted labor-physiological studies in August 1979 on the basis of a 72-hour round trip and loading and unloading operations and fastening and unfastening the freight cars by the crew. It was concluded that under the conditions of the study cases of fatigue at the end of the 15-day work period make the existing working schedule acceptable from the labor-physiological viewpoint, and that 15 days ashore insure the full

rest of all crew members. These conclusions do not apply to working conditions in a 60-hour round trip. This requires further studies. Possibly, they may result in the changing of crews at shorter intervals.

Table 2 shows the computed necessary labor outlays for the crews operating a ferryboat in each of the four variants of labor organization aboard ship.

Table 2

Crew labor outlays	Loading-unloading operations and fastening and unfastening freight cars by the crew		Loading and unloading operations and fastening and unfastening freight cars by a coastal brigade	
	72-hour round trip	60-hour round trip	72-hour round trip	60-hour round trip
Round trip, man/hours	1 460	1 245	1 270	1 060
Two-year interrepair period, man/hours/2 years	318 280	326 190	276 860	277 720
Available working time for technical servicing of the ship in operation in man/hours/2 years	64 900	65 440	72 736	73 393
Shortage of work done for technical servicing of the ship in operation in man/hours/2 years	32 335	34 790	22 592	26 937
Percent of the working time needed for technical servicing	33.9	34.7	23.07	26.9

Three variants of ship crews, as shown in Table 3, were deemed necessary on the basis of the quantitative and qualitative study of the required labor outlays for the operation of a ferryboat in the four variants of labor organization aboard ship.

Permanent floating brigades are contemplated to cover a considerable percentage of the working time shortage of the crew to provide technical servicing in the period between repairs as shown in Table 4.

Particular attention has been paid in drawing up the basic schedules for the breakdown of the working time of crew members among the various activities within a round trip to the creation of conditions for high labor productivity aboard ship and for insuring possibilities to rest between shifts and other operations.

Table 3.

1) Длъжност	2) Брой на членовете на екипажа			
	3) извършване на товарно-разтоварни операции и закрепване и освобождаване на вагоните от екипажа		4) извършване на товарно-разтоварни операции и закрепване и освобождаване на вагоните от брегова бригада	
	72-часов кръгов рейс 4a	60-часов кръгов рейс 4b	72-часов кръгов рейс 4a	60-часов кръгов рейс 4b
5) Капитан	1	1	1	
6) I пом. капитан	1	1	1	
7) Старши пом. капитан	1	1	1	
8) II пом. капитан	2	2	2	
9) III пом. капитан	2	2	2	
10) Зав. корабна радиостанция	1	1	1	
11) Главен механик	1	1	1	
12) Механици (II, III и IV)	3	3	3	
13) II механик (хидравлик)	1	1	1	
14) Електромеханик	1	1	1	
15) Корабен техн. по ел. инсталация	2	2	2	
16) Машинен бояджи	1	1	1	
17) Мотористи (от които най-малко трима с правоспособност за огняри)	8	8	5	
18) Моторист (хидравлик)	—	1	1	
19) Палубен бояджи	1	1	1	
20) Моряци (вкл. четирима кърлчии)	10	10	8	
21) Домакин	1	1	1	
22) Готвач и пом. готвач	2	2	2	
23) Камериери	4	4	3	
24) Обща численост на екипажа	43	44	38	
25) Резервен екипаж за осигуряване на всички видове законни отпуски на членовете на четирите редовни екипажа, средногодишни бройки	13,45	13,38	11,88	11,55
%	7,82	7,60	7,82	7,60

Key:
1. Position
2. Number of crewmen
3. Loading and unloading operations and fastening and unfastening freight cars by the crew
4. Loading and unloading operations and fastening and unfastening freight cars by a coastal brigade
4a. 72-hour round trip
4b. 60-hour round trip
5. Captain
6. First Officer
7. Senior First Officer
8. Second Officer
9. Third Officer
10. Head of Ship Radio Station
11. Chief Mechanic
12. Mechanic (II, III, and IV)

[Key to Table 3, continued]

13. Second Mechanic (hydraulics)
14. Electrician
15. Ship technician in charge of the electric system
16. Machine Bo'sun
17. Engineers (of which at least three boiler men)
18. Engineer (hydraulics)
19. Deck Bo'sun
20. Seamen (including four helmsmen)
21. Purser
22. Cook and Assistant Cook
23. Stewards
24. Total crew
25. Reserve crew filling in for the members of the four regular crews who are on leave, annual average

Table 4

Indicator	Loading and unloading operations and fastening and unfastening freight cars by the crew		Loading and unloading Operations and fastening and unfastening freight cars by the coastal brigade	
	72-hour round trip	60-hour round trip	72-hour round trip	60-hour round trip
Size of the permanent sailing brigade man/ferryboat	5	6	5	5
Part of the shortage of working time for technical servicing of the ship covered by the sailing brigade in man/hours/2 years	17 000	20 400	17 000	17 000
Percent	52.57	58.64	75.25	63.11

The relative study of the four variants of the organization of the work aboard ship indicates the following:

In a 60-hour round trip the overall average annual labor outlays of the crews operating one ferryboat are 2.4 percent higher compared with the 72-hour round trip with loading and unloading operations and fastening and unfastening freight cars by the crew and by 0.23 percent when a coastal brigade is in charge of loading and unloading operations and fastening and unfastening freight cars.

A comparison between the labor outlays of the crews in loading and unloading operations in a 72-hour round trip and a 60-hour round trip in terms of loading and unloading operations and fastening and unfastening freight cars by the crew indicates that in the 60-hour round trip they are 16.6

percent lower. The information is that even though the number of trips is increased, in the 60-hour schedule loading and unloading operations are far more intensive. Time reserves for idling for various reasons, existing in the 72-hour round trip, keep in a state of readiness the brigades in charge of such activities. Their overall time is longer even though their labor intensiveness is lower. The 60-hour round trip requires greater tension and higher labor productivity aboard ship compared with the 72-hour round trip. Since 60 is not divisible by 24 the psychophysiological stress of the crew rises also because of the lack of regular working and resting hours in terms of the hours of the day within the framework of a round trip. All this requires that greater attention be paid in the 60-hour schedule to the breakdown of the working time of the crew-members for various activities and insuring the necessary level of work capability through a suitable resting system. In this connection the variant of assigning to coastal brigades the loading and unloading operations and the fastening and unfastening of the freight cars offers clear advantages.

Assigning loading and unloading operations and fastening and unfastening of freight cars to a coastal brigade, regardless of whether the round trip takes 72 or 60 hours, would make it possible to reduce the size of the crew by 5 to 6 people while increasing the amount of time available for technical servicing during the operational shift, increasing labor productivity for technical services as a result of the frequent splitting of the working time among activities of different nature, and improvements in passenger transportation conditions. All in all, under this variant the operational expenditures of the two ferryboats are lowered by 158,600 leva per year (132,600 leva per year from a reduction in the size of the crew and 36,000 leva from a lowering of expenditures for the technical servicing of shifts in operation).

The annual cost of coastal brigades engaged in loading and unloading operations and fastening and unfastening freight cars is lesser by 20,400 leva than the reduced operational outlays aboard ship. The computations are based on wage and price data of September 1979.

The members of the coastal brigades in charge of loading and unloading operations and fastening and unfastening freight cars have better conditions for restoring their forces and resting ashore immediately after the working time compared with the members of the crews engaged in such activities with the other alternative.

The aspiration in the development of these alternatives in the organization of the work aboard Bulgarian ferryboats servicing the Varna-Il'ichevsk line was for each variant to be optimized in terms of its circumstances in order to be effectively applicable should such working conditions be applied to the line.

The coordinated study of labor outlays for the operation of the ferryboats as transport systems and labor outlays for their technical servicing and the increased labor productivity aboard ship, with optimum working and resting conditions for crew members and coastal brigades for loading and unloading operations and fastening and unfastening freight cars are important aspects in the methodical approach to be followed in the implementation of this task.

5003
CSO: 2200

SPECIFICATIONS OF NEW DUAL PURPOSE SHIP

Varna KORABOSTROENE KORABOPLAVANE in Bulgarian Jul 80 p 5

[Report: "Launching the First 3,000 Ton Sea-River Ship"]

[Text] On 21 May 1980 the first of the series of 3,000 ton sea-river ships was launched at the Iv. Dimitrov Shipbuilding and Ship Repair Combine in Ruse.

The ship is of the KM ✱ L^4[I] ISP class according to the USSR Ship Register. It is built for navigation in internal waterways and agitated sea areas. The design of the ship was adapted to the building conditions of the shipbuilding combine in Ruse and the use of Bulgarian materials was formulated by the Shipbuilding Institute, Ruse Branch.

The new enclosed building slips of the combine, equipped with 100-ton cranes, make work possible under difficult weather conditions at full capacity in shop conditions.

Main Features

Longest width	114.06 meters
Structural length (according to GVL)	110.84 meters
Width	13.26 meters
Width, computed	13.00 meters
Board height	5.50 meters
Draft:	
in fresh water	3.75 meters
in sea water	3.68 meters
Height (without masts and equipment, removed)	15.85 meters
Full capacity	2,484 registered tons
Dead weight	3,135 tons
Power system	2 x 660 hp
Speed at 3.65 meters draft	10.6 knots
Refueling	each 10 days

5003
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SHIP RECONSTRUCTED INTO PURIFICATION STATION

Varna KORABOSTROENE KORABOPLAVANE in Bulgarian Jul 80 pp 2-4

[Article by Kosta Kostov: "Reconstruction of the Anton Ivanov MT Into a Floating Purification Station"]

[Text] The study of the dynamics of the growth of maritime haulage of liquid freight and the presumed spilling of harmful substances into the world's oceans in the period between 1960 and 1985 (see Table 1) indicate a trend toward a steadily growing pollution which strangles the ocean and causes tremendous damages to its flora and fauna. In the period between 1974 and 1978 alone over 300 accidents involving tankers were recorded. All this has caused the maritime countries, whose economies are closely linked with maritime resources, to join efforts in the struggle against pollution with petroleum and petroleum products which predominate among the liquid freight hauled by sea.

So far, under the guidance of the Intergovernmental Maritime Consultation Organization, IMCO, the maritime countries have adopted a number of international conventions on the protection of the world's oceans from pollution with substances harmful to maritime flora and fauna.

Following the example and in the spirit of the work of the IMCO a number of maritime countries have concluded additional regional agreements on preventing the pollution of specific maritime areas with petroleum products such as, for example, the 1974 and 1976 agreements for the Baltic and Mediterranean seas. The Baltic Agreement became effective in 1977 while the one on the Mediterranean was signed on 16 February 1977. As a now recognized maritime country Bulgaria as well is not ignoring this important problem. Resolution No 208 of the Council of Ministers, dated 18 May 1970, and the Ukase of the State Council of the Bulgarian People's Republic No 1293 of 26 August 1976 with which the country joined the 1954 International Convention, with supplements and amendments of 1962 and 1969, proved the great attention which we are paying to this problem.

The pollution of our coastal waters with harmful substances is caused by pollutants located directly within the water area of the ports and the coastal zone, by polluting agents in the high seas. These pollutants are the main culprits for the poor condition of the flora and fauna in the

Black Sea. according to estimates supplied by the Water Transport Institute in Varna, the spilling of petroleum and petroleum products in the Black Sea Basin totaled 10,000 tons in 1975 and is expected to reach 32,000 tons in 1985.

Global experience indicates that coastal and floating purification stations are among the most effective technical systems which could either prevent or reduce sea water pollution.

A number of countries are using floating purification stations (PPS) because of their basic advantage of making possible the processing of ships in an operative order and with the lowest possible time loss while the ships are docked or undergoing loading and unloading operation at the pier. At the same time, they have the fullest possible set of technological facilities for all types of mechanized flushing of ship tanks and adequate capacity for the separated petroleum products received from another ship, a reliable system for the treatment of the waste water polluted with petroleum, and good working and living conditions for the specialized station crew.

Table 1*

1) Години	2) Наливни товари, млн/т	3) Среден годишен темп на нарастване на превозите, %	4) Количество нефтопродукти, изхвърлени в Световните океани, млн/т
1960	540	—	0,5
1965	860	0,64	0,9
1970	1370	1,02	1,4
1975	2300	1,86	2,0
1985	6000	3,70	6,0

* Марынов О. Г. Нефтяное загрязнение и жизнь моря, 1973.

Key: 1. Year
2. Liquid freight, million tons
3. Average annual growth rate of haulage, percent
4. Quantity of petroleum products discharged into the world's oceans, million tons

* Marynov, O. G., "Neftyanoye Zheryazneniye i Zhizn' Morya" [Oil Pollution and Sea Life], 1973

The choice of the type of purification system depends on the specific operational conditions of the commercial fleets of the individual maritime countries. Meeting the specific conditions of a given port for which the floating purification station is built and the requirements of effective international agreements and conventions make floating stations a necessary and economically expedient equipment.

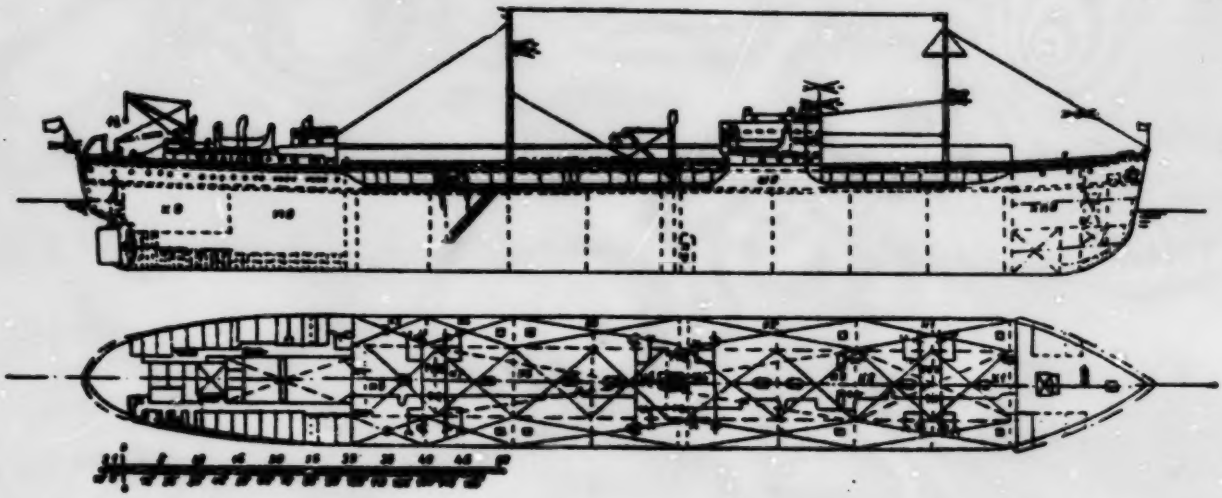

Fig 1

The moth-balled Pioner Motor Ship was reconstructed as the first Bulgarian floating purification station for work at the Burgas port. This was a manifestation of the proper attitude displayed by the Water Transport SO [Economic Trust] toward the problems of protecting the purity of Black Sea waters and a creative application of the concept of the functional and technological equipping of purification systems in accordance with the specific conditions under which ships operate in the Burgas port. The station suffered a major breakdown and the country faced, once again, the problem of creating a purification system on the basis of the already acquired practical experience, taking the structural and operational shortcomings of the first station into consideration.

The decision of the Water Transport SO, the Varna Okrug Council of Scientific and Technical Unions was instructed to prepare the complete technical work documentation for the reconstruction of the Anton Ivanov MT, scrapped in 1978, into a floating purification station.

According to the technical assignment, the floating purification station must meet the requirements of the 1954 international convention with its amendments and supplements and perform the following basic functions:

- Receive and separate ship waste water polluted by petroleum or petroleum products meeting the stipulated standard;

- Assist tankers in their flushing process prior to repairs or change in freight;

- Aerate the washed tanks to the level meeting the requirements of a "gas-free" certificate;

- Collect the separated petroleum products from the polluted waters and hold unpolluted the petroleum products of ships undergoing repairs;

- Use for its own power generation system the separated petroleum products and sell the surplus to the respective state organizations;

- If expedient or necessary to participate in the sea operations for the cleaning of major oil spills.

After its reconstruction, the Anton Ivanov MT will have the technology and appearance as indicated on Fig. 1.

Essentially, the reconstruction includes the following operations:

- Main tanks 1 and 2 with a total capacity of 2,341 cubic meters will become a system for the storing, additional separation, holding, and utilization of separated petroleum products;

- Central tanks 3, 4, 5, 6 and 7, with a total capacity of 5,867 cubic meters will become a separation system;

- Central tank 8 and auxiliary tanks 4--port and starboard--with a total capacity of 2,107 cubic meters will become a system for flushing with hot water the tanks of ships of all models;

- Auxiliary tanks 1, 2, and 3--port and starboard--with a total capacity of 5,760 cubic meters will become a system for ballasting the station with possibility for connection to the separation system;

- Auxiliary tanks 5--port and starboard--with a total capacity of 800 cubic meters will become clean fuel containers;

- The machine section of the tanker will have additional mechanisms according to the technological requirements of the station and the structural changes and additions of the boiler system;

- Changes will be made in the pumping sections of the tanker;

- The stern superstructure is entirely changed with a view to providing suitable working and resting conditions for the specialized station crew;

- Centralized posts are established, three on each side for work with the hoses and for station control;

- Improvements will be made in the navigational system of the ship with a view to updating and improving intraship control communications;

- The tanker's electric power system will be additionally saturated with new generators and possibilities for the use of the existing generators within a single power system;

- In order to facilitate the work of the crew with the hoses taking on polluted water and controlling the work of the separation system, the existing one-ton loading systems on each side of the station will be retained. They will be used for delivery to the processed the hoses, ejectors, membrane pumps for the suction of the polluted water from the tankers in the double bottom and for other heavy operations. The control of the bottom valves and the cutoff valves of the system will be located on the main deck;

- In order to improve the work of the separation system the bottoms of the containers will have a heat insulation cover consisting of polyvinyl chloride porous material and bitumen;

- In order to avoid a static electric charge in receiving water polluted by petroleum products, the siphoning pipes will have a special location. Deflecting protective systems will be installed on the receiving pipe leading to central tank No 3 in order to avoid the dynamic shock of the incoming water and insure its atomizing with filtration through a petroleum layer;

- Air hoists convenient for work and shifting will be installed to assist in the difficult process of cleaning and extracting bottom sedimentation from the tanks in the course of the technical servicing and repairs of the station;

- A special furnace will be equipped for the storage and fastening of hoses of all sides;

- The station tanks will have modern ventilation facilities.

Following the completion of the repairs of the Anton Ivanov tanker and its reconstruction it will be able to carry out its functions of a floating purification station in accordance with the recommendations and standards of the 1954 International Convention, signed by Bulgaria in 1976. It will meet the requirements of the Bulgarian Ship Register for a tanker with a limited sailing range.

Following the enactment of the 1973 International Convention and the acceptance of Bulgaria as a party to this convention, the possibility has been contemplated, should it become expedient, to improve the quality of the work on the separation system of the station.

The economic effectiveness of the Anton Ivanov floating purification station will be its assistance in the flushing processes of tankers and the shortening of their nonproduction idling. It will also come from the flushing of the sides and bottoms of oil and fuel tanks of dry freight ships, the sale to state organizations or private individuals of separated petroleum products suitable for use and the utilization for its own power system of some of the separated petroleum products and the earnings based on set state prices from taking the polluted water of Bulgarian and foreign ships.

According to preliminary estimates, and taking into consideration annual maintenance, supply, and repair expenditures of the station and the cost of the crew, its economic effectiveness is estimated at 200,000 leva annual profit. However, the social effect from the preservation of the purity of sea waters in incalculable.

The creation and proper operation of the Anton Ivanov floating purification station by the Water Transportation SO is among the important links within the overall expanded governmental program for the gradual and total solution of the problem of the preservation and reproduction of the environment in our country.

5003
CSO: 2200

USE OF PRICES TO PRESS FOR CONSERVATION, QUALITY VIEWED

Prague HOSPODARSKE NOVINY in Czech 29 Aug 80 p 3

[Article by Engineer Vlastimil Boura, ScC, first deputy minister, Federal Price Bureau: "Prices: Pressure on Conservation and Quality--On Improvement of the Planned Management System"]

[Text] "The CPCZ Central Committee Presidium and the CSSR Government stress the extraordinary importance of responsible introduction of gradual rationalization of wholesale prices which must reflect more adequately efficiency and quality of production as well as the situation in world markets. The prices of imported goods must affect more than ever before the management of economic production units and enterprises, particularly conservation of raw materials, materials and power, imported machinery and equipment." This objective has been outlined in the decision by the CPCZ Central Committee Presidium and by the CSSR Government declaring the price area to be an integral part of the targets on which the Set of Measures for Improving the Planned Management System of National Economy After 1980 is focusing. Basic principles of price policies, among them especially the enforcement of uniform prices and systematic consolidation of state price control, will be further maintained and strengthened so as to comply with this directive.

In the price area the point of departure will be provided by the applied forms and methods of price controls which proved satisfactory during the Sixth Five-Year Plan, or, as the case may be, those which are now undergoing tests within the framework of the comprehensive experiment. In several directions, however, it will be necessary to proceed even further. Such methods of work and price control policy must be enforced as will contribute more effectively to the solution of material problems in our economy. Primarily the following issues are at stake:

--To assess the efficiency of the expanded social work on all levels of management more objectively and from a longer-range perspective, and thus, to create preconditions for increasingly demanding evaluation of merits earned by organizations for the results they achieved;

--To stimulate an efficient innovation process, especially progressive directions of the economic development and structural changes, in harmony with the goals of the economic development and with the objectives of the national economic plan;

--To react more flexibly to the changing economic conditions, and above all, to external economic factors;

--To strengthen the price discipline and thus, to help enhance the responsibility of organizations and of the leading economic workers for the achievement of societywide interests and objectives and for giving them priority.

Further rationalization of wholesale prices and the conditions for their implementation represent problems that are far from simple. The price level is under considerable, steady pressure forcing it to rise further as a result of the constantly accelerating growth of foreign prices as well as of domestic factors.

Rationalization of Wholesale Prices

At present the prices of imported and domestic sources of fuels and power and of certain other raw materials are being adjusted. Contrary to the previous practice, where every major adjustment of wholesale prices was reflected in the tasks of the plan, the current adjustment follows a nontraditional method. Wholesale prices of sources of fuels and power have been gradually increasing every year since 1979, namely, during the 1980-1985 period by 2 percent annually. Thus, the wholesale prices of solid and liquid fuels valid in 1978 will be up by 19 percent in the target year: of electric power and heat, by 15 percent; and of gas fuels, by 12 percent. But this increase will not affect the adjustment of wholesale prices in subsequent processes of production. Thus, consumers are put under economic pressure to conserve fuels and power, and to make a better use of them in the production of goods.

In addition, as of 1 January 1981 a one-time adjustment will raise the wholesale prices of the sources of fuels and power and of certain other raw materials on the average by 45 percent. The effect of this rise will be reflected in wholesale prices in subsequent processes of production, however, only in those branches of production where it could lead an excessive decline of profitability, or to a deficit in production. Here, too, it is desirable to soften the impact of higher wholesale prices for fuels, power and raw materials to an advantageous extent by lower costs and by above-average profitability of the processing sectors, and to reduce to a minimum the growth of the price level, particularly in finished goods manufacture. Nevertheless, this adjustment will affect almost two-thirds of national economic production. In the area of finished goods, where on principle wholesale prices are not adjusted, manufacturers may compensate for the price increase in the preceding stages of production only by better exploitation of fuels, power and materials, and by achieving the parameters of high technological standard and quality of their products reflected in price-setting and price stimulation of improved goods.

The gradual increase and the one-time adjustment will raise the level of wholesale prices of primary fuel and power sources and of other raw materials (including the adjustment of wholesale prices of precious metals in 1980) on the average by 56 percent. In 1985, for example, the price of power coal will be up by 40 percent, of coking coal by 43 percent, of gaseous fuels by 58 percent, and of crude oil by 65 percent.

Higher wholesale prices of sources of fuels and power and of certain other raw materials will promote a marked rise in the price level in metallurgy, petrochemical industry, transportation, and in those sectors of other branches of our basic industry that consume considerable amounts of power and materials. New wholesale prices for those areas have already been set and approved; their price level will be up by 24 percent.

In the one-time adjustment of wholesale prices the center of gravity is being transposed into the area of the processing industry, where a relatively more moderate rise of the price level is envisaged. It is presumed that the overall level of wholesale prices in our industry and construction will rise in 1982 on the average by 7 to 9 percent.

Price Stimulation

The comprehensive approach to the concept of price stimulation, applied in the course of this five-year plan, is demonstrated by continuously improving efficiency; it is based on the correlation of price stimulation with the funds of material incentives of organizations, on an appropriate adjustment of the planning methodology, and also on corresponding regulations for the area of product-rating. Manufacturing organizations are showing increasingly more interest in price stimulation, as evident from the 250-percent rise in the volume of preferential pricing in 1979 (up to Kcs 2,126,900,000) as compared with 1977: the current extent of penalty price reduction (Kcs 260.6 million in 1979), however, still falls short of fully expressing obsolescence and shortcomings in the quality of certain products.

Price stimulation exerts a more powerful effect in organizations conducting the comprehensive experiment in the management of efficiency and quality, because its regulations give priority in an essentially more effective way to accelerated introduction of new technology and better quality, which represent the principal factors in raising efficiency of production. To be sure, the emphasis is put primarily on long-range planning, on the qualitative aspect of the replacement process, on the application of the indicator of profitability of operating assets, and on the value-added indicator whose fulfillment reflects all changes with substantially greater intensity in the costs base as well as in the price standard. For that reason, the annual plan must consistently make provisions for this circumstance.

A more intensive effect of price stimulation under the new conditions appears in the structure of the value-added indicator in the industry, where the material component of production, which is excluded, amounts

to roughly 67 percent, so that the value-added indicator amounts to 33 percent of the current volume of goods.

This enhances to a considerable extent the effect of the value-added indicator on price stimulation and especially on the implementation of all measures leading to reduction in operating costs and to higher profits. Thus, for instance, if the costs are cut by 2 points, this indicator will reflect it by profits raised also by 2 points, which, however, boosts the value-added indicator by 6 percent (2:0.33), so that the intensity of the effect is increased threefold. Naturally, its effect is equally powerful in the opposite direction, i.e., in raising the costs. The above-mentioned effect will become more conspicuous in price stimulation and penalty price reduction, namely, in direct proportion to the higher rates applied there.

In this conjunction we are fully aware that precisely in this area the value-added indicator will pose particularly high demands. We must consider that enterprises may try to achieve the target in an easier way, by enforcing higher prices without corresponding improvement of the quality parameters of their goods, by improper speculations with changes in the line of goods, etc. This must not happen! Discipline in planning and price-setting, and discipline in supplier-consumer relations, must be imposed, and any failure to maintain it must be penalized more than ever before.

At the same time, for a more productive effect of price stimulation, the new conditions demand, on the one hand, that necessary preconditions be created for its further development, and on the other hand, that more scrupulous criteria of its implementation be unconditionally enforced. The measures mentioned below are being planned for that purpose.

Rating of Technical Standard

The basic precondition for the implementation of preferential pricing or penalty price reduction is the rating of the technological standard or quality of products. In order to expand the extent of price stimulation, more goods must be rated for quality and for their technological standard. Quality rating, which is decisive, concerns above all enforcement of all new products scheduled for obligatory rating as soon as in the preproduction stages, which will enable preferential pricing of all new products included in the category of first quality. In order to expand substantially the volume of products subject to rating, it is particularly important to establish a system of ministerial rating (ministerial testing laboratories) pursuant to general principles approved by the Bureau for Standardization and Measurements in force as of 1 January 1981.

The number of products to be rated for their technological standard will be increased by mandatory rating of all new products manufactured on the basis of the state plans for technological development (insofar

as they are not subject to mandatory quality rating), whereby this procedure will be tested for feasibility and efficiency also of new products manufactured on the basis of ministerial and branch plans for technological development. Changes aiming particularly at a more consistent practical application of penalties for technologically outdated products will be made in methods rating the technological obsolescence of products by means of deadlines for their technical economic service life as well as by individual ratings.

All measures planned for the methods of preferential pricing and penalty price reduction are motivated by stricter requirements of quality and efficiency of improvement programs. Stricter evidence of the efficiency standard will be required for new products for that purpose--while maintaining the current maximum level of preferential pricing and penalty price reductions. Preferential pricing will not apply without proof of the economic contribution of the new product in technologically advanced and top quality means of production, or in products that are designated for use in production and not for export. As for the technologically advanced and high-quality products for export, the standard of preferential pricing, or as the case may be, of penalty price reduction, will depend on the average price attained, or realistically attainable, in foreign markets. In case of products for domestic consumption as well as for export, the achieved export efficiency will determine preferential pricing and penalty price reduction.

Contrary to the previous method, the level of preferential pricing of individual products will be assessed for its stability. If the efficiency of a product changes conspicuously, for example, if its export efficiency deteriorates, the level of preferential pricing will be proportionally reduced or completely canceled. Preferential pricing and penalty price reduction will be implemented by means of surcharges and deductions on basic prices.

For a closer link between the domestic and foreign prices the new program of price stimulation to be introduced will depend solely on the level of prices obtained in foreign markets. It will be applied in selected branches with a high share of production for export. Price stimulation will be applied bilaterally, in other words, as preferential pricing as well as penalty price reduction. The determining criterion for its application will be based only on prices obtained in foreign markets. In those cases rating of products will not be mandatory, because, as a rule, foreign prices represent a sufficiently objective and demanding criterion, expressing in general also the technological standard and quality of products. Thus, domestic and foreign prices will be gradually brought closer together throughout the planning and price-setting processes.

Central Price Control of Imports

Domestic and foreign prices must be unconditionally linked not only with the final output of the replacement process, but also with its input by

means of central price control of imports, which guarantees that imported materials which are vitally important for production will be uniformly rated on the basis of actual costs of their import, or of production. By the same token, this prevents fluctuation of foreign prices in the markets of the capitalist states from being reflected arbitrarily in our processing industry. Furthermore, price control of imports provides the essential preconditions for planned projection of actual changes in terms of value in world economy into our domestic price system, most of all, into the wholesale prices of basic material inputs.

At this time the central price control system for imports for 1981, which is based on partially narrowed nomenclature of current groups I and II, has already been resolved. The two groups form a new group I, and the remaining items will be transferred into a new group II (previously group III). In view of the fact that uniform wholesale prices have been set for these transferred items, the principle of participation of assets belonging to enterprises and of the state budget in covering the differences between the wholesale and retail prices will apply for the transferred items to the extent which will be stipulated in the state plan. Thus, the obligation to set uniform wholesale prices for these items in costing calculations will continue.

As for financial and price relations, the OZO [Supply and Marketing Department] will invoice domestic consumers for imported items at set wholesale prices (in specific cases, at current retail prices) in such a way that the difference between the stipulated wholesale price and the current retail price will be balanced by the OZO (in special cases by the initial domestic consumer) with the state budget. In justified cases therefore the new control group I retains the method currently applied in the former group II, where the differences between the retail and wholesale prices are balanced on the level of the initial domestic consumer and of the state budget.

Domestic consumers will be invoiced by the OZO for the remaining imports included in the new group II of central price controls at current retail prices. In those instances where the obligation was stipulated to calculate the prices of imports according to a uniform wholesale price (in general, items excluded from the current groups I and II), the domestic consumer will account for the difference between the prices from his capital reserves and the state budget.

In certain cases involving imports of a cooperative type, thus far included in control group II, prices will be set within the framework of the above-mentioned one-time wholesale price adjustment as of 1 January 1982; in case of proven import efficiency, a special standard for balancing the difference in prices will apply to other specialized and cooperative imports.

These adjustments in price control of imports, particularly in the nomenclature of group I, will be analyzed during 1981; further measures will

be adopted for 1982 and for the following years of the Seven Five-Year Plan, especially to achieve the desirable and economically justified tapering of the scope of controlled items.

Adjustments in central price control of imports are planned and implemented deliberately; at the same time, however, their objective, which is constantly scrutinized, will be fulfilled gradually on the basis of exerting purposefully higher pressures in order to achieve economical consumption. It is necessary, however, to taper off the scope of controlled items gradually, because only thus realistic relations between the wholesale and retail prices may be maintained, and the undesirable redistributions undercutting the effect of the planned objective may be eliminated.

If the price system is to serve as an effective tool of the planned management system, it must continuously and systematically approach the development of socially vital costs. In the past period this has been valid particularly in the development of the costs of procurement of material inputs in the process of replacement, i.e., purchase of fuels, power and raw materials, particularly the imported ones. If we aim, when implementing the above-mentioned measures, at a more flexible process of updating prices and price relations and at a closer linkage with the economic criteria of international division of labor, it does not express automation, arbitrariness or one-sidedness. It calls for highly responsible, expert approaches to the solution of these problems in every area of the planned management system.

9004
CSO: 2400

KEY CONSTRUCTION PROJECTS PROGRESS REVIEWED

Prague HOSPODARSKE NOVINY in Slovak 19 Sep 80 p 2

[Article by Jozef Hudec, CPCZ Central Committee deputy department chief]

[Text] During the current scientific and technical revolution the rate of progress of economic development of society depends on a reliable energy base and the ability to meet the steadily rising demand for power. Therefore, our capital policy aims primarily at developing a reliable and stable fuel and energy base. Other capital construction programs such as those of the nuclear, petrochemical and other industries are spinoffs of this power base which in turn is tied to the construction of capacities for the production of building materials and the vast social comprehensive housing construction program concentrated in key industrial areas.

The plan provides for an investment of Kcs 724.7 billion for the continued development of our economy in the Sixth Five-Year Plan. In 4 1/2 years projects valued at Kcs 632.5 billion were completed which leaves a comparatively high volume of work worth in excess of Kcs 5 billion to be completed in each of the 6 remaining months of the five-year plan.

What then is the situation at the key construction sites of the republic less than 80 working days before the end of the Sixth Five-Year Plan?

This year's power consumption in our country is expected to amount to 75.5 billion kWh of which our domestic production will supply approximately 72 billion kWh. The balance will be drawn from the joint CEMA pool. This year new capacities with an overall installed power output of 1,297 MW are expected to go into operation to meet the planned increase in power consumption. This is a steep annual increase in our conditions.

By bringing also the second 440 MW unit of the V1 nuclear power plant into trial operation the CSSR carries on its large-scale industrial development of nuclear power. This milestone in the development of the Czechoslovak nuclear power base is important also from the aspect of future development of additional power resources because of the valuable experience gained in preparatory work, the implementation of construction and assembly work, the start-up and operation of the V1 power plant needed to master the tasks required to establish the nuclear power industry in the CSSR.

But it needs to be stressed that without the great and effective assistance of the Soviet Union we would have been unable to achieve such progress in building and starting operations of nuclear power plants. This is also the reason why already two units of the V1 power plant are in operation today as an important contribution to the Czechoslovak electrification system supplying reliably additional 4.6 billion kWh power which is equivalent to a saving of 4.6 million tons of brown coal.

Together with the second unit of the V1 power plant two additional thermal units with 37 MW total power output came into operation this year. This leaves 820 MW total generating capacity to be brought on line in the remaining 4 months of this five-year plan.

The technically exacting construction of the Melnik III power plant to which the SZM (Union of Agricultural Youth) Central Committee pledged assistance at the 15th CPCZ Congress is about to be completed. At present preparations are under way to begin trial operations of the entire technological plant of the power unit.

The trial run of the first of five 210 MW units of the Prunerov I power plant will also be completed by the end of the year. The assembly of the technological equipment by the Polish contractor proceeds satisfactorily. Only the Prague Armabeton enterprise is far behind with its work on preparations for the construction of the pumping stations, cable lines and supports for the deslagging pipeline.

This year's last addition to our power base is expected to be the construction of the pumped storage hydroelectric power plant on the Cierny Vah River where, by the end of the year, the first of six 110 MW units is expected to come on line. The efforts expended by the suppliers CKD Blansko and the Plzen Skoda branch enterprise in assembling the technological equipment of the first power plant set are deserving of recognition and as always also the employees of the Bratislava Elektrovod for assembling the electrical installation of the underground distribution network and the above-ground switching station. All these facts indicate that the first hydroalternator will be in operation before the set deadline.

But there are problems in the construction of the first feed duct between the first upper reservoir and the power plant. The builders of this part of the water works Banske stavby Prievidza (Prievidza Mining Construction Enterprises) and Hutne montaze Ostrava (Ostrava Metallurgical Assembly Works) are a month behind schedule. This will delay the gravitation filling of the upper reservoir with water designed to shorten the preliminary comprehensive testing of the first 110 MW power plant generating set. But they are doing everything in their power to reduce the delay. In this way the overall power plant capacity increase postulated by the 15th CPCZ Congress will be fulfilled.

The vast program of the planned vital development of our fuel and energy base includes the ongoing construction of additional nuclear power plants at Jaslovske Bohunice and at Dukovany, preparatory work on the construction of nuclear power plants at Mochovce, in South Bohemia and North Moravia, the

construction of additional water works on the Danube and at Dlhe Strane, the opening of strip mining sites in Chabarovice, Vrsany, Maxim Gorkiy and elsewhere. In the Seventh Five-Year Plan an increase of 4,000 MW in new generating capacity is expected to be built. The lions share of 2,640 MW will be supplied by the Jaslovske Bohunice and Dukovany nuclear power plants. For both these projects the material and economic prerequisites exist to meet the increase in generating capacity within the deadline postulated by the government. But both projects struggle with problems stemming from inadequate preparatory work.

Another problem plaguing these projects is the shortage of construction steel caused by the Vitkovice Klement Gottwald Iron and Engineering Works which is the reason for the more than 2-month delay in the construction of the main generating unit by Hydrostay.

The problems facing the Dukovany project are even more complicated and are the cause of up to 6 months delay due to a shortage of materials, steel door frames, etc. The responsibility is shared by the project supplier because of his failure to institute two-shift work and work on weekends now and during the most advantageous summer months. Because of this development the target deadlines for the start of individual generating units are not likely to be met even though the design work on both these projects was expected to be specifically efficient. Also, the Vitkovice Skoda enterprise, the Klement Gottwald Iron and Engineering Works and Kralovopolske strojarne [Kralovo Pole Engineering Works] must catch up with the production of construction steel, steel frames and hermetically sealing doors and other equipment deliveries. At the same time there is an urgent need to increase the construction capacity by adding more experienced carpenters, steel workers and bricklayers. Further, like the Bratislava enterprise Hydrostav also the Brno enterprise Priemyselne stavby [Industrial Construction Works] must institute shift work at the Dukovany power plant construction site and around-the-clock work at sites which lag behind. Under such conditions, as happens at the construction site, also the managerial and coordinating activities of the investor must be pursued more energetically to accelerate deliveries for the projects.

The results achieved by our builders demonstrate that the Kcs 724.7 billion in investment allocated to capital construction in the Sixth Five-Year Plan will be materially fulfilled and that capital construction is a success as the prerequisite of a secure future and a rising standard of living.

8664
CSO: 2400

PROGRESS IN METALLURGY, ENGINEERING VIEWED

Prague HOSPODARSKE NOVINY in Czech 12 Sep 80 p 2

[Commentary by Jiri Poslt, department deputy chief, CPCZ Central Committee: "Metallurgy and Heavy Engineering"]

[Text] From the beginning of the year the fulfillment of the plan in the metallurgy-engineering and electrotechnology complex has been characterized by endeavors of workers, technicians and managers to perform well the tasks of the last year of the Sixth Five-Year Plan.

In the province of the Federal Ministry of Metallurgy and Heavy Engineering the efforts are centered on ensuring national management of metals, especially their appropriate structure. This is a great technical and organizational struggle that must be intensified further in the second half of the year, and especially in 1981 and the following years of the Seventh Five-Year Plan. Metal conservation must be a rule, starting with its metallurgical processing up to its use in engineering, construction and other fields of the national economy. We ask from the metallurgical workers that they introduce speedily such products as will improve the material standards of goods and ensure availability of products which we have to import from capitalist countries. We must therefore seek effective ways to ensure adequate supplies of electric generator and transformer sheet steel, and suitable materials for our canning industry and food industry in general. Production of bonding materials cannot be neglected either.

In the field of heavy engineering the efforts in the first half of the year were concentrated on supplies for important construction projects at home and abroad. For example, a 500 Mw block was installed in the Melnik electrical power plant thanks to the good work of the Skoda workers. Deliveries from other industrial production units also serve well in the Prague Metro, in chemical plants, in the food industry and in many important construction projects. However, old shortcomings still exist, or one should say, persist. They have a common denominator: the poor functioning of the higher supply functions and failure to achieve the objectives already approved at the third session of the CPCZ Central Committee.

Greater emphasis must be placed on deliveries of items destined for operation in the USSR; CHEPOS [Enterprises of Chemical and Food Industry Machinery] is primarily involved. And the managerial personnel of the sector, of industrial production units and of plants must also continue to give maximum attention to supplies for the fuel and energy base, from coal mining to the construction of nuclear electrical power plants.

Workers in the sector of general engineering did not ensure the necessary dynamism in the first half of the year. Zbrojovka enterprise in Brno, for example, increased its backlog from the past period and at the same time recorded the lowest ratio of the annual plan. The Zcechoslovak Automobile Works in Prague and the Heavy Engineering Enterprises in Martin also showed a lower ratio of the annual plan than the average for the sector. As a whole the sector exceeded the plan by Kcs 324 million. The weak spot is the production of replacement parts; it amounted to 48 percent of the annual plan. The ratio continues to be affected significantly by the Czechoslovak Automobile Works in Prague with a 45-percent quota of fulfillment and the Heavy Engineering Enterprises in Martin with the current 51 percent. The latter has not met deliveries for capital investments either, especially to the sector of the Federal Ministry of Transportation and the Ministry of Agriculture and Food of the CSR (only 45 percent of the annual plan) and the SSR (47.9 percent of the annual plan). All industrial production units with the exception of the Engineering Technology Works in Prague bear responsibility for this situation.

Deliveries to the domestic market far above the plan are characteristic. There is not yet, however, the required selection of goods, especially in refrigerators, kitchen ranges, solid fuel stoves, enamel tubs and gas fuel.

In the area of innvoations in consumer goods, the existing situation has not improved. Of the 54 products planned for 1980, by the end of June only 23 had been produced, of which 20 were placed on the market.

The lowest production dynamism was noted in the sector of the Federal Ministry of Electrotechnical Industry. Low fulfillment quotas were recorded by the High Voltage Electrotechnology Enterprises in Prague and by Tesla enterprise in Bratislava.

As long ago as during the session of the CPCZ Central Committee on technological development in 1974 it was stated that the metallurgical-engineering complex plays an important role in the tasks associated with the achievement of a higher general work productivity. This applies even more to industrial production units and the electro-technical and electronic fields, where one expects that more human and routine labor saving devices should be available. Shortages of parts, however, hinder the application of electronics. Executives of the ministry, together with enterprises, are successfully eliminating some material difficulties which impede their work. At the same time a long range program is being prepared for the field of electrotechnics and electronics, while buyers and the producers themselves must have a sufficient supply of quality components. The main effort must therefore be channelled as before into this area.

In all three sectors attention is centered on the important export tasks. Nevertheless, there are still some shortcomings which should not escape the attention of the plant managers in particular. There are, for example, insufficient supplies of replacement parts as regards both variety and quantity. In deliveries of complete industrial plants the biggest problem is meeting the requested and controlled terms. We must improve in general our cooperation with the foreign trade companies by seeking common ways to raise our sales. This is, after all, a question of foreign currency needed to purchase raw materials, machinery and equipment. Foreign currency regulation is and must be the law for the entire managerial axis. When requesting imported items, every organization must ask itself the basic question--is it meeting responsibly its export duties.

At the half-year mark we also evaluate more deeply in general the attainment of qualitative indicators, work productivity, profits, expenditures and the use of wage funds. In many cases this gives us new views with regard to improvements of the system of planned management and the objectives approved at the 14th session of the CPCZ Central Committee. In this respect such requirements as better production utilization of the technological base, reduction of inventories, use of wage funds and better management of raw materials and energy definitely merit greater attention. There are still considerable unused resources but their utilization has only begun. Suggestions for changes of the plans as were requested by some industrial production units, are of no help here. What is needed is energetic, well conceived, work especially on the part of the managers, technicians, engineers and economists.

Plans are being prepared at the present time for 1981 and the Seventh Five-Year Plan. These plans must reflect to a greater extent the ideas which were already considered at the third session of the CPCZ Central Committee in 1976. They mainly concern a broader application of technological advances and improved management of economic activities, including the modification of the production structure for domestic and foreign trade. In this light we must work on the attainment of the objectives in the second half of 1980 also from the viewpoint of the preparation of the plan for 1981. The key factor here will be the development of work initiative and socialist competition in all work sectors.

9562
CSO: 2400

FIGURES PROVIDED ON DEVELOPMENT OF SYNTHETICS INDUSTRY

East Berlin PRESSE-INFORMATIONEN in German No 90, 31 Jul 80 pp 5-6

["Facts and Figures" report by Press Office, Chairman, GDR Council of Ministers: "Plastics and Elastics Used in Many Ways"]

[Text] Plastics are in part replacing metals, porcelain, glass, wood and leather as raw materials. Basic production materials in the chemical industry are coal, petroleum and natural gas. The good properties of plastics are their low density, good electric insulation values, corrosion resistance, good workability and low heat conductivity.

The most important thermosetting plastics and thermoplastics which are processed in the GDR are polyvinyl chloride (PVC), polyethylene (PE), polystyrene (PS), polypropylene (PP), polyamide (PA), polyurethane (PUR), polytetrafluoroethylene (PTFE), fiber-glass-reinforced unsaturated polyesters (GUP) and thermosetting plastic materials.

Coal and lime are the basic materials used to produce synthetic rubber in the Chemical Works Combine VEB, Buna. In the Plastics and Elastics Processing Combine VEB and the Tire Combine VEB, Fuerstenwalde, to mention only two processors, rubber mixtures are manufactured from natural and synthetic rubber using preparation methods suited for particular purposes and are processed into an enormous variety of rubber products.

The assortment of synthetic and natural rubber involves about 30 types, including special types which are resistant to gasoline and oil, are nonfading and have high resistance to abrasion.

Plastics can be economically produced and efficiently processed. The ratio of investment costs to produce plastics, crude steel and aluminum is 1:3:5. The energy costs of production have a ratio of 1:3:8. The material utilization factor for metals is between 60 and 70 percent, for plastics between 90 and 95 percent. Limitations on the use of plastics stem from low resistance to heat, low strength and electrostatic charging.

In 1950, 38,000 tons of plastics and synthetic resins were produced in our republic. This year it will be 800,000 tons. Particularly noteworthy is the expansion of capacities to produce polyvinyl chloride, polystyrene and high-pressure polyethylene in the Chemical Works Combine, Buna, the largest manufacturer of plastics; also noteworthy is the establishment of a new facility to produce low-pressure polyethylene in the Walter Ulbricht Leuna Works Combine VEB. Production of synthetic rubber in the Chemical Works Combine VEB, Buna, rose in the past 30 years to 5.4 times the original level; in the process adaptation and expansion to modern cold rubber production was accomplished in the past few years.

Plastic and elastic products are used in all sectors of the economy. One processor of these raw materials is the Plastics and Elastics Processing Combine VEB. This year 80,000 tons of plastics and 120,000 tons of rubber mixtures will be processed into 150,000 different products. Some 95 percent of the goods produced in the combines are component products for other industrial sectors which help determine the readiness for use, serviceability, efficiency and service life of a large number of final products.

For example, 1 ton of plastic material in the appropriate type yields 2,860 meters of water hose, 2,050 10-liter pails, 775 49-liter tubs or 449 60-liter tubs. One ton of elastic material, for example, produces 1,420 square meters of floor covering or 1,075 rubber boots for children.

Using plastics is economical if the plastic is chosen in a manner appropriate to the specific purpose, if the most economical processing method is selected and if the appropriate treatment of the plastic is guaranteed. For example, in the efficient extrusion blow molding process a 120-liter barrel can be made from polyethylene in 1.6 to 1.9 minutes with a service life of 4.5 years, while a wooden barrel, which requires more labor and time to make, lasts only 1.5 years if subjected to the same application. Plastic barrels are corrosion-resistant, the maximum temperature rating ranges from -20°C to +60°C.

The decorative laminated plastic Sprelacart is made from special papers which in the molding process are treated with phenolic resins impregnated by the effect of pressure and heat. Kitchen furniture, for example, is coated with this.

Special papers, phenolic resins and molded fiberboards are used to make surface-molded improved fiberboards (OPV-boards) which are used for ceiling and wall coverings for large areas. For example, decorative laminated plastics were used in Berlin's elevated trains. With 100 different decors and surface configurations this plastic product meets the highest requirements.

It is no longer possible to imagine life without the "1,000 little things" made of plastics and elastics. The workers in the Plastics and

Elastics Processing Combine VEB, for example, will this year produce 2 million pairs of rubber boots, 124,000 children's bathtubs, 582,000 laundry baskets, 3.8 million soap boxes, 3.3 million pails and 3.7 million storage containers.

Radial shaft gaskets made of elastics are decisive for the serviceability of gears in rolling mills, vehicles and also kitchen appliances. Approximately 10,000 customers in the GDR are supplied with 3,000 different sizes. The smallest gasket has an outside diameter of 13 mm, the largest 755 mm. It is indispensable for the serviceability of ship's propellers.

To produce efficient conveyor belts use is made of high-quality elastic materials, which gave the rubber coverings a high degree of resistance to wear and tear and abrasion, of tear-resistant polyamide and polyester silks or of steel ropes as carriers. Conveyor belts rationalize the transport of bulk and general cargo. Joined together by successive bonding or vulcanizing into continuous units, conveyor distances up to 2,500 m, for example, can be handled in the GDR by outfitting the conveyor units with textile belts. If wire-reinforced belts are used, the conveying distance can be as high as 10,000 m.

The weight of plastic and elastic parts--excluding the plastic parts in vehicle electric equipment and auxiliary products, lacquers and paints, sealing substances and adhesives--is 25.1 kg in a Wartburg 353 W and 47.6 kg in a Trabant 601. The Plastics and Elastics Processing Combine VEB produces about 300 plastic and elastic parts for every Wartburg.

A large number of molded parts in electric equipment, machines and vehicles are made of phenolic resin molded materials. Phenolic resins and fillers, such as wood flour, stone flour, textile fibers, textile scraps, glass fibers and other things, are processed by molding, transfer molding or injection molding, for example, into telephone casings, reels, furniture handles, molded parts for measuring equipment or vehicle construction.

The Super-Elastic-S industrial tire, a solid rubber tire, is sturdy and resistant to wear and tear. It combines the security of solid rubber tires against breakdowns with the good cushioning and muffling action of air tires and is used on forklifts, small cargo carriers, electric carts, construction machinery and agricultural equipment.

Taking into consideration the change in indices--caused by the natural aging of organic materials--recycling of secondary plastics is possible only in the case of thermoplastics. Thermosetting plastics cannot be reheated after curing. They would be destroyed. On the other hand, if regranulated, thermoplastics become plastic and thus reworkable by being heated.

In 1980 in the GDR a total of 28,000 tons of secondary plastics will be processed. This will be done, for example, in the Elaston Works VEB, Friedrichroda, the Plastic Coating and Manufacturing of Technical Textiles, Fehrbellin, the Plastic Processing Works, Schwerin, the Chemical Works Combine, Buna, and other enterprises. The general concern is to return the secondary plastics, which accumulate as a result of production, to the materials cycle in the same enterprise in order to avoid additional transport costs. At present the Ministry for Chemical Industry, in cooperation with the trade and the Used Raw Materials VVB [association of state enterprises], is testing to determine in what form in the future thermoplastics from households can be returned to the raw materials cycle. Also, research is currently being done on how and where thermosetting plastics can be used on an industrial basis as fillers, for example.

12124
CSO: 2300

PROBLEMS RELATED TO BUILDING EXPLOSIONS EXAMINED

Leipzig CHEMISCHE TECHNIK in German Vol 32 No 9, Sep 80 signed to press 22 Feb 80 pp 481-484

[Article by Johannes Pester and Thomas Wartner, Chamber of Technology: "Criteria on the Necessity of Measures To Protect Against Explosions in Buildings--Report From the VEB Chemical Facilities Construction Combine, Leipzig-Grimma"]

[Text] Statement of the Problem

Measures of structural explosion protection are intended to cope with damage produced by explosions and with resulting conflagrations.

In the relevant section of Specification 58/78 of the State Building Inspection Department--Architectural Explosion Protection [1]--there is, inter alia, the following statement: "1.2. This specification applies to newly erected buildings in which there exists explosion risk in the sense of TGL 30042. This includes newly erected buildings having technological installations which in the event of accident can produce dangerous increments of pressure within the enclosed space (e.g., through rupture of pressure vessels or through spontaneous reactions)."

With regard to structural explosion protection--in the following abbreviated as BES--when there is gas explosion and dust explosion risk in the sense of TGL 30042 [2] the specification further provides: "1.3. In preparing engineering appraisals of fire and explosion hazard, in accordance with TGL 30042, it must be determined whether measures of structural explosion protection are required...."

The latter paragraph thereby imposes an obligation to decide upon the need for BES not upon the individual applying Specification 58/78 but rather upon those persons responsible under TGL 30042 for preparing the appraisal of fire and explosion risk. The logical basis of this occupies the foreground of the relevant section of Specification 58/78: "1.1. It is the object of structural explosion protection to delimit by means of architectural measures the consequences of an explosion. Architectural explosion

protection measures are basically designed to meet a situation in which the technological protective measures of TGL 30042 fail to be adequate."

The commentary on Specification 58/78 [1] states further: "The architectural planner cannot in general make a determination as to whether explosion risk exists, as to the degree of the explosion risk or whether architectural protective measures are necessary over and above technological protective measures. The corresponding determinations should therefore be supplied to the architectural planner."

Of fundamental importance for the application of Specification 58/78 are the sentences of commentary which immediately follow that specification: "Wherever there exists explosion risk they will also as a rule be need for measures of architectural explosion protection. But situations can arise in which the realization of architectural protective measures produces severe engineering complications or high costs. In such situations a responsible determination must be made as to whether by means of intensified technological protective measures the risk cannot also be adequately delimited without architectural protective measures. This applies particularly to the performance of reconstructive measures in an already existing structure."

These regulations yield three basic questions for a preparer of an appraisal of fire and explosion risk:

1. When in the course of capital investment planning must binding statements be made regarding the need for BES measures?

2. On the basis of what criteria are decisions to be made regarding the need for BES measures in accordance with Specification 58/78?

3. What are the minimum data which must be supplied to the architectural planners in order to apply Specification 58/78?

Schedule Date for the Decision as to BES Measures

The question as to the point in time in the course of investment planning when a decision must be made as to the need for BES measures is closely related to the question of the effect of BES upon the architectural design. Senf [3] lists in this connection the following functional and design details:

a. Safety spacing,

b. Safety zones around explosion-endangered buildings,

c. Architectural style of the buildings,

d. Exits, evacuation routes and stairways,

e. Size of the explosion-endangered sections,

f. Maximum number of stories and building height,

g. Design details for explosion pressure relief and for opposing the effects of explosion.

From this rough account it may be seen that BES plays a role throughout all architectural design of explosion-endangered buildings. Even initial studies of site selection involve BES decisions.

Therefore a decision must be made as to whether a capital investment requires BES measures or not at least no later than the date on which binding approval is given to the building plan. Every postponement of this decision can seriously reduce the possibility of achieving an optimal design. In the absence of prerequisites for making a realistic evaluation of the risk situation of the planned object under its expected conditions of operation and location it is advisable to become oriented, as a preventive measure, with respect to the application of Specification 58/78. The following section contains some aids to decisionmaking.

Decision Criteria With Regard to BES Measures

We have already explained the reasons why the architectural planner is not in a position to judge the general necessity for BES measures. However, at the beginning of investment planning the technologist is equally ill prepared to make a comprehensive judgment of the economic and engineering effects of BES measures. Even in the advanced stages of investment planning it is only with the help of a meaningful evaluation of explosion risk, in the sense of TGL 30042, that it is possible to survey the interaction between explosion preventive measures and architectural measures designed to reduce the destructive effects of an explosion.

From this point of view it is obviously impossible to base decisions regarding the essential need for BES measures upon a combined evaluation of engineering and architectural protective measures. In accordance with their safety engineering significance all forms of explosion protection may be graded in three groups: 1) measures for the prevention of explosion risk (so-called primary explosion protection); 2) measures preventing the ignition of explosive mixtures (so-called secondary explosion protection); 3) measures for avoiding or palliating explosion damage (e.g., BES).

From this ranking it may be seen that BES functions under the heading of employee job safety within the endangered area only as one (of several) modes of compensation for inadequate explosion safety. On the other hand from the point of view of the actual risk situation in chemical installations and in terms of the industry-specific variable need for protecting the immediate environment of explosion-endangered areas or buildings, BES is often undervalued. But such considerations belong uniquely in the domain of compensation protection.

Decision criteria of fundamental significance are the following:

a. Special BES requirements in the specifications relevant to the particular case of application,

b. The probability of immediate danger to life and health resulting from explosion,

c. An above-average need on the part of economically important installations or facilities for protection against the consequences of explosion,

d. An above-average damage probability for the explosion-endangered industrial facilities concerned.

This ranking corresponds to the increasing level of difficulty encountered in evaluating these factors. Each factor can just by itself be the decisive criterion of need for BES measures.

Existing specifications for special explosion-endangered buildings and work sites are not affected by Specification 58/78; the requirements contained in such specifications with regard to architectural explosion protection must be met [1].

The Soviet standard "Explosion Safety, General Requirements" [4] gives valuable suggestions regarding the allowable probability factor for the endangerment of employees by the effects of explosion; it also gives indications with regard to damage probability. In that reference the allowable annual explosion probability is limited to the value 10^{-6} and permits the same level of probability of 10^{-6} per person also for the effect of "factors for dangerous human explosion sequelae in the course of 1 year."

If BES is to be a safety factor capable of corresponding to the increased protection requirement of specific installations then in addition to the explosion-endangered work site the neighboring areas, buildings or installations must also be evaluated as a potential center of explosion.

The summary of those safety factors which are susceptible of evaluation and of the decisive criteria as they appear in the proposed decision-tables (Tables 1, 2, 3 and 4) provides the individual responsible for the appraisal of fire and explosion risk with a basis for appropriate determinations regarding the need for BES measures in accordance with Specification 58/78. In the stage of capital investment planning and also in the design planning phase the evaluation of the explosion risk of an industrial installation continues to be based largely upon intuitive decisions [5, 6]. In the absence of mathematically determinate criteria one lacks the essential prerequisite for obtaining a uniquely defined result in analyzing an individual case.

Also for a qualitative-metric evaluation with the aid of expert methods, like those proposed by Altmann in another connection [7], there does not exist any reliable set of principles for logical application in BES. In order to make possible decisions which are acceptable despite the verbal character of the criteria employed the decision factors have been graded in terms of fundamental and alternative groups. It is necessary that there be a judgment at least of the fundamental factors (Table 1) and of a group of alternative factors (Tables 2, 3 or 4). The imposition of limits upon BES measures relative to the requirements of Specification 58/78 or a dispensation from such measures can arise only when the decision of Table 1 also leads to this conclusion.

Prerequisite Data for BES in the Appraisal of Fire and Explosion Risk

If it has been decided that BES measures are necessary (or not necessary) for the building in question in accordance with Specification 58/78 of the StBA then this fact must be unambiguously documented in the appraisal of fire and explosion risk [5].

A substantial portion of the BES is governed in design cost by the building's risk from a possible explosion, expressed by the explosion risk class (EGKL) in accordance with Specification 58/78:

EGKL I	Very great building risk
EGKL II	Great building risk
EGKL III	Less great risk to the building

Of decisive importance here are principally the explosive force of the explosive mixture (pressure rise in MPa/s) and the pressure effects which occur. Since at the present time there are available no generally accessible tables for explosive force values nor can any practical method be offered for estimating pressure effects, the commentary to Specification 58/78 [1] permits substitution of a very simplified procedure for assigning the EGKL. On the basis of the combustible gases and vapors explosion class in accordance with TGL 30020/03 [8] and using the distinction between "explosive" and "highly explosive" combustible dust-air mixtures and by means of the grading of risk in accordance with TGL 30042 the construction engineer can also establish the correct EGKL by himself. There are further conditions which relate to the ratio of the danger zone volume, according to TGL 30042, to the total space volume.

The structural engineer requires the following absolutely essential preliminary information:

1. Determination whether Specification 58/78 of the StBA is applicable to the building concerned (or parts thereof) or not;

2. Assignment of the appropriate explosion risk class (EGKL I, II or III) or--in place of this--assignment of a characteristic explosive material, including:

2.1. For gases and vapors (liquids) the explosion class in accordance with TGL 30020 and the characteristic gaseous explosion risk level (EG) in accordance with TGL 30042 (EG 1, 2, 3 or 4);

2.2. For dusts the designation "explosive" or "highly explosive";

3. The extent of the danger zone in the space under consideration (in case the entire space is not involved).

All further details, e.g., those ranging above a merely partial application of Specification 58/78, together with design details for the BES or for the installation of pressure relief surfaces do not come within the scope of an evaluation in the sense of fire and explosion prevention in accordance with TGL 30042. These data relating to the reduction of recognized risks should appear in the architectural GAB* record. While there certainly exists no legal impediment to also including such determinations in the appraisal of the fire and explosion risk, the responsibility for all design requirements of architectural explosion protection nevertheless remains with the building engineer.

The situation is substantially different when one is dealing with the BES for buildings affected by risks other than those of gas or dust explosion, in accordance with TGL 30042, e.g., for spaces occupied by pressure vessels or by explosive materials.

In such cases one lacks the preliminary data required to extract a representative EGKL from the commentary to Specification 58/78. Explosion risks which lie outside the scope of TGL 30042 must either be established in special appraisals, i.e., for coal dust and coke dust endangered industrial sites in accordance with ABAO 125/2, or they must be documented in the technological GAB record. However, even then the technician should come to an understanding with the building engineer regarding the need for BES measures, so that the building engineer may promptly submit a statement of the preliminary data which he requires for the application of Specification 58/78 or of any other special specifications.

Summary

In the Specification 58/78 of the State Building Inspection Department--Architectural Explosion Protection--it is required that in formulating the fire and explosion risk appraisal a decision should be made regarding the need for measures of architectural explosion protection. This decision must be made even as early as the capital investment planning, prior to approval of the building plan. By means of a selection of tabularly arranged criteria and by assigning corresponding decision categories it is possible to suggest practical decision aids to the individual making the judgment.

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* Health protection, labor safety and fire protection.

Table 1. Decision Factors for Determining the Need for Measures To Be Taken in Accordance With Specification 58/78 of the State Building Inspection Department--Architectural Explosion Protection (BES)

1. Fundamental Decision Factors

Decision Factor	Decision Regarding Application of Specification 58/78: a) Application Required	Decision Regarding Application of Specification 58/78: b) Application Not Obligatory	Examples, Remarks
1.1. Specification reference for the special case application	Whenever in other regulations BES is required in accordance with Specification 58/78	Whenever other regulations contain concrete requirements for BES --when the endangered zone is not completely surrounded by structures --for open-air facilities --for framework which is not surrounded by construction --for structures embedded in the earth --whenever potentially endangered persons can be promptly evacuated --whenever safety measures in other locations exclude explosions in the work site and there exists no reason on the basis of Col a (1.1 to 1.4)	a) At present no example known b) E.g., in ABAO 125/2; also see commentary to Specification 58/78
1.2. Reconstruction of the explosion-endangered zone in accordance with TGL 30042	Whenever the danger zone is surrounded on all sides by buildings and there exist no other reasons according to Col b (1.1 to 1.4)		a) E.g., for normal heated interior spaces in which employees are required in the production process to work with dangerously explosive materials
1.3. Danger to life and health resulting from explosion effects	--for an explosion probability $>10^{-6}$ per person and year within the endangered space --for explosion probability $>10^{-6}$ (also without danger to persons)		a) Analogously GOST 12.1.010-76; probability 10^{-6} per year corresponds, e.g., to an acute danger during 5 min annually b) E.g., when gas warning installations with early warning

Table 1.1 (continued)

Decision Factor	Decision Regarding Application of Specification 58/78: a) Application Required	Decision Regarding Application of Specification 58/78: b) Application Not Obligatory	Examples, Remarks
		--in the case of low-level protection requirement (reconstruction more economical than BES; no production interruption unacceptable from the point of view of the national economy) and --whenever there is no reason on the basis of Col a (1.1 to 1.3)	are used or when the technological installations have a construction which is resistant to explosion pressure
1.4. Protection required for the explosion-endangered building because of national economic considerations	--for an endangered building having a protection requirement which is above average or --for neighboring buildings within a 100-meter radius having a protection requirement which is above average		a) Depending upon the technological regulation applicable to the building; for the environment: e.g., energy centers, institutions serving the needs of children and the like b) E.g., for isolated storage facilities for paint (without decanting)

Table 2. Decision Factors for Determining the Need for Measures To Be Taken in Accordance With Specification 58/78 of the State Building Inspection Department--Architectural Explosion Protection (BES)

2. Decision Factors According to Characteristics of Explosion Risk

Decision Factors	Criteria	Decision With Regard to Application of Specification 58/78
2.1. Explosion danger from gases or vapors (liquids) Explosion class of the endangering material (TGL 30020/03)/gas explosion risk level (TGL 30042)	IIC/EG1 to EG4	No limitation implied
	IIB/EG4 IIA/EG3	Limitation possible under some circumstances; special testing required
	IIA/EG4	May possibly be omitted
2.2. Explosion danger from dusts (EG-St; TGL 30042)	Highly explosive dust, e.g., magnesium, aluminum, diphenyl	No limitation implied
	Explosion-inert dust, e.g., forage albumen from petroleum derivatives	Limitation or omission possible; special testing required
2.3. Explosion danger primarily within the "inner area of the technical installations"	No explosion danger at the "work site" resulting from industrial operations	Limitation possible; special testing required
	Explosion danger within the inner space of the technological facility only in the event of a breakdown	May possibly be omitted (evaluate in conjunction with 2.4!)
2.4. Totally disabling emission of dangerously explosive materials (acute explosion danger, e.g., through failure of protective measures in	On the basis of experience unlikely or not very likely	May possibly be omitted
	On the basis of experience total disabilities must be reckoned with or episodes of total breakdown	No limitation implied

Table 2.2 (continued)

Decision Factors	Criteria	Decision With Regard to Application of Specification 58/78
accordance with TGL 30042 or failure of the "primary explosion protection")		

Note: "Limitation possible" calls at least for the application of the requirements for pressure relief given in Specification 58/78 of the StBA; with regard to limitations affecting the requirements for meeting building collapse (pressure resistance) and with regard to safety spacing special judgment must be rendered. In this connection attention must also be drawn to compensation possibilities in the form of protective structures or special building configurations (position of the doors, pressure relief surfaces, etc.).

Table 3. Decision Factors for Determining the Need for Measures To Be Taken in Accordance With Specification 58/78 of the State Building Inspection Department--Architectural Explosion Protection (BES)

3. Decision Factors in Accordance With Characteristics of Installation-Engineering Explosion Protection

Characteristic of Explosion-Protected Installation	Criteria: Primary Explosion Protection: Normal Operation	Criteria: Primary Explosion Protection: Breakdown	Criteria: Secondary Explosion Protection: Normal Operation	Criteria: Secondary Explosion Protection: Breakdown	Criteria: Deportment Requirement (personnel)	Decision With Regard to Application of Specification 58/78
3.1. Objectively explosion-resistant procedure	Fully effective	Fully effective	--	--	None	Not required

Table 3.3 (continued)

Characteristic of Explosion-Protected Installation	Criteria: Primary Explosion Protection, Normal Operation	Primary Explosion Protection, Breakdown	Secondary Explosion Protection, Normal Operation	Secondary Explosion Protection, Breakdown	Deportment Requirement (personnel)	Decision With Regard to Application of Specification 58/78
3.2. Objectively explosion-resistant installation	Fully effective	Limited effectiveness	Fully effective	Fully effective	Little	Omission possible
3.3. Subjectively explosion-resistant installation	Limited effectiveness	Limited effectiveness	Fully effective	Limited effectiveness	Moderate	Limitation possible
	Limited effectiveness	Not effective	Fully effective	Limited effectiveness	High	No limitation implied
3.4. Partially explosion-resistant installation	Not possible	--	Fully effective	Limited effectiveness	Very high	No limitation implied

Note: The "breakdown" criterion relates to breakdowns in the effectiveness of the particular explosion protective measure, i.e., in the case of primary explosion protection it relates to the measures taken for avoidance of dangerously explosive mixtures while in the case of secondary explosion protection it relates to the avoidance of sources of ignition. Deportment requirements include the prohibition of open flames, the prohibition of smoking, etc. (slight requirements) and additional requirements respecting the operation of equipment which can call for variably high degrees of concentration of the operating personnel (moderate up to very high).

Table 4. Decision Factors for Determining the Need for Measures To Be Taken in Accordance With Specification 58/78 of the State Building Inspection Department--Architectural Explosion Protection (BES)

4. Decision Factors With Respect to Features Having To Do With Position and Volume

Decision Factors	Criteria	Decision With Regard to Application of Specification 58/78
4.1. Location of the explosion-endangered space in the building concerned	Exposed exterior position, e.g., at a corner, surface construction, access only from the outside and the like	Limitation possible, possible omission, whenever possible according to Table 1 (1.3; 1.4)
4.2. Volume of the space	$<100\ m^3$	Limitations mentioned in Specification 58/78
4.3. Ratio of the volume of the danger zone, in accordance with TGL 30042, to the space volume	$<10^{-3}$ $<10^{-4}$	Limitation possible Omission possible

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8008
CSO: 2300

DEVELOPMENT OF MANPOWER SITUATION DISCUSSED

Budapest FIGYELO in Hungarian No 37, 10 Sep 80 p 4

[Article by Dr Jozsef Laczo: "Picture of the Manpower Situation"]

[Text] Characteristic of the manpower situation is the fact that in the first half of the year the manpower demand continued to moderate. In some branches and lines, chiefly in the capital city, the manpower supply improved despite signs of a shortage.

With Less Manpower

According to the 1980 planning direction, the reduced production increase in the material branches must be achieved with a reduction of 22,500 workers (0.6 percent). In addition, a small-scale manpower increase (between 0.2 and 0.9 percent) may be realized in the food industry, transportation and communications, domestic trade, and water management, as well as in the agricultural cooperatives. The plan calls for a 1.4 percent manpower increase in the nonmaterial branches.

The reduction in the manpower demand is evident not only in enterprise plans, but also in enterprise and cooperative labor requirements reported to manpower agencies, reports that are characteristic of the whole country. In comparison to the same period last year, such a demand declined, for example, in the Alfold megyes in the first half of the year by 30 to 50 percent, in Budapest in the second quarter by 13 percent.

The vigorous efforts of the enterprises at personnel reduction were due to the combined constraining effect of the manpower situation in the previous years, the measures of the supervisory organs, the moderation of the rate of growth, and the system of demand regulation.

With a more moderate than planned growth rate in production, sales and other areas of performance, and with the decline that took place in industry, in the first half of 1980 there was a decline in the economic areas under discussion of 74,900 workers employed, instead of the called-for decline of 22,500 workers as compared to the same period in the previous year.

Among the individual economic branches and sub-branches, the manpower grew only in water management and communications. Manpower remained essentially stagnant in the agricultural cooperatives (99.9 percent) while in the other economic branches and sub-branches the number of workers employed declined to a greater extent than planned, that is, in the two most important sub-branches of the tertiary sector, transportation and domestic trade.

Accounting to preliminary data, manpower increased by about 10,000 to 11,000 workers in the nonmaterial branches. This included an increase of 2,300 workers in organizations dealing with economic and population services.

Making Up for Shortages by Organization

The manpower situation and the development of employment by economic branches is characterized in the following:

In the first half of 1980, socialist industry employed 46,200 fewer workers than the year before. In contrast to the experience in the previous year, the decline continued for most of the half-year period from month to month. (Formerly, the January decline as compared to December was followed by a personnel increase in February.) The decline resulted mostly from deliberate action, but in part it was also spontaneous, with the extent of the resignations greater than was desired. In many places, chiefly in light industry, where in the multi-shift areas the people quit work to a greater extent than average, the plans reflect the compulsory taking into account of the actual situation and not a deliberate personnel management policy. These light industry enterprises strive primarily to moderate resignations, maintain personnel, and make up for resignations through work organization because they can no longer count on additional investments to replace manpower.

It was rare to find any areas where factories were completely unable to fulfill their production tasks because of a manpower shortage (among the exceptions being the TAURUS Enterprise's Cordatic factory unit, the Technical Rubber Factory, and in washing powder manufacture, the United Chemical Works.) Only the textile industry and metallurgy were forced to make up work time lost due to manpower reduction (increasing overtime by 3.1 percent and 2.6 percent respectively.) But overtime hours worked, as compared to a drop of 2.9 percent in total hours worked, dropped by 9.2 percent.

Without Regrouping?

Even with a personnel decline--in sum and composition--that was greater than planned, the manpower supply increased because, despite the increase in technical equipment, production declined. But in some enterprises and lines, primarily in the capital city, the manpower shortage continued to be characteristic.

Despite the above-indicated reduction in demand for manpower in the capital city, there is still a manpower shortage of 30,000 to 40,000 workers. The difference between manpower demand and supply was also made worse by the branch and trade (occupational) tensions (for example, in retail trade, in urban transport, at the Capital City Laundry, and also in certain public health branches, despite the personnel expansion that has been realized).

However, in the Alfold and South Trans-danubian areas and in the North Trans-danubian districts and absorbing capacity of the tertiary sector is smaller--particularly in the villages--and therefore placement requires a longer time, or commuting is frequent from these districts (the Szatmar-Bereg portion of Szabolcs megye, certain areas of Borsod megye, the northern portion of Bekes megye, the Berettyoujfalu district of Hajdu megye, the southern communities of Somogy megye and the Bakonyi communities, and Kormend and Orseg districts of Veszprem megye). Despite the longer waiting period for employment, we cannot speak of unemployment problems either here or elsewhere in the country. To be sure, personnel reductions initiated by the employers have not occurred anywhere. The method has been to realize the overwhelming bulk of the reductions in the framework of natural manpower mobility. (Attrition through death, retirement and other causes is made up only partly by the hiring of new workers.) In general, they do not plan on withdrawals by personnel quitting, and thus they do not count on manpower shifts among the enterprises either. Personnel declines from natural attrition and quitting are made up partly or wholly from conscious discovery of internal reserves and by way of recruitment. To this end, in 1980, we are continuing the investigation of work areas, and in certain areas we are improving organizational activity.

It is true that there have been reports from several districts, of 10 to 30 jobs having been eliminated, but this is being managed locally and without stress.

The Direction of Manpower Movement

In carrying out the resolutions of the Council of Ministers directed at improving manpower management in nonproducer areas, we have started reducing or regrouping some of the manpower. The manpower management offices in the capital city have received such reports from five affected institutes--the Construction Information Institute, the Budapest Department of the Kecskemet Winery Research Institute, the OVH [National Water Bureau] Documentation and Continuation Training Center, the Hungarian Style Institute, and the Oil Plan. The measures in question affect 30 to 190 workers in each of the institutes, or a total of 480. Requests have been received from the offices concerned for help in placing 23 workers, the others were handled within the pertinent sphere of authority.

For demographic reasons, the number of those retiring has increased. For example, in the first half of the year, among workers and employees as well as producer cooperative members, the number of retirees increased by 19.8 percent, or 11,400 persons above the same period in the previous year.

Employment has declined in the class of workers whose economic activity is below average--outworkers, part-time workers and pensioners. In industry, the number of outworkers--primarily in the handicraft and domestic industry--declined by 7.7 percent, and employed pensioners by 5.9 percent. In domestic trade, the number of part-time workers and employed pensioners declined by 4.4 percent as compared to the same period in the previous year.

Some of those quitting in the socialist sector have found work in the private sector. The number of workers in this sphere has increased by nearly 7 percent during the past two half-year periods.

The trends experienced in recent years in the areas of manpower mobility have continued to be characteristic. Because of the reduction in the demand for manpower, the workers tend more to remain in their place of work. There has been a substantial reduction, primarily in industry and the construction industry, in the number of ill-considered changes of work place. (The ratio of workers quitting between 1976-1979 declined from 58 percent of all withdrawals to 46 percent.)

There has been a particular decline in the mobility of nonphysical workers. The Economic Research Institute conducted surveys at about 50 enterprises on the characteristics of the flow of physical workers in 1980. They found that there were no new features evident this year in the direction of movement. It may be assumed this applies to more than this year, but it is worth mentioning that 70 percent of the workers participating in the fluctuation--those who left enterprises--were below 35 years of age and in similar ratio were earning below 3,500 forints.

Transitional Difficulties

The ratio of work-relation terminations initiated by employers rose from 8 percent to 17 percent. Within this, there was an increase, small in extent, but perceptible, in the ratio of dismissals for disciplinary reasons as well. Enterprise attitude in this respect is being further strengthened this year.

The economic activity of the enterprises declined decisively because of the decrease in the payment capability of domestic demand. Because of modifications in the economic regulators, including mainly producer prices, some of the enterprises were uncertain about the delivery of orders and the signing of delivery contracts. In this connection, industrial and construction industrial production declined, and as a result of the latter the rise in productivity was less than in previous years.

In the construction industry, production per employee rose according to plan, but only to the small extent of 0.5 percent. In industry, in contrast to the called-for increase of 5 percent in the annual level, the rise in productivity came to only 1 percent for the first half year.

In evaluating the process, however, we must take into account that the following factors are basically at play in the development of industrial productivity: technical development, work organization and manpower management measures; as well as changes in the production structure.

In the first half year, industrial production declined, and this had an unfavorable effect on the development of productivity. We could have countered this effect to a great extent by organization, work time, etc. measures, but these were not implemented everywhere.

Despite the accelerated increase in personnel reduction in the first half of the year, the managing units still have significant manpower. The majority of the enterprises regard the factors which evoked the uncertainty experienced in the first half of the year, and the production, material supply and marketing difficulties, as temporary, and since, in order to meet the possible manpower needs of new production tasks or developments, it is not possible freely to pick up manpower on the labor market at any time whatsoever, the managing organs try to retain some of their personnel.

6691
CSO: 2500

PRIVATELY FINANCED HOUSING CONSTRUCTION DISCUSSED

Budapest FIGYELO in Hungarian No 37, 10 Sep 80 pp 1, 2

[Article by Katalin Bossanyi: "Privately Financed Housing"]

[Text] The acrimonious are saying that a tenth has been added to the nine plagues of the Bible, namely, private housing construction. Just let housing construction be mentioned, whether this is being handled through the National Savings Bank, a housing cooperative, a collective of lawyers, or just with the help of friends and relatives, the most common form of private construction, and the "victims" complaints begin to pour forth. Legal, technical and organizational inconsistencies and stresses are cited, the conclusion being that by the time the new home is ready the builders are sick of it, embittered by the long years of vexation.

A Changed Perspective

Nevertheless, private housing construction, in view of its extent and its proportions, is a socioeconomic factor. Of the 1.05 million housing units constructed during the first 15-year housing construction program (1961-1975), 63-64 percent were privately built. The target for the second 15-year program (1976-1990) is 1.2 million units, with the percentage of those privately built reaching 70-75 percent. As against last year's plan of 90,000 units, 88,196 were actually built--34,056 by the state, which was 9.9 percent above the plan. However, only 55,110 units were built privately, or 8.9 percent fewer than planned. And this when state and social agencies have made and are making increased efforts to improve the supply of plans and materials for builders, to ease the terms for organizing a business, to simplify administration.

The broadest breakthrough in recent years has occurred in the "sphere of interest" of the construction ministry. The Private Housing Construction Development Target Program Committee, which had earlier been oriented primarily toward technical, planning and organizational goals, has expanded since 1975 into an advisory body that from time to time offers a forum for other planning-organizational-development councils likewise involved in the area but separate from each other, specifically finance organs (primarily the National Savings Bank), the domestic trade and communications

departments, and last but not least, the National Federation of Cooperatives. The National Federation of Artisan Cooperatives and recently the National Organization of Artisans as well, which is becoming increasingly more involved in private housing construction. The target program committee has also involved in its work the National Technical Development Committee, the Architests' Cooperative, and institutions responsible for formulating and drawing up regional development programs. All this is not just a matter of form, but a sign of a complete change in the way of viewing things.

As a result of their combined efforts, sites in priority settlements have been marked out and the public utilities requirements which can be included in modern settlement-like multistory cluster private housing construction have been estimated. Closely related to this is the fact that, at the initiative of the Ministry of Construction and Urban Development, the legal provisions relating housing construction have been simplified. This will make it possible for official proceedings and administration to proceed more rapidly. A significant improvement has also been made in providing plans for private builders: 135 different approved plans for family housing are now available which the home builder can purchase at a reasonable price. (If these are used without modification the councils are required to grant a building permit within 15 days.) Soon a collection of approved plans for modern cluster houses (row houses, chain houses, atrium-style houses, etc) will appear. It is also helpful that these plans can now be obtained at Fuel and Building Material Trade Enterprise and National Saving Bank offices. We might also mention progress made in supplying private housing builders with modern structures and building materials in satisfactory quantities and assortment, even though there are still problems with the latter. We should also mention two other areas to which increased attention will have to be devoted in the near future as a result of changes that have occurred in the national economy, namely, that the Ministry of Construction and Urban Development is proposing an increase in financial aid to private housing construction (credit, enterprise assistance, and other types of financial assistance), as well as pressing for the construction of additional model settlements, in conjunction with the National Technical Development Committee and megye councils.

Approved Plans

This favorable picture is somewhat different as regards its details, if we consider the conditions existing in private-housing construction individually.

We have already referred to the Ministry of Construction and Urban Development's modernizing the collection of approved plans for family housing, and in conjunction with this those for private housing construction in general. Last year a total of 8,440 such plans were sold.

According to comments made by the public, the Center for Information is advertising the speed with which permits are granted for approved plans as their most attractive feature in vain if the councils most directly involved are not paying any attention. The members of many councils simply do not have a clear idea of what these approved plans are and therefore treat them in the old bureaucratic way. Another group of complaints made by the people focuses on the rigid loan-granting practices of the National Savings Bank. They claim that even if they should be able to obtain a loan for installing an attic, if it is paid in installments, construction is carried out at a slower rate. An important observation people make, to which planners and builders alike must pay heed, is that many people want plans for small farm buildings to go along with houses being built in rural areas that conform with the plan, and they are calling for plans that provide the necessary space requirements for various auxilliary activities. And one more legitimate request: it would be a great help in selecting from among the approved plans if the consultant at the information office were familiar with the layout plan of the building site, or if he could evaluate the detailed development plan of a settlement or region at a distance.

Model Residential Settlements

A recent innovation in providing plans for private housing builders that also takes the broader interests of the national economy into consideration is model residential settlement competitions. The advantage of these is that while taking into consideration changes in life style, as well as urban and settlement developmental requirements, they also are well suited to introducing advances made in modern building methods, technologies and investment and organization. In the past 10 years approximately eight model residential settlements have been completed in rural areas, and three in Budapest. In some places construction has already begun, in others only the preparatory work is under way. But in the course of the Sixth Five-Year Plan it is hoped that approximately 12 new model settlements will be started.

According to past experience, progress is so slow because a uniform system of conditions for financing and providing financial assistance for model settlements has not yet been worked out, and their advantages in terms of architecture and urban development are not sufficiently convincing to overcome financial brakes based on earlier habits, both organizational and conceptual. For this reason the Ministry of Construction and Urban Development target program committee is proposing that a special system of centrally provided assistance be established. In the Fifth Five-Year Plan a total of 6 million forints was allocated for this purpose from central funds, which proved insufficient either to mobilize council resources or to realize the goal-oriented intentions of the central government. The realities of the situation justified spending approximately 100,000 forints of state appropriations per model settlement residence on up-to-date support for

building, on site preparation, and on partially financing expenses for public utilities--not as a subsidy but as an advance.. Beyond the marking out and preliminary provision of public utilities, this would also considerably reduce organizing time or speed up time to complete the model housing settlement, which in the long run would also lower the total cost.

Actually problems of this type also crop up, only on a larger scale, in the National Federation of Cooperatives megye organization of cooperatives in the housing cooperatives being formed. At the end of 1979, 181,000 housing units were being financed by barely 950 housing cooperatives; during the Fifth Five-Year Plan, 20,000 to 22,000 cooperatively owned housing units were built in this country, so that by the end of 1980 the total number of cooperative housing units will reach 220,000. Experience indicates that this is the most practical and the most commonly selected of the various forms of residential buildings, after self-contracting a private home.

That this "malaise" nevertheless appears to be greatest for this type of construction is due in part to distortions in laws and concepts, and contractor and support-industry problems that today seem to be causes can be regarded as only consequences. The most serious childhood disease of cooperative residential construction is that the cooperative is not a legal person with respect to the investor and the building contractor. The National Savings Bank, for instance, has separate contracts with the members of the cooperative and therefore the position of each family limits organizing construction and production time. Although it often happens, it is also bad for the cooperative's members that the building drags on even though the members are already making payments on the loan for the apartment or house being built. But this is also the reason for the excessive extension of the time required for organizing and preparation. (At present, the housing cooperatives are "held up" an average of 3 or 4 years, and afterwards it is hardly any less time before the owners are able to move in.) That is to say, during the planning and organizing period the representative of the housing cooperative cannot negotiate with the council, cannot obtain --as an advance--credit for site preparation, cannot order the investment program, etc.

In order to overcome this widespread uncertainty, the National Federation of Cooperatives is instituting a Housing Construction Security Fund, which is, however, to provide only temporary relief and is not intended to be a solution to the problems of the housing builders. Another sore point is that they are not given the same treatment as state housing construction--the equal rights problem. Last year, at the suggestion of the National Federation of Cooperatives, it was decreed that the councils should deal with site preparation for cooperative settlement-type multistory private construction in exactly the same way as with that for state housing construction, and it was also made possible for cooperative housing builders to request sites with basic public utilities. The regulations notwithstanding, some of the councils still differentiate between them. What also contributes to this is that the allocation figures for the Sixth Five-Year Plan are being drawn up and this also, understandably, reduces the council's self-assurance. These reasons, as well as the shortage of capacity, play a

role in protracting the process. What makes all this even more difficult is that the housing cooperatives cannot sign a contract even with the building contractor until they have taken possession of the land allocated by the council. This fact has made even the previously most confident support industry, the building-industry cooperatives, uncertain. Both the National Federation of cooperatives and the National Federation of Artisan Cooperatives could help the joint planning and preparations, but so far there has been little progress in this area. Instead they have produced pseudo-solutions, for instance the possibility of establishing a building industry cooperative within the framework of the housing cooperative, or of increasing the proportion of self-contracting.

Problems with Material Supply

We should discuss the supply of materials and services for private builders separately. If the figures for the Fuel and Building Material Trade Enterprise and the Ministry of Construction and Urban Development for the first half of 1980 are compared with those for the same period last year, a considerable improvement is to be seen: building-material turnover for the half-year was up 6 to 8 percent, or 10 percent at current prices. Sales and supply are still not in harmony. That is to say, this turnover was 55 percent greater than last year's in terms of forints, but only 30 percent greater in volume, excluding inventories. But for some products--cement, for instance--there was excess supply, while there continued to be a shortage of glazed tiles, roofing materials and in some places even of bricks. Among the reasons for the decrease in demand is that the total number of privately built projects continued to decrease. Holding down the rate of investment also affected this area.

One thing is certain: improving supplies can be effective only when these are combined with more modern services. For instance, the Ministry of Construction and Urban Development could support having the broadest possible range of private builders participate in the system of material-provision contracts, and a similar method could be used in the area of deliveries of prefabricated structures. (It is primarily on the basis of approved plans that builders are given preference.) An increasing effort is the expansion of the so-called "package" system of providing building materials (this would be in connection with the "semi-finished" house program), or they would recommend not "turn-key" ready houses, but rather separate interchangeable building elements components such as the trussing, or a bathroom or kitchen.

The Ministry of Construction and Urban Development is making new efforts to strengthen ties with artisans. An agreement between the ministry and the National Organization of Artisans was concluded this year which both makes it possible for the almost 50,000 artisans in this country in the construction field to play a greater role in private construction and also provides the conditions for the artisans to borrow tools and machinery from

the larger building industry organizations. As one step toward this they have made the Construction Industry Capital Equipment Marketing Enterprise partially responsible for supplying the artisans. All this is sure to make private building faster and easier and will also improve the quality of self-contracted construction.

The reason that only a small number of people are able to take advantage of the existing services is to be sought in the outdated views of building-materials marketing, its old-fashioned organization and its fragmented network. According to surveys, 90 percent of the population whose place of residence is near Fuel and Building Material Trade Enterprise sites is completely unable to utilize existing services simply because the settlement itself is unsuitable.

In an attempt to resolve this intolerable situation, the construction and domestic trade ministries have drawn up a common development program this year, the fundamantal purpose of which is to expand the basic settlement system. These large modern settlements will be able to offer a complete line of building materials and structures, to provide customer services and advice, to loan tools and machinery, to assist with transportation and moving, and with minor production tasks. The design for the basic settlement system can be drawn up only by taking into account the settlement development, communications and industrial development concepts. This is one reason that a fairly long time is needed to carry this out. Another delaying factor is that building such a system would cost, it is estimated, 2.2 billion forints. Therefore, work can proceed only gradually, but it can also be seen that significant state support or interministerial cooperation will be required in addition to enterprise funds. Thus, no change can really be expected in this area for 5 or 6 years, according to the most optimistic views.

Credit and Prices

And finally, we must make a short detour and consider what has now become the most "sensitive" point in private housing construction, the relation between prices and credit or financial assistance possibilities.

We have referred to the fact that at the present time privately financed construction accounts for two-thirds of all housing being constructed. If we examine the price changes that have occurred over the last 2 decades we note that housing costs, and construction costs in general, have risen faster every year than those for consumer durables or food, and have also exceeded the rate of increase for incomes. This means that it has proved least possible to maintain the value of the forint in the area of housing construction. Another question, of course, and one that would be interesting to analyze in detail, is: to what degree the current, also very high private housing construction costs are justified.)

This enormous burden is being laid upon the state, and to no less a degree, upon the private builders as well. (As compared to 1978, last year it cost 10.6 percent more to build a small, privately-financed house in this country.) Since the means do not exist to increase in the near or distant future the extent of state housing construction, it is justified to inquire what types of financial-organizational and business conditions could ease the burden on private housing builders. The decline in the percentage of private housing construction from 1978 to 1979 is not a one-time phenomenon, but very nearly a trend. (Evidence: in 1976, 61,000 privately financed housing units were built in this country; in 1977, 59,000; in 1978, 56,000; and in 1979, 54,000. The data for the first half of 1980 show a further decline.)

First of all we must make it clear that the state is assisting private housing builders with the enormous annual sum of approximately 20 to 22 billion forints. (Of which 5 to 6 billion is in the form of central assistance, 10 to 12 billion is in National Savings Bank loans, 1 to 1.5 billion is in employer provided assistance, and 1.6 to 1.9 billion forints is in the form of social policy benefits.) This, however, seems too little with the total number of those seeking housing growing from one year to the next. But this is another source of new inequalities in the search for housing. The average cost of an apartment being built with National Savings Bank financing--taking 60 square meters as a basis--is between 600,000 and 800,000 forints. Just calculate: on the basis of the credit policy directives--using half the building costs--for the conventional family house in Budapest a loan of 180,000 forints can be given, in the main megye towns and priority settlements 160,000 forints, but in some communities only 150,000 forints. Thus, from the very outset, home builders are divided into different categories. Even while such differentiation is understandable in some cases, for instance where clustered or settlement-type construction is involved, discrimination based on occupation certainly is a reflection of an outmoded way of looking at things. (At present, those working in agriculture and in cooperative industry are discriminated against when seeking loans; the 200,000 forint credit goes only to industrial workers.) Even taking every benefit into consideration it is not possible to obtain more than 300,000 or 400,000 forints in external resources. But at today's prices this does not cover even half the costs involved in building a house. It is precisely for this reason--with the consideration of the country's load-bearing capacity--that it is justified to revise the upper limit on National Savings Bank loans and raise the possible credit terms at least to the previous 50-50 base. This, however, only helps those who have already accumulated the necessary down-payment for the National Savings Bank house or cooperative residential housing. And this is what it is getting harder to do with every passing year. If we think only about housing, then saving small amounts begins to seem meaningless, but every group in the society is able to save up large amounts in a comparatively short time. This means that if we disregard the restricted worker residential housing programs, average-income families are obtaining housing on more onerous terms or after waiting a longer time.

How can this situation be changed without depending on the state to keep digging deeper into its pocket? How can the effort to expand the number and scope of privately financed projects in the future become a reality? There are many solutions; now we are presenting only one of the possible alternatives. The specialists have drafted a legal-economic-technical concept for introducing a residential square-meter share (bond). The point was that we agreed upon an accounting unit that is a physical value and that--as far as housing is concerned--can be most simply expressed in square meters. Each square-meter share can be bought at the prevailing price, and when it is redeemed it is repurchased at the square-meter price in effect, without interest. It would be worth mentioning the two kinds of bonds: one kind, the bonds, are redeemable when we exchange those accumulated within a predetermined period, or when the National Savings Bank or housing cooperative counts them toward the down-payment, or when it is a matter of special-purpose advance savings. An important condition for the introduction of shares is that when they are assigned, the possibility of speculating with them or making a profit on them must be precluded and for this reason the square-meter shares are not marketable and can be sold or given only to someone within the purchaser's family. A similarly essential condition is that the bank issuing the shares must use the sums received from the public exclusively for housing construction: this should make it possible for the "housing bank" serving as prime contractor, and the possibly different planning and contracting organizations behind it, to operate in a flexible, responsive fashion. The square-meter share would make it possible for people to find housing more quickly and more equitably, and not least, it would mobilize significant private financing for the state for specific purposes related to housing construction. The theoretical bases of the concept have been worked out, although many technical, economic and, last but not least, business terms have not been worked out in detail for its implementation in practice. This joint search for possible solutions and ways to relieve existing stresses, however, should be able to make a great contribution to improving the general state of health of privately financed housing construction.

[Tables on following page]

Table 1. The Trend in Housing Construction

Key:
1. Thousands of units
2. State housing construction
3. Privately financed housing construction

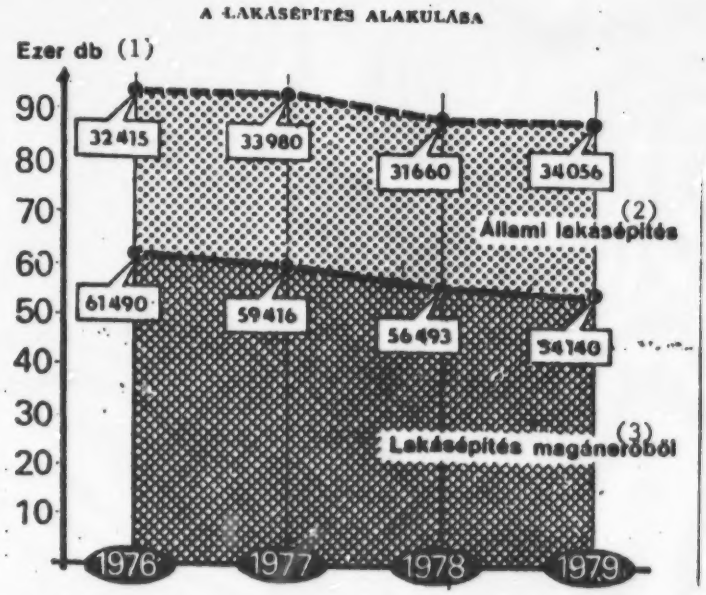
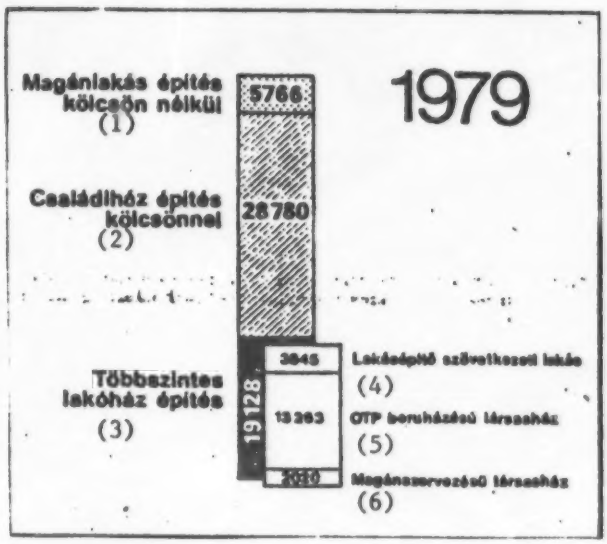


Table 2. Breakdown of Privately Built Housing

Key:
1. Privately built housing built without loans
2. Family houses built with loans
3. Multistory residential housing
4. Housing construction co-operative units
5. National Savings Bank investment condominium
6. Privately-organized condominium



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AGRICULTURAL PRICE CHANGES SLATED FOR NEXT YEAR

Budapest FIGYELO in Hungarian 27 Aug 80 p 13

[Article: "Price Changes in 1981"]

[Text] In the interest of lightening the planning work of the large agricultural concerns, the Council of Ministers has already come to a decision on agricultural price measures to go into effect on 1 January 1981. The decision provides that the purchase prices for tools and materials used in agricultural production will rise with the passing on of the increases that have occurred in industrial producer prices and in import prices since 1 January 1980. This year the budget will temporarily compensate for these price increases, chiefly by counterbalancing at the marketing agencies in the area of maximum purchase prices for agricultural requirements (agricultural machinery, chemical fertilizer, crop protection agents, industrial feeds).

So that agricultural producers also feel the increase in the expensiveness of the tools and materials used in production and use these more economically, the purchase price level for agricultural machinery is to rise approximately 2 percent as of 1 January 1981. Included here is an average 1-percent increase in the price of machinery built in this country, as determined by changes in industrial producers' prices. The price of agricultural machinery imported from capitalist countries will rise an average of approximately 7 percent.

The agricultural purchase price of chemical fertilizer, crop protection agents and mixed feeds is increasing by an average of 6 percent. As a consequence of the increases in state purchase prices going into effect on 1 January 1981, the selling prices of cereal fodders are also going up 5 to 8 percent. Industrial producer and import price changes made in the area of nonmaximum-priced tools and materials are to be gradually passed on to the state farms in the future as well. Consequently, as compared to prices at the beginning of 1980, the price of agricultural spare parts will increase approximately 7 to 8 percent, while charges for services such as crop dusting, various types of examination fees and artificial insemination will increase approximately 5 percent.

In accordance with the increases in costs and taking into account the objectives of production policy and the interests of export and domestic supplies, the

producer (state purchase) prices for agricultural products will go up an average of 5 percent.

Table 1. Price Increases for Various Products

Wheat, per 100 kilograms	20.00	forints
Feed grain, per 100 kilograms	25.00	"
Corn, per 100 kilograms	18.00	"
Rice, per 100 kilograms	100.00	"
Sugar beet, per 100 kilograms	5.00	"
Tobacco, per 100 kilograms	200.00	"
Potatoes, per 100 kilograms	20.00	"
Beef cattle, per kilogram	1.60	"
Hogs, per kilogram	2.00	"
Poultry, per kilogram	2.50	"

The multiyear contract premium that has been paid to small-scale producers is to increase the price by 1 forint per kilogram over the basic price for fattened hogs. The state purchase prices for milk, sunflower and other oil plants and paprika are not changing.

The new state purchase prices for livestock products and for fodders will go in effect on 1 January 1981; those for other crops, in accordance with previous practice, are to be paid for products from the new harvest. The multiyear contract premium paid for fattened hogs sold by small-scale producers will go up on 1 September 1980.

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CURRENT, FUTURE ROLE OF FOOD INDUSTRY DEPICTED

Budapest KOZGAZDASAGI SZEMLE in Hungarian No 7-8 July-Aug 80 pp 895-907

[Article by Imre Kovacs: "The Situation and Direction of Development of the Food Industry in the 1980's"]

[Text] The natural geographic and environmental characteristics of our country provide favorable conditions for the production of food. We have agricultural production under way on a singulary large portion of our area among European countries--74 percent. So the food industry based on agricultural production occupies a peculiar position in our national economy compared to that of other countries. It processes raw materials that derive from domestic production, and this production can be repeated continually, and even expanded, since the primary energy source for this production is sunlight.

The food requirements of the population can be satisfied by 80 percent of present food production, and the other 20 percent can be exported. This ratio is gradually shifting in favor of exports, since domestic consumption is growing at a slower rate than production itself. Food export makes up some 15 percent of the total export of the national economy, and 65 percent of that is comprised of exports to nonruble countries.

Food production constitutes one fifth of Hungarian industrial production, and it employs 12 percent of industrial workers. It is in our economic interest that this ratio not decrease. On the contrary: is should increase as much as possible.

The importance of the food industry--besides its proportional share--lies really in the fact that its products are used repeatedly every day, and they satisfy human needs that cannot be postponed. It is an indispensable requirement of general social well-being that these needs be continually satisfied. This peculiar situation of the food industry emphasizes even more the working out of the development policy in the coming five-year planning cycle that will provide for balanced domestic supply on the one hand and for active participation in the improvement of economic balance on the other.

Structure and Organization of the Food Industry

The organization of the processing of agricultural products into an industry goes back only a relatively short time. A half century ago, the concept "agricultural industry" still included only a few branches (the milling, sugar, tobacco, and alcohol industries). Today, however, the food industry denotes 14 specialized branches and 33 processing branches that are nearly or totally noninterchangeable. The activities and products of the specialized branches differ from one another so much that we can bring them under the unifying title of "food-industry" activities only on the basis of the agricultural origin of most of their raw materials and on the basis of the destination of their products. Food production thus covers a spectrum of activities in which the weight and importance of various specialized branches varies.

Table 1. Distribution of net production in the state food industry (percent)

Specialized branch	Distribution in 1978	
Meat industry	22.6	
Milling industry	14.2	
Milk industry	11.1	
Preservation industry	9.6	
of this: canning industry		7.8
refrigeration industry		1.8
Confectionery industry	8.0	
of this: "Compack"		3.0
Poultry industry	6.3	
Sugar industry	5.8	
Baking and pastry industry	5.1	
Wine industry	4.2	
Tobacco industry	3.6	
Vegetable oil industry	3.5	
Beer industry	2.8	
Alcohol and starch industry	2.7	
Mineral water, soda water, and soft drink industry	0.5	
State food industry total	100.0	

Source: MEM [Ministry of Agriculture and Food Industry] STAGEK [Statistical and Economic Analysis Center] statistical data.

It is especially important, from the point of view of development, that certain specialized branches (milk, tobacco, sugar, confectionery, alcohol, baking and pastry industries, soft-drink manufacturing) produce almost exclusively for domestic consumption, whereas a significant portion of the products of and other branches (meat, poultry, milling, vegetable oil, wine, and preservation industries) is prepared for export.

The number of establishments of various sizes and capacities that conduct food industry activities exceeds 5,000. Of them, some 1,900 belong to the enterprises* that are considered as part of the food industry branch. The others are operated by agricultural enterprises and cooperatives.

The state food industry plays a critical role in fulfilling the tasks of national supply and in accomplishing exports: it accounts for some 94 percent of the total income from sales. The cooperatives and state farms--in spite of significant development--still only get 6 percent all together. But these latter play a significant role in local supply and in expanding the variety [of products available]. Within the state food industry, we distinguish enterprises under the direct control of the ministry and those under the councils. Control of the 124 enterprises under the ministry is provided by trusts in 10 specialized branches. In three specialized branches (Hungarian Refrigeration Industry Enterprise, Hungarian Confectionery Industry Enterprise, Vegetable Oil and Washing Ingredient Manufacturing Enterprise), large multisite enterprises are functioning. A total of 44 bakery, mineral water, soda water, and soft drink industry enterprises are under the councils; control of them is provided by the agricultural and food industry departments of the county councils.

Large, middle-sized, and small capacities are all found among the industrial establishments. The largest products for single industrial establishments are in the sugar and vegatable oil industries (750 million and 722 million forints, respectively), and the smallest is in the mineral water, soda water, and soft drink industry, which does not reach 6 million forints, but the baking industry also is under 10 million forints. This great disparity is the natural result of the very large differences in the purposes of these industries and the consequent differences in their equipment and location.

The sizes of the establishments within the same branch are also very different. In the meat industry, for example, we find plants for processing several thousand hogs a year and others for 2,000 to 3,000. The situation is similar in the milk and preservation industries, for example. This is the result of the development policy, begun in the 1970's and followed especially in recent years, which insisted on creation of middle-sized and small plants along with plants of large capacity, especially through direct connections between agricultural plants and retail cooperatives. Different domestic and export requirements and economical processing of available raw materials can only be met in this way.

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*According to the classification of the KSH [Central Statistical Office, state industries, industrial cooperatives, and enterprises belonging to large agricultural operations along with independent joint enterprises with mixed ownership belong here; these are collectively called the socialist food industry.

Production Factors in the Food Industry

Agricultural and food-industry production are closely connected with one another. Most of the mass of products leaving agriculture is sold by the food industry. Two-thirds of the raw materials required by the food industry derive from agriculture. It is extraordinarily important, therefore, that the ability of agricultural production to ship out, and the food industry to accept, develop in harmony. Otherwise, tensions arise that reduce productivity and competitive ability.

Agricultural production and processing activity did not develop harmoniously in earlier years: development of industrial capacity was not able to keep up with the fast pace of growth in agricultural production.

In some cases the disharmony between basic-material production and processing capacity has aggravated even more the annual fluctuations in agricultural production although dependency on weather has lessened with the rise in production levels, so that the development of agricultural production has become more regular in recent times). In spite of great efforts, losses in storage and processing have been signficant.

Thus the creation of balance between raw-material production and processing is the most important task of food production. In our days an increase in storage and refrigeration capacity in proper ratio to productive capacity is an especially urgent task. Without it we must expect not only losses in products destroyed and damaged in quality, but also inability to use them because of failure to adjust flexibly to prevailing market requirements. Provision for smooth cooperation between the dynamically growing branches of animal husbandry and the specialized branches based on them is a cause of concern, and we are frequently forced to make use of grains, vegetables, and fruits in other than the most favorable times and ways.

Lack of harmony is obviously in contradiction with our economic interests. In order to eliminate it, important developments during the period of the Fifth Five-Year Plan were justified: enterprise resources have been supplemented with state support, large state investments have been made, credit has been utilized to increase the basis of exports, and the food processing activities of large agricultural operations have been expanded.

In comparison with the period of the Fourth Five-Year Plan, monetary investments in 1976-1980 by the ministry and the councils in the food industry have doubled--calculated at current rates. Especially significant investments are being made in the meat, milk, refrigeration, sugar, and vegetable-oil industries. Investments by the large agricultural operations in the food industry are also increasing significantly.

In spite of considerable development, creation of harmony will require still more effects, in part because we are still far behind (especially in developing storage space), in part because we have had some unfavorable experiences in addition to good results in overall development:

--Some large investments have been delayed beyond their planned time, and they will get into production later.

--Significant expenditures beyond planned amounts are frequent occurrences.

--The efforts of the enterprises are generally directed to moderating shortages in capacity. The scarcity of investment resources (and fear of this!) strengthens that desire even more. Thus projects to improve competitive ability--but not production direct--receive low priority. For this reason we are behind in investments for accessories and for environmental protection.

In spite of strong development, the technological level of the food industry--except for one or two new plants and manufacturing processes--can only be described as average in comparison with the capitalist and socialist countries with developed food industries. It has improved, but agricultural production and processing capacity have not yet been sufficiently harmonized geographically. The locations of both agricultural and food-industry operations can change and adjust to one another. The possibility of adjustment is greater when productive capacity can be converted [from one crop to another]. Convertability is greater in agricultural operations that are not sufficiently specialized and those that grow annual crops; it is less in food-industry enterprises with a narrow profile. Solution of this problem is not easy: harmony at the branch level is not sufficient to improve competitive ability in food production. In order to decrease very substantial transportation costs, we must try to have each economic district (not the same as administrative district!) establish harmony between raw material production and processing.

The Evolution of Human Conditions

Food industry activities employ some 230,000 people. The number has increased in past years--up to 1979--by 1 to 2 percent annually, which was caused by expansion in services, transportation, marketing, and commercial activities, in addition to increased production and starting of operations in new units.

Between 60 and 70 percent of growth in production arises from increases in worker productivity. The year 1979 was the first in which the number of people employed in the food industry did not increase. However, production still exceeded the previous year's level by 3.2 percent. The increase was thus totally attributable to improvement in productivity.

The technological levels of activities in processing are uneven, and the lack of accessories such as loading and moving machines has an even more unfavorable effect on increasing productivity. Working conditions, especially in older operations, are subject to criticism. Heavy, physical labor is being performed in wet of damp environments, and in some branches the number of overtime hours is large. In recent years incomes in the food industry have increased, but the amount by which they lag behind the overall average for industry, 4 to 5 percent, has still not decreased.

Food production needs increasingly better trained experts with more up-to-date knowledge. But keeping present experts and skilled workers, because of the above conditions, often causes problems, which has the consequence that turnover (and this means wasted knowledge!) in the work force is significant. The training of new experts also runs into limitations. Because of the characteristics of the various branches, each branch needs a relatively small number of highly specialized experts, which obviously means a difficult tasks for our instructional system. Appropriate college-level training has begun, but it only goes back a few years. Some of the present specialized engineers received their training in the Soviet Union.

Evolution of Production and Utilization in the Food Industry

The food industry, based on agricultural activity, has in past decades greatly increased production, expanded the variety of products available, and improve their quality and packaging. Beyond satisfying the increasing and differentiated domestic demand for these products, they have made regular exports possible.

The Fifth Five-Year Plan prescribed a 28 to 30 percent increase for the food industry as a whole between 1975 and 1980. Two of the past 4 years were unfavorable for agriculture, and so production in the food industry has fallen somewhat behind schedule. Production in 1979 exceeded that of 1975 by some 20 percent. If the goals for 1980 are met, the prescriptions of the Fifth Five-Year Plan for increases in production can be met approximately.

The results of the first 4 years of the plan period indicate that the increases in production in some specialized branches differ from the planned amounts. Thus, for example, there has been a greater than planned development in the milk, baking, beer, and tobacco industries, whereas in the other industrial branches growth has been at the planned level (vegetable-oil and sugar industries) or below.

Change in the structure of food-industry production has been caused by a wide variety of causes. In some specialized branches (preservation, milling, confectionery industries), for example, development has been hindered by insufficient supply of domestic and imported raw materials; in order specialized branches the rate of growth of production has changed because of market requirements. For example in the meat industry, foreign demand for live animals has decreased the volume of products processed, in the poultry industry considerations of export economics limit production. In other specialized industries again (for example the beer, baking, and pastry industries) the increase in demand by the population and the need to accept more than planned amounts of raw materials (for example in the milk industry) have speeded up development.

Accomplishment of the Tasks of Domestic Supply

In connection with the evolution of production and the retail price regulations that affect larger and smaller areas of food, a structural change in domestic supply has taken place differing from that planned. Consumption of milk and milk products, as well as eggs and beer, has risen faster. On the other hand, increases in consumption of meat, vegetables, fruit, wine, coffee, and sugar have moderated. Overall, domestic supply has been balanced.

Table 2. Evolution of per capita consumption of the most important foods (kilograms per person)

Food	Consumption		
	1970	1975	1978
Meat	58.1	68.5	71.2
Milk and milk products	109.6	126.6	155.0
Eggs	13.7	15.2	17.4
Fats	27.7	29.1	29.8
Cereals	128.2	122.2	118.5
Potatoes	75.1	66.8	60.5
Vegetables	83.2	85.2	83.1
Fruit	72.5	74.0	79.3
Sugar	33.5	39.4	36.4
Coffee	1.6	2.6	2.6
Wine (liters)	37.7	34.2	22.8
Beer (liters)	59.4	72.3	86.0

Source: Hungarian Statistical Pocketbook, 1979, KSH.

The number of kinds of foods produced by the food industry exceeds 4,000. The variety of foods available has expanded considerably. Especially the milk, preservation, meat, and confectionery industries have brought new items into circulation in recent years. As a result of urbanization, a smaller and smaller share of our nutrition is supplied by consumption of products we have produced ourselves.

Foreign Commerce in Food Products

In Hungary's foreign commerce a very significant role falls to agricultural and food industry products. Their total share in foreign commerce is relatively large, even in relation to other countries with a developed food industry:

Table 3. The role of food in the foreign trade of certain countries (percent)

Country	The share of food in total export	import
Denmark	33.4	9.9
Hungary	22.2	9.8
Netherlands	21.3	14.3
France	15.1	11.4
Yugoslavia	13.1	9.5
Belgium and Luxembourg	9.4	12.2
United Kingdom	6.7	16.6
FRG	4.4	14.4
Austria	4.2	7.8
Czechoslovakia	3.6	10.8

Source: FAO Trade Yearbook. Rome, 1978. Foreign Trade Statistical Yearbook, 1977.

Meat and meat products, grain, and garden products represent the largest volume in our exports. In addition to this, however, foreign currency income is obtained from the sale of so-called "little items" as well (rabbits, pigeons, honey, etc.). In our imports, protein feeds, tropical fruits, coffee, tea, and cocoa represent the largest portion.

In past years the export of processed products in our food exports has increased dynamically. Export of these products exceeded 60 percent of all agricultural and food-industry exports in 1978, whereas in 1975 their share had been only 55 percent. The export-import balance in foods generally and in industrially processed products is positive. (See Table 4.)

The socialist countries represent an important buying market for our food exports. Beyond them, we market significant quantities to countries in Western Europe, North America, and the Near East. As a result of work in studying and expanding the market, a large portion of the increase in exports compared to 1975 has been directed to new markets, mainly Near Eastern countries and North America.

Table 4. Foreign commerce in food products (in billions of forints)

Category	1970	1975	1978
Total exports	13.0	26.9	31.6
Total imports	9.0	18.4	15.1
Balance	3.3	8.5	16.5

Source: MEM STAGEK statistical data.

Expansion of our food market, however, has been connected with new tasks and risks in addition to advantages. The problems are mostly connected with transportation. To accomplish export transportation, lacking appropriate domestic transportation capacity and a stock of specialized vehicles of appropriate technological level, we more and more frequently rent means of transportation from other countries, which results in substantial costs in additional to uncertainty.

The Direction of Development in the Food Industry

The tasks and fundamental goals of the food industry long-range and for the 1980's in particular will not change: the increasingly differentiated domestic requirements must be satisfied, and beyond that the basis for exporting those goods that can be economically exported must be expanded. We must be careful that the composition of products in excess of consumption by the population be as favorable as possible from the point of view of placing them economically on foreign markets.

Especially in the rapidly changing world economic situation of our days, this requires exceptionally careful work. The attainable structure and level of food production in the coming plan period depend in large measure on the evolution of possibilities for sales on foreign markets, resources available for development, improvement of harmony between raw-material production and processing, and creation of conditions for competitive ability.

Evolution of Demand for Food Products

a) Change in domestic demand

Demand on the part of the domestic population for consumption of processed foods can only be projected with some uncertainty. Consumption depends strongly on the evolution of real income and food prices. On the basis of international experience, however, it can be seen as probable that the quantitative increase in food consumption will moderate compared to previous [levels]. This is because, among other things, we are near the point of saturation in consumption of foods.

On the other hand we must prepare for the fact that at the same time as the increase in consumption moderates, the demand for quality and variety in food will increase, and satisfying this demand is also an important task. Business and consumers both expect the widest possible variety of foods that keep well and can be prepared quickly. The proportion of self-supplied foods--with some transitional fluctuations--will decrease, so that demand for centrally supplied goods will increase everywhere. Development must take these points of views into consideration.

An annual increase of between 1 and 1.5 percent in food-industry production will presumably be sufficient to meet the expected domestic demands.

b) The evolution of foreign-market possibilities

The ability of the socialist and capitalist countries that are our potential markets to accept export goods is greater for most products than we could justify from the production side. This, however, is only one necessary condition for sales on foreign markets, and it does not guarantee economical exports. Obviously we are faced with a double task when we attempt to develop our food exports: on the one hand we would like to increase our foreign-currency income, and on the other hand we want to improve export economy.

From this point of view, however, our potential markets are greatly varied. It is no problem to sell food, because demand in the world is greater than supply. But to sell in such a way that we will be repaid for our costs and will be able to buy products needed by our national economy with the money (foreign currency) received, is no small task. Competition in the profitable food markets is getting stronger; we can only maintain our position with high-quality products and successful market work.

According to our present knowledge, we can count on an increase in demand from the socialist countries for our food products.

The ability of the developed capitalist countries of Europe to supply themselves in increasing. In spite of that, this area will represent a buying market for some of our products (vegetable oil and products of animal origin) for a long time to come.

Among the capitalist countries outside of Europe, we can expand export of food mainly to North America, especially with an increase in the share of those products that can withstand the greater transportation costs.

In the developing countries of the Near and Middle East, which have demand and ability to pay, additional social classes will presumably join the group of consumers requiring imported foods, and this will increase our chances for export.

The actual and economic use of market opportunities is a function of many factors: seizing opportunities that open up on foreign markets requires not only additional production, but competitive ability, quality, and significant and fast improvement of market-organizational work.

Taking all of this into account, we can state that it will be possible to sell competitive foods, and their export will influence the foreign trade balance of the country favorably.

The Possible Size and Main Directions of Development in the Food Industry

The size and direction of development in the food industry is determined naturally by other factors in addition to domestic and foreign demand. We must mention here the work-force requirement for expansion of production

(which must be in harmony with developmental requirements as regards not only numbers of people, but also composition of skills), the agricultural raw materials available, and the resources for development. All these factors impose ever greater specific burdens.

None of the conditions listed above is expected to guarantee a wide possibility for fast growth in the food industry in coming years. In the case of the necessary work force, qualitative requirements are coming more and more to the fore. Requirements for additional manpower can only appear to a limited degree, even in the case of the introduction of new capacities. In general, we can expect a leveling or even a reduction in the work force. But there will be a growing requirement for experts or for expertise in general. To satisfy this requirement will be a large task for education and training. Keeping the experts on hand, improving working conditions, providing fair wages for work performed, etc., are problems that appear simultaneously in every food-industry plant.

Thus provision of the necessary work force will be a greater task than before, but the possibilities for expansion of food production will be determined fundamentally not by this, but by the possibility of expanding the availability of capacity for storing and processing raw materials.

According to international experience, harmony between food production and production and processing of raw materials is appropriate in a country when the annual rates of growth of agriculture and [food] industry are related to one another in the ratio 1 : 2. The data relating to this from neighboring socialist countries are contained in the following table:

Table 5. Comparison of the growth rate of agriculture and food industry

Country	Average rate of annual growth in 1971-6 (percent) in agriculture	in the food industry	Ratio of rate of growth in agriculture to rate of growth in the food industry
Hungary	4.9	4.7	1 : 0.9
Bulgaria	3.0	5.8	1 : 1.9
Czechoslovakia	2.7	4.7	1 : 1.7
Poland	3.7	8.9	1 : 2.4
GDR	2.7	5.4	1 : 2.0
Romania	6.5	7.5	1 : 1.2

Source: Statistical Yearbook of the Foreign Members of the SEV. Moscow, 1978.

Naturally the characteristics of various countries differ in regard to the weight and internal structure of food production. But even so, we can state that during the first half of the 1970's the rate for growth in

raw-material production and processing was not appropriate, mainly because of insufficient processing capacity. During the years 1976-79, the ratio of the average rate of growth of the two main branches was 1.0 : 1.7; thus there has been an improvement in comparison to previous years.

In the first half of the 1980's it is expected that agricultural production will increase at a more moderate rate than during the period of the Fifth Five-Year Plan. According to our knowledge of today agricultural production may grow at an annual rate of between 2 and 2.5 percent during the period of the Sixth Five-Year Plan. More precise values of this will be determined by the possibilities for competitive exports. An annual growth rate of about 1 percent will supply sufficient raw materials to satisfy domestic needs. Beyond this, production can be increased--within the limits of the economic environment--as conditions for economic export of products are created. But this is critically determined by the possibilities for processing and storage. So in the future, processing and storage capacity must be increased in those branches whose products can be exported under favorable conditions. Taking into account development of production and possibilities for export, the average annual rate of growth for the Sixth Five-Year Plan can be set at between 3 and 4 percent. Even the lower limit of the rate of growth computed in this way exceeds the 1 to 1.5 percent needed to satisfy domestic requirements. At least half of the increases can therefore be turned into exports.

A significant part of the funds for development in coming years must be devoted not to expansion of capacity, but to improvement in quality, storage, refrigeration, protection, and packaging of products, improvement of working conditions, and investments for environmental protection. Naturally new capacities must be created, but there will be less possibility than during the Fifth Five-Year Plan. It is essential to emphasize that development of processing and storage is justified not only in the state food industry. There is great need for the agricultural operations and the retail cooperatives to join to a greater degree than before in the processing and storage of their products. The solution whereby processing or storage capacity is established through joint investment of agricultural and food industry enterprises is especially good. This is because in that case cooperation and mutual interests between raw-material production and processing on the part of the participants can be guaranteed.

The requirement of selective development causes differentiated expansion of the various specialized branches of the food industry. The size of development and the number of alternatives to be considered depends mainly on whether the given branch is producing for domestic supply or for export. This is because we regard the increasing needs of the domestic population in quantity and quality as requirements that must be satisfied in any case.

a) Not even the development of those branches which produce mainly for domestic consumption can take place at an equal rate, because requirements for consumption change in differing ways. There is need for relatively fast growth is the manufacture of milk products and soft drinks, as well as in the confectionery industry and further in the beer and alcohol industry

(for the latter in the manufacture of industrial alcohol and liquid sugar). But in the sugar, tobacco, milling, and baking industries a more moderate rate of development will be sufficient.

b) Those branches that play an important role in both domestic supply and export must be developed depending on what chances are available for economic placement of their export products. We can be (or can become) competitive both in ruble and nonruble relationships with products of the meat, poultry, vegetable oil, and refrigeration industries. We must pay increasing attention to development in these areas.

This applies particularly to the case of the meat industry, where there is demand for its products on both the socialist and capitalist markets. We must place emphasis in developments on modernization of existing capacity, improvement of technological and sanitary conditions, and solution of transportation probelms. Production of canned meat should increase at a faster than average rate as should (in order to decrease import of protein feeds) the processing of byproducts and meat meal.

Favorable outlooks can be projected long-range also for export of vegetable oils. This makes it justified for the vegetable oil industry to increase its production to a greater degree than any other branch of the food industry. For this it may be necessary to increase its capacity.

A similar dynamic development can be prescribed for the products of the refrigeration industry--most of all quick freezing. For this development raw materials of appropriate quantity, quality, and composition must be provided, the necessary rebuilding must be completed, and new refrigeration plants must be built.

Fast development would also be possible in the poultry industry as well. For this, processing capacity can be created, and enthusiasm on the part of the agricultural operations undertaking the work can be assured. The rate of development will be determined, however, by the export possibilities that will be offered hereafter. Domestic requirements for feed in this branch make necessary an increase in processing of by-products for the manufacture of meat meal.

Exports of the canning industry and the wine industry take place mainly in exchange for rubles. The conditions for wine have been made relatively clear. Strong development of the wine industry can be provided by raising the level of grape production.

Planning of lines of development for the canning industry is a complex task. This is because greater than average growth in this case can only be imagined if we are able to modify our previous export structure to a considerable degree. There is need for production of substantially more ready-cooked foods in order to meet the demands for consumption that are appearing.

The System of Funding for Development of the Food Industry

In order to reach the goals of the Fifth Five-Year Plan--improving financial conditions for food production in the interest of increasing capability of self-financing--a system of regulation was formulated that differs from the general industry regulation system and adjusts to the characteristics of the branches of the food industry. The organization of wholesale prices effected on 1 January 1976 created general conditions for the formation of the necessary developmental funds for planned investments and for achievement of the planned levels of personal income.

Since 1 January 1980 a new system of conditions has been in effect for the food industry. Solutions differing from the requirements of the general (normative) requirements of regulation were discontinued. Success in the various specialized branches depends to a large degree on how we are able to improve organization of the work and efficiency of operation. It is certain that even if work efficiency is improved as much as possible, the ability of the food industry to finance itself will decrease and developmental funds will be less available as a result. This in turn will critically hinder rebuilding from enterprise funds.

This scarcity of development funds is not, however, the only difficulty in investment practice. Increasing the export-orientation of food production, improvement of competitive ability, and flexible adjustment to varying market relationships require machines, equipment, and various materials--collectively called background industrial activity--much of which cannot be supplied by domestic industry. The weight of the food industry in the national economy and the requirements for improving balance demand that the machinery and chemical industries in particular, but also light industry, devote more attention to satisfying the demands of the food industry, which represents a continual buying market.

An increase in independence of the enterprises is required in order to improve efficiency, increase fulfillment of plans, and make better use of reserves. Most of that part of the food industry under direct supervision of the ministry is organized into trusts, and a smaller part into large enterprises with multisite operations. In earlier years this form of organization was successful; that is demonstrated by the significant development of the food industry. However, the new requirements can be met by the enterprises only through more economic independence than before. For this reason, the internal accounting systems of the trusts must be appropriately modified.

An increase in economic independence by the trust enterprises can mean a considerable step forward in mobilization of reserves and in making the connections between raw-material producers and commercial enterprises more productive. All this is an indispensable condition in order for our food industry to be internationally competitive and for domestic needs to be satisfied at a high level.

It is necessary for production in the food industry to be expanded enough to meet increasing domestic requirements; it is advantageous in the interest of improving our balance of payments situation to expand even further. For that we need more differentiated development of agricultural production and a more efficient utilization of energy resources in processing, and for this we need a better foundation for background industry. As these development are realized, further improvement transportation and business work will be needed. Food production is one good characteristic of the Hungarian economy. Exploitation of this characteristic is a great task for workers in agriculture and the food industry first of all, but recognition of this characteristic throughout the whole society and harmonious, purposeful activity among the various units of our economy are necessary for it to be realized.

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FOOD INDUSTRY RELATED ACTIVITIES OF FARMS NOTED

Budapest FIGYELO in Hungarian 27 Aug 80 p 13

[Article by D. Tamas Horvath: "Food Industry at the Producer Cooperatives"]

[Text] Most of the active small plants in Hungary are working in subsidary operations of producer cooperatives. It is striking, however, that these small plants are industrial in nature and are engaged in food processing to a lesser extent than could be desired. The generally cited reason is the low profitability of food processing.

A counterexample to this is provided by the Szilasmenti Producer Cooperative in Kerospestarcsa, which has been profitably engaged in processing agricultural produce for nearly a decade. The Szilasmenti Producer Cooperative farms approximately 6,000 hectares, but it is low-quality land valued at an average of 13.5 gold crowns per hectare.

That they have been successful is proved by their 1979 per-worker result of 30,000 forints for all producer cooperatives. However, 24 percent, approximately 175 million forints of last year's total sales receipts, were from the food, medicinal-plant and essential-oil processing plants.

From Dried Vegetables to Seasonings

Food processing began in 1971 with the production of dried vegetables. The sphere of activity grew gradually. They combined dried products into seasonings, and also began to produce pickled products. The cooperative's bakery and pastry plant came into being, and fish processing also commenced. The expansion of the sphere of their activities was accompanied by an increase in the food-processing plant's sales receipts from the initial figure of 9 million forints in 1971, to 54 million in 1975, and 85 million in 1979. This income from sales was reached with the employment of 100 persons in the subsidiary operation.

The plant manufactured about 20 different types of products last year and exported 20 percent of its production through Hungarofruct. Small-scale food plants similar to that of the Szilasmenti Producer Cooperative's subsidiary production line have two advantages: rapid market response and comparatively

low capital intensiveness. A good example of both of these is the rum cherries the cooperative makes for the candy industry, the newest product of the cooperative's food-processing plant. Due to the strained capacity of the candy industry a manufacturer was being sought for the popular confection, and the Szilasmenti Cooperative was discovered. Within a short time, using existing machinery and equipment costing approximately 150,000 forints they had turned out 10 million forints' worth of rum cherries. And the result of this one-time deal in cooperation will most likely be a long-term contract.

Where They Were Trailblazers

The production and processing of medicinal plants also began in the early 1970's. This production line also employed 100 persons, but its sales receipts in 1979 were nearly 90 million forints. At present it manufactures approximately 300 different products, some of which is for direct consumption and some of which goes for medical purposes and cosmetics. Last year it exported approximately half of the plant's output through Medimpex. Its best customers are the FRG and France.

In the beginning it processed only medicinal plants raised on the cooperative's land, but since 1975 it has had contracts with other cooperatives as well. Last year medicinal plants were raised on 1,500 hectares at the cooperative, and in addition, nearly 1,000 hectares' worth was raised by other farms. Their most important partners were the cooperatives in Pelpuszta and Fot, which raised medicinal plants on 400 and 300 hectares, respectively, for the Szilasmenti Cooperative's processing plant.

From the economic standpoint what is most important is that in both the production lines mentioned in this article the enterprise result per worker is higher than the characteristic indicator for the Szilasmenti Cooperative as a whole: this, however, is considerably better than the national average for cooperatives. To this we must also add that the amount of capital per capita is less than the characteristic 132,000 forints of the cooperative as a whole, while this itself is barely 40 percent of the 346,000 national average for cooperatives.

What is the explanation for such a good result being obtained with such a small amount of capital? In the first place, the cooperative watches the market and is able to respond to it rapidly. The cooperative is able to manufacture seven or eight different products from a plant and it always tries to make the one commanding the highest price. It buys only equipment that has multiple uses. Cost factors are systematically analyzed and the cheapest solution is sought. For instance, right now, because of rising energy costs, the cooperative is experimenting with heating air by using the cooling water warmed by the drying furnaces, which has to be cooled in any case, and then using this warmed air for drying too. As another possibility for reducing losses, the cooperative is also testing the use of the plant fiber waste from the manufacture of flavorings as an addition to silage.

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HUNGARY DEVELOPING AS PRODUCER OF MEAT

Budapest FIGYELO in Hungarian 27 Aug 80 p 13

[Article by Marton Lovas: "The Development of Meat Production"]

[Text] Nowadays there is hardly an economically developed country without an industrialized developed agriculture. Hungary's greatest natural treasure is its arable land. Before 1940 we produced an annual 6 million tons of grain on 4.1 million hectares of arable land. Thirty-five years later, between 1975 and 1978, Hungary produced 12 million tons of grain on less area (3.8 million hectares.

One of the important indicators in agriculture is the per capita production of meat, because in the developed countries of Europe expanded grain production is not increasing but rather decreasing the consumption of cereals (types of flour).

Among the Leaders

The trend in meat production and consumption is thus a good indication not only of a major component of agricultural development but of the standard of living as well. The following data show the production of meat since World War II.

Table 1. Per Capita Meat Production (in Kilograms)

	1965	1970	1975	1978	1978/1965 (%)
CEMA countries	49	56	68	70	142.8
Common Market countries	60	68	74	77	128.3
Hungary	92	101	135	143	155.4

From the table we can see that Hungary is one of the greatest meat producers, per capita, in Europe.

We produce more meat than we consume; in other words, a significant proportion of the meat we produce is exported, in addition to completely satisfying domestic requirements. Hungarian meat production is the most important source of Hungarian exports.

In 1960 we produced a total of 1 million tons of meat in Hungary; in 1978 and 1979 we produced 2 million tons annually.

Until 1970, Denmark led Europe in per capita meat production (216 kilograms), Holland was in second place (108 kilograms), and Hungary was third (101 kilograms). In the early 1970's Hungary rose to second place, while Holland, even though it had increased its production (128 kilograms per capita) fell to third place, because meat production in our country was 143 kilograms per capita, with per capita meat consumption rising to 73 kilograms. In addition we exported 24 million forints' worth of livestock and meat.

Our Own Fodder

Hungary differs essentially from the small, developed meat-producing countries of Western Europe. The difference is that while the West Europeans produce meat using feed imported from abroad, from America, almost as paid laborers, we here in Hungary can produce it using our own feed resources.

It is thus a historical truth that Hungary, at the beginning of the 1980's, has developed into a meat-producing country.

Hungary cannot exist without materials and equipment produced by other countries, and we obtain these materials and equipment from the world market by selling the goods we produce. Progress means that we must import even more in the future.

The important question for the present and the near future is what the Hungarian national economy can and should produce for export in the future in great quantities in order to be able to import what we need.

The basic requirement is economic efficiency, that the cost of producing the goods be elss than the selling price. This is an essential condition for every export.

The future is promising for export production. Producing such products strengthens not only one branch of the economy but the development of the whole Hungarian national economy, as it has done in the preceding decades.

Between 1960 and 1980 we increased the country's meat production from 1 million to 2 million tons, but we have not yet drawn a lesson from this experience.

According to this experience, we should expand the country's production of protein sources. Grass raising should be continued on large areas at the expense of pasturing, and the protein produced should be preserved by using already known (and, in part, applied) technological procedures. The production of grain feeds can be further expanded in the coming decades; the further improvement in and the more favorable combination of the characteristics of animal breeds and the further expansion of meat production are a great reserve.

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PUBLIC FOOD SERVICE ENTERPRISES MOVE TOWARD SELF-SUPPLY

Bucharest REVISTA ECONOMICA in Romanian 29 Aug 80 pp 8-9

[Article by I. Panaseen, Academy of Economic Studies: "Better Utilization of Internal Resources in Public Food Service"]

[Text] Public food service, an important branch of domestic trade, has achieved remarkable results both on an economic plane and on a social plane. Thus, in 1978 as compared with 1960, the network of units grew about 104 percent (including the network of restaurants about 277 percent), the volume of sales about 412 percent and so on. One should also note the fact that the percentage of culinary production and other food products in the total sales through public food service units came to over 57 percent on the average. The average sales per unit grew over 2.5-fold in this period, from 684,000 to 1,722,000 lei per year. The percentage of sales through public food service units in the total sales through socialist trade rose from 14.8 percent to 16.3 percent.

The development of public food service is reflected positively in the level of satisfaction of the population's needs. While there were 2,135 inhabitants per public food service unit on the average in 1960, the number fell to 1,245 in 1978. The average consumption per capita rose from 320 to 1,383 lei.

In prospect for 1985, targets that surpass the average growth of socialist trade (the growth of sales by 30-35 percent in comparison with 1980) devolve upon public food service. Thus, the Directive Program for Increasing the Standard of Living in the 1981-1985 Period and Raising the Quality of Life provides that the volume of sales through public food service is to grow 36.1 percent and, within them, prepared and partly prepared foods are to grow over 50 percent. A significant increase in the sales of prepared and partly prepared foods requires a qualitative diversification in accordance with the structure of the population's demand, with the providing of a consumption established on the basis of scientific criteria.

The fulfillment of such an essential requirement helps to ease work in the domestic economy, to raise the quality of life.

The transition to a new quality in public food service puts in the forefront the optimization of the structure of sales, as a result of the constant growth of the production of prepared foods and other food products, but especially of kitchen products. The attainment of this major objective requires the utilization of all existing resources, the elimination of any waste that would affect the growth of profit, the raising of the degree of satisfaction of the demand of the consumers.

The organization of annex-farms for raising hogs and poultry represents a main way to increase the volume of culinary production. The main feed for these animals can be provided through the efficient utilization of kitchen scraps. This requirement fits organically into the task contained in the documents of the 12th party congress with regard to the complete recovery and reuse of raw materials and supplies. In the speech at the work conference of the RCP Central Committee in February 1980, Comrade Nicolae Ceausescu, secretary general of the party, stated that "...it is necessary to proceed to organize the raising of poultry and hogs near the commissaries, which have big quantities of food scraps." Consequently, decisive steps are required from all the decisionmaking factors in public food service, in order to put an end to waste of food, including that which can be recovered and reused to raise hogs and poultry, for increasing and improving the production of prepared and partly prepared foods.

The implementation of such an important task unleashed a vast program of actions, meant to amplify considerably the achievements already obtained. Thus, at the end of 1979, there were about 1,800 annex-farms, with about 44,000 hogs and 23,000 poultry, within public food service. It follows that there were 45 annex-farms per county on the average. However, the existing possibilities permit, through sensible utilization, the obtaining of better results by each public food service enterprise.

The steps taken by the Ministry of Domestic Trade [MCI] for 1980 constitute the most graphic proof in this regard. At the level of this year, within the MCI, the organization of 363 new annex-farms and -sections, that is, an average of about 9 units per county, has been planned. In comparison with the achievements up to the end of 1979, for all public food service, the planned growth represents about 20.17 percent. Regarding the number of hogs and poultry that are to be raised on annex-farms, the plan targets for 1980 are 0.41 percent and 269.59 percent higher, respectively, than the achievements obtained in 1979. The average per county is about 1,105 hogs and 2,125 poultry. (In some countries, such as Bacau and Bistrita-Nasaud, the raising of other meat animals is also planned.)

The distribution of annex-farms according to counties shows big variations. Between 1 and 10 annex-farms operate in 29 counties (72.5 percent of the total) and between 11 and 36 in the other 10 and in the capital (27.5 percent). In the category of counties with a higher number of annex-farms are: Arges, 36; Prahova, 25; Sibiu, 21; Constanta, 18; Dolj, 16; and so on, and the municipality of Bucharest, 25. Among those with a lower number

are: Bistrita-Nasaud, one; Vrancea, Galati and Salaj, two each; Gorj and Iasi, three each; Botosani, Caras-Severin, Harghita, Ialomita and Timis, four each; and so on. In view of the strong development of public food service in all the counties, it seems difficult to explain significant differences noted between Arges, Prahova, Sibiu and Constanta, on the one hand, and Galati, Gorj, Iasi and Timis, on the other hand, the latter being far below the possibilities that they possess. Moreover, the differences seem even more visible from the viewpoint of the number of hogs and poultry that will be raised on annex-farms. For example, 800 hogs and 10,000 poultry in Arges and 1,150 hogs and 1,950 poultry in Prahova, as compared with 200 hogs and 2,500 poultry in Galati and 250 hogs and no poultry in Timis. With the social and economic conditions being approximately similar, this means that it is a question of unequal concern for the utilization of kitchen scraps by annex-farms. One should also note the fact that a number of counties—Brasov, Buzau, Constanta, Dimbovita, Dolj, Harghita, Ialomita, Iasi, Salaj, Teleorman, Timis, Tulcea, Vilcea and so on—have not planned for this year the raising of poultry on annex-farms, although this does not require measures far different from those for raising hogs, and the meat obtained fits into the category of foods with a high nutritive value.

Not only the number of annex-farms but also their dimensions, with which efficiency in operation is closely connected, are important. The plan targets for 1980 in the following counties are illustrative in this regard: Hunedoara (where on the 5 annex-farms the raising of 4,270 hogs and 4,300 poultry, equivalent to 420 tons of meat, is planned), Covasna (6 farms, 3,450 hogs, 20,000 poultry, 186 tons of meat), Neamt (11 farms, 2,150 hogs, 6,000 poultry, 224 tons of meant) and Mures (9 farms, 1,522 hogs, 400 poultry, 104 tons of meat).

The most revealing indicator that reflects the manner of utilization of kitchen scraps by annex-farms is meat production in physical terms. According to the plan targets for 1980, 2,046 tons of meat, amounting to about 51 tons per county on the average, will be obtained by the annex-farms within the MCI. Ten counties are above this average. In some counties the planned meat production is far below the average: Arad, 0.5 tons; Galati, 6 tons; Iasi, 6.9 tons; Sibiu, 3.7 tons; Tulcea, 4 tons; and Vilcea, 4.1 tons. These small quantities illustrate the insufficient utilization of kitchen scraps in comparison with other counties with an approximately equal potential: Arges, 83 tons; Ilfov, 86 tons; Prahova, 58.8 tons; Suceava, 103 tons; and so on.

The raising of poultry by annex-farms can also provide a significant production of eggs, but this is planned in only 2 counties: Prahova (15,000) and Satu Mare (1,000), which nonetheless have a relatively small number of poultry—3,600 and 500, respectively. The situation in other counties, with a higher number of poultry, which have set no target for egg production, seems all the more peculiar: Arges (10,000 poultry), Braila (5,000), Neamt (6,000), Vrancea (10,000) and the municipality of Bucharest (18,000 poultry). However, it is known that eggs—with a high nutritive value—can

be used in the preparation of a wide assortment of dishes, partly prepared foods and pastry products.

The efficient functioning of the annex-farms and -sections of the public food service enterprises in the MCI system presupposes the cultivation of areas with vegetables, potatoes and greens needed to prepare the dishes, as well as fodder for animals. In 1980, 1,529,560 square meters, with an average of 38,239 square meters per county, have been planned. In 16 counties (Arad, Bistrita-Nasaud, Braila, Constanta, Dimbovita, Hunedoara, Ialomita, Iasi, Maramures, Neamt, Prahova, Salaj, Sibiu, Timis, Tulcea and Vilcea), not a square meter of crops connected with the annex-farms has been planned!

Among the counties where such crops are planned, one notes big differences regarding the area cultivated--from 400 square meters in Botosani County to 150,000 square meters in Galati County. The counties with an area earmarked for crops of vegetables, potatoes, greens and fodder of up to 5,000 square meters are Brasov (3,500 square meters), Buzau (3,880 square meters), Caras-Severin (1,200 square meters), Covasna (600 square meters), Gorj (2,800 square meters), Ilfov (1,450 square meters) and Teleorman (1,700 square meters). The municipality of Bucharest has the biggest area earmarked for the above-mentioned crops--1.05 million square meters, that is, about 68 percent of the total area cultivated by annex-farms.

The orientation adopted in the crop structure from one county to another seems significant. Thus, crops of vegetables are planned in 19 counties (47.5 percent), potatoes in 11 counties (27.5 percent), greens in 10 counties (25 percent) and fodder in 4 counties (10 percent). It is interesting to note the fact that crops are not planned in some counties with favorable soil and climatic conditions (vegetables in Arad, Arges, Botosani, Braila, Constanta, Dimbovita, Ialomita, Iasi, Satu Mare, Sibiu and Tulcea; potatoes in Alba, Bistrita-Nasaud, Cluj, Dimbovita, Gorj, Hunedoara, Maramures, Neamt, Salaj, Sibiu and so on; greens in Arad, Braila, Buzau, Constanta, Dolj, Galati, Teleorman, Tulcea and so on; and fodder in Bacau, Bihor, Covasna, Harghita, Maramures, Mures, Neamt, Salaj, Sibiu, Suceava, Vilcea and so on).

The structure of the total area proposed for crops is as follows: vegetables, 59.07 percent; potatoes, 21.17 percent; greens, 15.28 percent; and fodder, 4.48 percent. The optimization of the crop structure in each county, in relation to the actual potential, seems necessary.

In the spirit of the instructions contained in Comrade Nicolae Ceausescu's speech at the Conference With the Actives and the Basic Personnel in the Consumer Cooperative System, the Artisan Cooperative System, the Agricultural Production Cooperative System and the People's Councils, in June 1980, one sees clearly the necessity of utilizing recoverable raw materials and supplies to a greater extent, the strengthening of order and discipline in performing this priority action. The above-mentioned aspects suggest,

besides the achievements obtained, the existence of wide possibilities of utilization of resources scattered widely over the country's territory, through the raising of hogs and poultry on annex-farms, using the kitchen scraps from public food service.

According to estimates made by the Study and Design Institute for Systematization, Housing and Communal Administration, it follows that just at the level of the country's cities about 300,000 tons of food for animals per year could be obtained through the utilization of kitchen scraps. With a quantity of about 1,800 kg of kitchen scraps per year on the average being needed for feeding 1 hog, it follows that about 167,000 hogs could be raised. Also taking into calculation the reusable kitchen scraps from public food service units in rural areas, the figure would reach about 200,000 hogs. However, considering that a part of these resources will be used to raise poultry on annex-farms, up to 150,000 hogs per year, with a meat production of approximately 12,000 tons, at a cost of about 10 lei per kg, is estimated as a feasible level. In this variant, 3,750 hogs, equivalent to 300 tons, could be raised on the average in each county--which would provide an increase in meat production for improving the population's consumption without resorting to the market supply.

In order to attain this extremely important objective--the raising of hogs and poultry on annex-farms--decisive steps must be taken on the various hierarchical levels of the sector of public food service.

First, it is necessary to promote an attitude of high responsibility, to develop initiative, to firmly eliminate any waste of reusable raw materials and supplies in public food service.

Another important step consists of extending and generalizing the positive experience. In this regard, it is possible to point to the experience of the ICSAP [expansion unknown] in Drobeta-Turnu Severin, which, with a small volume of investments, organized annex-farms, with a large number of animals, complying with the requirements for environmental protection.

It being a question of raising a relatively large number of hogs and poultry on annex-farms, the providing of specialized assistance is necessary, eventually by a veterinarian with higher training and a suitable number of personnel with middle training at the level of each county trade directorate, depending on the number and the volume of annex-farms.

The stimulation of the working people on annex-farms for an activity with high economic efficiency presupposes a suitable system of incentives, so that their earnings rise in accordance with the increase in the number of animals and the meat production.

The sensible organization of the collection and transportation of kitchen scraps from public food service units, using suitably equipped means of transportation, is indispensable for the proper functioning of the annex-farms.

A minimum of facilities is also necessary for the functioning of the annex-farms throughout the year so that the meat production is achieved regardless of the climatic conditions.

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BRIEFS

REDUCED STEEL PRODUCTION--It is estimated by members of the executive council of the General Ferrous Metallurgical Association of Yugoslavia that production will be lower this year compared both to the plan and to last year's results, and that the economic position of steel producers is worsening. Lack of foreign exchange will make difficult a supply of raw materials and spare parts, thus lowering production results in ferrous metallurgy at the end of the year compared to the first half of the year. Because of supply problems, 512,000 tons of finished steel products was "lost" in the first half of the year, as well as a significant quantity of other ferrous metallurgical products. This has worsened the supply for steel consumers and increased pressure to import ferrous metallurgical items which are in short supply. Steel producers warn that if the problems of foreign exchange and of imported raw materials is not resolved, there will be a marked deviation in production in the first quarter of 1981, as well as increased difficulties in supplying domestic consumers with finished ferrous metallurgical products. [Text] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 8 Oct 80 p 12]

REDUCED HEAT IN BELGRADE--The heating season and length of daily heating time in Belgrade will probably be shortened this winter. A proposal will soon be before the Belgrade Assembly council to limit heat during the day from 0600 to 2100 hours (instead of 2200 hours as up to now), and on Sunday from 0700 to 2100 hours. The season would last from 15 October to 15 April. These measures would save 32,450 tons of mazut. [Excerpt] [Belgrade BORBA in Serbo-Croatian 7 Oct 80 p 14]

FOREIGN INVESTMENT--Data regarding investment by foreign partners in Yugoslav enterprises shows that this form of cooperation has not attained the dimensions suitable to the needs and ambitions of the international division of labor. In the last 12 years 205 agreements have been signed on such forms of cooperation in the Federal Committee for Energy and Industry; this is very modest. One-half of all the funds involved fall within 14 agreements. The proportion of domestic and foreign funds in these business deals is 75:25. Last year 17 new contracts were signed with a total value of 8 billion dinars, and with contributions of foreign partners amounting to 2.2 billion dinars, or 28 percent. This whole area needs to be examined comprehensively in order to discern with greater certainty the effects of the new legal regulations. One assessment shows that the purpose of the

agreements has not been attained. The Yugoslav side must put more effort into the entire matter, especially in explaining the conditions under which these deals can be arranged. One gets the impression that the conditions are not sufficiently known to foreign partners. It is, nevertheless, felt that certain legal prescriptions need to be tested in order to learn whether some are an obstacle to contacts and cooperation. In analyzing the results of 53 contracts, it is seen that the foreign partners received a modest profit of 255 million dinars, 74 million dinars of which (or 29 percent) was reinvested. This shows the insufficient interest of owners of foreign capital to expand cooperation. In 9 contracts there was a loss of 377 million dinars, and in some agreements business operation remained on the border of profitability. It is obvious that modest [low] profit is one of the reasons for the lack of interest among foreign partners to invest and to expand such cooperation. In some ventures investments have been very small, ranging from 1 million to 30 million dinars (this applies to 140 contracts). [Excerpt] [Zagreb VJESNIK in Serbo-Croatian 3 Oct 80 p 1]

LABOR ACCIDENT AT KRSKO--The official report on the accident at the construction site of our first nuclear electric power plant at Krsko which occurred on 3 September this year says: the accident was caused by unprofessional work done while testing the pressure in a water pipe to be used in fire-fighting equipment. One worker, Josip Tomic (20 years old) from Slavonski Brod, was killed, and another worker, Adam Begonja (19 years old) from Sremski Samac, was seriously injured. [Excerpt] [Zagreb VJESNIK in Serbo-Croatian 9 Sep 80 p 12]

NON-ECONOMIC INVESTMENTS--Yugoslavia is among the countries with the highest proportion of investments in the social product--more than 40 percent. The total value of investments at the end of last year amounted to 1,043,000,000 dinars which is more than the annual social product for the socialized sector of the economy (the social product amounted to 1,036,000,000 dinars in 1979). The great fragmentation of investments is seen in the fact that 520 billion dinars, or one-half the value of all investments fall within 300 large projects. The other half is distributed among about 30,000 small ventures (data as of the end of 1979). In the last 4 years funds for reproduction amounted to 545 billion dinars, or 458 billion dinars after subtracting payments for foreign credits, while total payments for investments amounted to 996 billion dinars. When payments on domestic credits are subtracted, one sees that OURs (organizations of associated work) in the economy invested 343 billion dinars of their own funds, or only 34 percent of total investment payments. In the last 4 years the real increase in economic investments was faster than planned (10 percent instead of 8.5 percent as planned), but the increase in investments outside the economy was also faster than planned (8 percent instead of the planned 7.5 percent). [Excerpt] [Zagreb SEDAM DANA (supplement to VJESNIK) 4 Oct 80 p 7]

LAG IN MACHINE INDUSTRY--According to data used by researchers in the Institute for Industrial Economy, our country pays more for importing equipment than for importing oil. And economic and technological lagging in

domestic machinebuilding is said to be a greater danger than the lack of domestic energy resources. Last year 32.2 billion dinars (19 dinars to 1 US dollar) was spent for oil imports and 76 billion dinars for machinery (electric and other) imports. At the same time, exports of machinebuilding products is considerably less than imports. Last year 53 billion dinars were spent to import machinebuilding products (not including products of the electric machinebuilding industry), while somewhat less than 11 billion dinars worth of domestic equipment was exported. The negative balance of 42 billion dinars is incomparably more than the imbalance which would be unavoidable considering the technological inferiority of the domestic machinebuilding industry, professionals say, estimating that the domestic machinebuilding industry can produce 70 to 75 percent of the equipment needed to build new production facilities for our economy; under present conditions only about 60 percent of this equipment is being produced. It is certain that part of the reason for unused possibilities in machinebuilding can be found in the realm of business organization and economic and developmental policy. The Institute's analysis leaves this to one side and points to lagging in the entire metals complex (including machinebuilding) in regard to investment. It points out that intensity of investment in this industry is less than the overall industrial average. It is also more difficult for the metals industry to obtain credits than it is for other branches of industry which are officially considered priority branches. Lagging in the metals processing industry is thought dangerous because experts say that, characteristically, the metals complex develops faster than average for countries which proclaim rapid industrial development. The rate of growth for the metals industry in the last 10 years has been only 1.07 [percent]. [Excerpt] [Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 29 Sep 80 pp 39-40]

KOSOVO FOREIGN TRADE--Despite the complex economic situation, Kosovo foreign trade is considerably better than last year. Up to September 15 this year the province exported 3.66 billion dinars worth of goods, or 35 percent more than last year. But the unfavorable structure of the economy, i.e., the construction of a number of capital investment projects necessitated imports of equipment and producer goods which was unfavorably reflected in trade. Thus, in this period Kosovo imported 8.34 billion dinars worth of goods from the convertible currency area, or 26 percent more than last year. This area holds a priority position in Kosovo trade, with the value of trade being 8.77 billion dinars with the developed countries of the West during this period, or 22 percent more than during the same 1979 period. The value of trade with the East European countries amounted to 3.23 billion dinars, or 49 percent more than last year. It is a positive feature that exports of products from Kosovo to the convertible currency area continue to grow faster than imports; deliveries to buyers in the West were 29 percent above that of last year. Imports from the clearing-account area rose 63 percent, and exports 41 percent, compared to the same 1979 period. With increased efforts, it is thought that the province can meet the balance-of-payments plan for 1980. [Excerpts] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 14 Oct 80 p 3]

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CONTENTS

BULGARIA

Party Secretary Discusses Wheat Producing Capacity in Tolbukhin
(Dimitur Dimitrov Interview; KOOPERATIVNO SELO, 25 Sep 80) 1

CZECHOSLOVAKIA

Product Quality in Domestic Market Severely Criticized
(Josef Kaniczek; HOSPODARSKE NOVINY, 12 Sep 80) 10

HUNGARY

Development of Economic Leadership, Organization Discussed
(Zoltan Roman; NEPSZABADSAG, 1 Oct 80) 16

Metallurgy, Machine Industry Achievements Discussed
(Istvan Soltesz Interview; MAGYAR HIRLAP, 14 Sep 80) 20

POLAND

Decentralization of Central Planning on Hungarian Model Advocated
(Habilitowany Aleksander Lukasiewicz Interview; PRZEGLAD TECHNICZNY KONTRACJE, 28 Sep 80) 25

Drastic Price Reforms for 1981 Unfavorably Assessed
(Janusz Gosciński; ZARZADZANIE, Jun 80) 32

Economic Journal Views Grain Shortage Problems
(Pawel Kapuscinski; ZYCIE GOSPODARCZE, 7 Sep 80) .. 38

ROMANIA

Research Important in Nontechnical Development
(Emil Nagrutiu; ERA SOCIALISTA, 5 Aug 80) 43

YUGOSLAVIA

Editorial Says Yugoslavia Is Not 'Overindebted'
(Editorial, Djuro Zagorac; VJESNIK, 20 Sep 80) 52

Economic Development Plan for Serbia for 1981
(D. Brdar; PRIVREDNI PREGLED, 26 Sep 80) 54

Money Supply, January-August 1980
(PRIVREDNI PREGLED, 24 Sep 80) 57

Varied Business of Federal Economic Council Outlined
(PRIVREDNI PREGLED, 27-29 Sep 80) 60

Data on Status, Outlook in Principal Sectors, Industries
(EKONOMSKA POLITIKA, 15 Sep 80) 63

Agricultural Organization Plans for Croatia, 1981-85
(Milivoj Stipanicic; VJESNIK, 20 Sep 80) 71

Koper Port Traffic, Facilities, Plans
(A. Jovanovic; PRIVREDNI PREGLED, 27-29 Sep 80) ... 75

PARTY SECRETARY DISCUSSES WHEAT PRODUCING CAPACITY IN TOLBUKHIN

Sofia KOOPERATIVNO SELO in Bulgarian 25 Sep 80 pp 1-2

[Interview with Dimitur Dimitrov, first secretary of the Tolbukhin Okrug BCP committee, on successes achieved by the okrug in the production of wheat and barley, conducted by Angel Nikolov, editor-in-chief of KOOPERATIVNO SELO: "Golden Dobrudzha Grain"]

[Text] In this issue we are continuing with our initiative of sharing the experience of leading okrugs APK [Agroindustrial Complexes] and brigades in grain production with a talk between Angel Nikolov, KOOPERATIVNO SELO editor in chief, and Dimitur Dimitrov, first secretary of the Tolbukhin Okrug BCP committee.

[Question] This year, despite adverse weather conditions in the country, the cold spring and the dry summer, record wheat and barley crops were harvested. Tolbukhin Okrug, our basic grain producer, has remained for a number of years one of the leading growers of rich harvests over large areas.

Comrade Dimitrov, could you describe briefly the okrug's achievements in this respect?

[Answer] It is true that Tolbukhin Okrug is a basic grain producer in the country. We accounted for 577,000 tons or 15.2 percent of the expected annual grain production. Along with repayments in kind, we poured into the state warehouses 436,000 tons of wheat, i.e., 20.7 percent of the total. The amount of barley sales we contracted have been met in full. The okrug is in a leading position in growing high wheat and barley crops. For the second time this five-year plan we exceeded the average of 500 kilograms of wheat per decare. Whereas in 1977 we harvested an average of 524 kilograms from an area covering 970,000 decares, this summer, once again, we exceeded the 500 kg limit on an area of 1,172,000 decares.

We are pleased to conclude the Seventh Five-Year Plan with 159,534 tons produced above the plan and 161,711 tons of wheat purchases above the

plan. In the past 5 years the average yields of this important crop have been 440 kg (excluding the adverse season of 1979). In 4 years we have averaged 484 kg compared with 361 kg in the Sixth Five-Year Plan.

This five-year plan eight industrial production brigades averaged from 550 to 600 kg; 26 brigades averaged from 500 to 550 kg; 23 brigades, from 450 to 500 kg; 7 brigades from 400 to 450 kg. Only three brigades averaged yields of under 400 kg per decare.

First among the average industrial complexes is the APK in Tolbukhin-Istok, whose first secretary of the rayon party committee is Iliya Demirev, with Iliya Kolev chairman of the complex. Its average yields for the five-year plan were 488 kg of grain per decare; the average yield this year was 540 kg. The APK in General Toshevo, Todor Ganchev first secretary of the obshtina party committee, and Vasil Pavlov, complex chairman, averaged over the five-year plan 440 kg and, for 1980 512 kg. The APK in Kavarna, Yanaki Tabakov, obshtina party committee first secretary, and Dimitur Panev, chairman of the complex, averaged, respectively, 441 and 520 kg.

Among the industrial production brigades the highest yields in the five-year plan and in 1980 were achieved by the brigade in Metodievo Village of the Tolbukhin-Istok APK--respectively 550 and 664 kg--and in Paskalevo Village--491 and 564 kg.

[Question] These data show a steady increase in wheat yields in the Seventh Five-Year Plan. Which are the main prerequisites for such high and lasting successes achieved by the okrug?

[Answer] Unquestionably, such achievements in wheat production are a vivid expression of our socialist farming and improved labor organization. We have established and fully introduced the brigade organization of labor and the small-group and individual piece-rate system. The struggle for a rich crop has been taken up by the farm workers. The industrial production brigade leaders are knowledgeable and capable. We enhanced the role of the specialists and the primary managers. We are adamantly applying the new economic approach and steadily improving the socialist organization of labor. Management and performing cadres are accepting and disseminating new developments in mass practice with a high feeling of responsibility. They energetically undertake to resolve technical problems.

All APK in the okrug are adamantly striving to utilize scientific and technical achievements and leading domestic and foreign experience. The okrug BCP committee buro and the executive committee of the okrug people's council are most grateful for the work and accomplishments of the scientific workers at the wheat and sunflower institute near Gen. Toshevo. The high yielding wheat strains developed by the institute, which earned

worldwide recognition, are welcomed with understanding and gratitude by the farm workers in the okrug.

[Question] The concentration of grain crops created conditions for the application of scientific technologies and for production industrialization. Comrade Dimitrov, could you tell us which are the basic technological aspects which, following their practical implementation, led to a steady increase in crop yields?

[Answer] Let me immediately stress the decisive role of preceding crops and the reduced number of cases of same crops planted twice in a row. Practical experience proves that wherever managers and specialists have seriously concerned themselves with the presowing preparation of the soil, particularly after a corn crop, very good results have been achieved. Let me give as an example two neighboring APK with virtually identical soil and weather conditions. This year the average wheat yield was 520 kg per decare at the Kavarna APK and 489 kg in the Shabla APK--a difference of 31 kg. The Kavarna APK clearly prepared the land better.

Here is another example: Two neighboring industrial production brigades of the Shabla APK--in Durankulak and Vaklino, harvested, respectively, 418 and 442 kg of wheat over an area of 3,500 decares. Why? Because planting was substandard and, compared with neighboring brigades, their yields were almost 100 kg of grain less per decare.

However, the preceding crop is of very great importance in terms of the good quality preparation of the soil for sowing and for the sowing itself. In our okrug 35 percent of the wheat is planted after a corn crop and 12 percent is planted again after wheat. This harms our efforts to achieve higher yields.

As to corn as a preceding crop, equipment should be procured for the fast and timely harvesting of this crop important to animal husbandry. It would be even better to consider replacing corn over the some 100,000 decares with soybeans which free the soil earlier.

As to second consecutive crops--planting wheat after wheat--which will continue to take place in the Black Sea areas, we should use preparations against fusariosis, root rot, and others.

A well developed strain structure is of great importance. The biological possibilities of the strains planted this year will lead to better yields. The APK adopted the most suitable strain structure involving the use of strains of different biotypes without excessive enthusiasm and with accuracy. This year again the principal strain planted in the okrug--Dobrudzha 1--proved its good biological possibilities and its yields did not drop below the average of 500 kg per decare on 614,000 decares. The Yubiley, Trakiya and Vratsa strains, used by the okrug for the past

three years, have yielded lasting and good results. They are steadily raising the average yields to, respectively, 565.8, 565.5 and 556.7 kg per decare.

Furthermore, the APK and the BPP [Industrial Production Brigades] addressed themselves to the problem of strain agrotechnology and observed the recommendations of our institutes to the highest extent.

Compared with other years the use of fertilizers has improved considerably. Specialists from the institutes issued recommendations on fertilizing the crops at the brigades and the fields, immediately before the work was undertaken. Fertilizer norms were observed accurately. However, we are still dissatisfied with the quality of fertilizing. It is still below the stricter requirements governing its scientific use. This is the main reason for the lesser average wheat yield per decare of the Balchik APK--by 31 kg--compared with the neighboring complex in Kavarna.

[Question] I gather from your statement that in Tolbukhin Okrug extensive work is being done to reach highly productive crops and make full use of the biological possibilities of the strains. In your view, Comrade Dimitrov, what are the main directions leading to highly productive crops?

[Answer] Not accidentally this is a matter of very great concern for the okrug's leadership. The strain, the strain structure and the highly productive crop act in dialectical unity in the growing of the crops. We pay great attention to the specific approach to the selection of strains and to the strain structure, taking into consideration the soil conditions of each individual field and the biological possibilities of each strain. Our okrug has a rich selection of strains of the intensive wheat variety. Naturally, converting the existing potential of such demanding strains into reality is determined both by meteorological conditions throughout the year and the level of the agrotechnical complex. We must use a greater variety of strains of different biotypes. We have given the right to the APK to adopt a creative approach. Our only requirement is for them to produce more, better grade and less expensive grain.

Currently the okrug's strain structure is approximately as follows: Dobrudsha 1, 47 percent; Trakiya, 11.5 percent; Vratsa, 11.7 percent; Zlatna Dolina, 9.4 percent; Yubiley, 5.4 percent; Early Novosadska, 5 percent; Charodeyka, 3 percent; Kubrat, 1.6 percent; Zlatoklas, 1 percent, and others.

The accelerated development of some promising strains is necessary. That is why, this very autumn all APK will plant Charodeyka. The new strains developed by the institute in General Toshevo--Skitiya, Pliska, Tervel, Preslav and Zagore--will be planted in greater quantities. Substantial improvements have been made in the development of seed lots and

all APK and brigades have emphatically displayed their interest in procuring high grade seeds.

Alfa will be the basic barley strain followed by Mirash, planted over a smaller area.

We are devoting great efforts to insure the good quality preparation of the soil. In practical terms, this is achieved when the work place of the technologist is always in the fields. Control on the part of the BPP manager must be strict. In the APK the task is assumed entirely by the first secretary of the obshtina (rayon) party committee and the complex chairman who are held liable for allowing sowing on poorly prepared soils. In this respect we pay particular attention to reduce presowing soil cultivation and, hence, to substantially reducing production costs.

Disking is mandatory in preparing the soil after a bean or sunflower crop. Sunflower leftovers must be entirely removed or burned down. Using the equipment promptly and on a high quality level, night and day, the soil is prepared for the sowing. The depth of the plowing of the soil following a bean crop is 12 centimeters; it is 12 to 15 centimeters after silage corn.

The thickness and number of plants per decare are of great importance in achieving highly productive crops. The sowing norm and sowing period are central problems without whose proper solution the foundations for a rich crop cannot be laid. The okrug has developed a precise measurement for the sowing norm--450 to 600 seeds per square meter. We take into consideration the type of season, the predecessor, and the beginning or the end of the sowing campaign. Our efforts, in all cases, are to insure 700 well developed stalks per square meter. In cases of greater soil moisture, the lower limit of the sowing norm is used while in a dry soil we mandatorily apply the upper limit. This principle is also applicable to the beginning and the end of the sowing campaign as well.

In no case should late sowing be allowed. However, very early sowing should be equally avoided. We usually begin to sow on 27 September and try to complete the sowing by 20 October; 70 percent of the areas must be planted by 10 October.

Another important problem is that of maintaining the sowing machines in good order. They must be taken to the fields only after a fitness certificate has been issued.

Naturally, fertilizing should not be underestimated. As I pointed out, we are trying to fertilize in accordance with soil conditions and the biological requirements of the strains.

[Question] Still in your efforts to raise more grain, what importance do you ascribe to the harvest?

[Answer] A very great one, for the question is not to produce more but to harvest the crop with the lowest possible waste and to insure its full use. This year our organization of the harvesting campaign was very good. The mechanizers accepted the responsible assignment to work with the combines on a round-the-clock basis with a great deal of self-denial and exceptional hard work. It is perhaps this that contributed the most to the great success of this year's harvest. A good example in this respect was provided by the complexes in Tolbukhin-Istok, Tolbukhin-Zapad and General Toshevo. In these complexes the decisive reason for the good results was the fast harvesting of the crop with the lowest possible waste of the grain. In 1978 the okrug achieved good results in harvesting the wheat. This summer, however, for the first time in the history of socialist farming, peak results were achieved: By 18 and 19 July, respectively, 112,000 and 120,000 decares had been harvested. We believe that the selfless round-the-clock work of the mechanizers was their answer to the proper way they were treated during the campaign.

[Question] Some omissions may be found in any, even though most successful, work, if carefully studied, particularly when it is a question of a complex and extensive activity, requiring good knowledge and great skills, as is the case with grain production. Therefore, in your view, what is the weakness allowed which hinders the work the most and must be rapidly surmounted?

[Answer] I hope that I will not incur the anger of our okrug cadres by pointing out a fact which, unquestionably, is of great importance in terms of end results. We begin very well. We develop an excellent organization and do high quality work for up to 80 percent of the total project. The remaining 20 percent of the areas, for example, are planted without proper attention and quality control. Here is another example: fertilizer has been applied but by what means, when, and how? It is not always applied on time or in accordance with requirements.

The nature of the main activities in grain production, as in other farming activities, are known and carried out properly. I would say that the details and fine points are not always observed everywhere and in everything. Yet, it is precisely they which help the most in achieving the great objective of increasing labor productivity not in terms of percentages but in hundreds of percentages, as Comrade Todor Zhivkov has said.

In our view, this is a major reserve. The entire work must be conducted in a model fashion from beginning to end!

[Question] What else could you add in this respect?

[Answer] If it is a question of dissatisfaction with achievements we could mention some disparities and unresolved problems whose surmounting does not depend on our okrug alone. Let us take as an example the question of equipment. Trailers have still not been added to the K-700 and T-150 model tractors. Yet, with more complete equipment, such tractors could do a great deal more work. Currently some such powerful tractors are used for hauling purposes which is unprofitable.

Or else, let us consider the availability of E-516 model combines. What is my point? Assuming that no more than 40 kilograms of grain per decare would be preserved from wasting, in Tolbukhin Okrug this would represent 45,000 tons of grain, i.e., the output of yet another APK growing wheat on 90,000 decares and with an average yield of 500 kg per decare. The combines would be paid for by the grain saved from such waste over a period of several years.

Suitable fertilizing equipment remains in short supply. That is the reason for which yellow stripes will be visible in the crops every spring.

[Question] In this connection, what is your assessment of the new brigade organization of labor?

[Answer] I would say that as a stage in the developed brigade organization in Tolbukhin Okrug and in accordance with our technical facilities, it offers a good, a successful solution which would give us good maneuverability. However, this would be a solution for the present only. In the spirit of the theses of the BCP Central Committee Politburo, we are thinking of the brigade of the future which would be supplied with more modern equipment, applying automation and industrial labor in agriculture.

Currently the okrug has 5,600 mechanizers. Should their number be reduced by a full half, in such a case, we would still be able successfully to carry out our agricultural assignments.

[Question] We are speaking of the immediate future. What are the assignments which the people of Tolbukhin are setting for themselves for 1981 and for the Eighth Five-Year Plan in the area of grain production? What new features will be introduced in the organization of labor and technology in order to achieve even greater and more lasting successes?

[Answer] As we know, the Eighth Five-Year Plan will be a five-year plan of scientific and technical progress. Our attention will be focused on the new agrotechnical, technological and organizational developments.

Above all, a new attitude must be adopted toward wheat production. We must put an end to rigidity and inertia in resolving problems related to growing wheat. Science must be the main booster. The good experience and skill displayed by the brigades which have proved that the possibilities of the okrug are far bigger must become widespread practice, steadily enriched scientifically and technologically.

We have developed a structure of the area under cultivation. Our computations are based on a more stable crop rotation system which would enable us to alternate crops most successfully and with the highest efficiency.

This year's results and those of previous years indicate that we must limit the raising of barley and that this crop should be retained only where it has already become traditional. Such is the case of the Tolbukhin-Istok APK in which barley yields are averaging 400-450 kg per decare.

Sowing wheat after another grain crop is a problem closely related to the structure of the cultivated area. A five-year study has confirmed that regardless of the strain used, the yield of a second consecutive wheat crop is always 150-200 decares lower than after a preceding leguminous crop, and from 60 to 80 kg lower compared with crops planted after medium-early predecessors. The problem now is to plant almost one-half of the area in corn grain as a predecessor of winter crops.

The okrug's specialists and mechanizers have developed the skill for sensible and scientific use of fertilizers. In this case we must yet again reassess the quality of fertilizing. We must not be concerned with fractional but with correcting fertilization in accordance with all requirements based on the type of soil, previous crop, and strain. We must be very precise in the use of nitrogen fertilizers in terms of the different strains. Actually, this is the focal point of our strain technology.

Mixed fertilizers should not be used in wheat crops and in no case should we rely on carbamide. This means that as of now all APK should take measures to acquire fertilizers. An average of 10 to 11 kg of fertilizer must be added to the soil before sowing wheat, and 8 to 10 kg of phosphorus fertilizer before sowing the barley. Wheat areas require 8 to 10 kg of potassium (active agent) per decare. The plant has a particular need for potassium in its "leaf-tubing" stage.

Another very serious problem is that of the use of microfertilizers and of the new preparations for the decontamination of seeds and the treatment of crops. We recommend the use of the biostimulant Fixal B, and the preparations Bemleyt, Bayleton and Baytan. This very year the APK must undertake the extensive use of some of these preparations.

I already mentioned the new brigade organization. The new economic approach and new economic mechanism require, above all, the strict and creative application of intracost accounting on a self-support basis in all production units in agriculture. Therefore, labor will be paid on the basis of end results.

It would be hardly necessary to prove that all this will be an effective factor in achieving even better results in the Eighth Five-Year Plan.

[Question] As it lays the foundations for a good crop, agriculture is already entering the year of the congress, the first year of the Eighth Five-Year Plan. Comrade Dimitrov, how are the working people in the okrug welcoming the decision of the BCP Central Committee Politburo on the nationwide mobilization for the prompt harvesting and full utilization of the crop?

[Answer] We welcomed this party decision with the understanding of the need for full mobilization of all forces for its implementation. The demand for strict organization and discipline, strict exactingness, and uncompromising elimination of inertia and inaction is considered as the basis, the mandatory component of our daily work. The meetings and conferences held in the various rayons provided the mood of intolerance of omissions and sluggishness and for promt and high quality work and fast harvesting and full utilization of the crops, and for accomplishments and high results in honor of the 12th Party Congress.

As we already mentioned, the timely release of the areas will lead to a model sowing campaign and to laying a solid foundation for a rich crop next year. At the same time, our efforts will be focused on the ever more adamant search for and full utilization of reserves in terms of technology, strains, chemization, and so on, and the sensible utilization of the achievements of scientific and technical progress. This will enable us to fulfill our ambitious plans and the task which we set ourselves in reporting the results of 1980: Next year Tolbukhin Okrug to average 550 kg of grain per decare on an area of one million decares!

5003
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PRODUCT QUALITY IN DOMESTIC MARKET SEVERELY CRITICIZED

Pargue HOSPODARSKE NOVINY in Czech 12 Sep 80 p 5

[Article by Engr Josef Konicek, Federal Office of Statistics: "The Crime of Poor Quality: Problems of Quality of Goods on the Domestic Market"]

[Text] In the period following the 15th Session of the CPCZ, political and state bodies took a number of basic measures to raise the quality of products supplying the domestic market. A comprehensive system of quality control was first put into effect in 1979 in a number of production enterprises in the CSSR. Also in that year regional bodies began to take punitive measures against makers of poor quality products. How all these measures are working out in practice is shown by the results of analyses by both national Ministries of Trade.

To fully satisfy the personal material consumption needs of the population not only requires constantly maintaining the necessary balance between supply and demand in the domestic market, and directing production to assure supplies of wanted goods, but also raising the quality of the products supplied. The consumer wants good quality, but does not always find it.

Many Complaints About Food

Increasing complaints against food products attest to the fact that their quality has deteriorated as compared with 1978. Most of the time, however, the complaints were against goods from abroad. The greatest number of complaints against domestic suppliers concerned supplies of grape wine, meat, meat products and canned goods.

In retail meats there repeated failures to follow technological procedures in processing, improper sectioning, too much fat, inadequate refrigeration, etc. With respect to meat products, the inspection showed that salami sausage had the most quality defects. On the other hand, the quality of poultry and canned fowl had stabilized at a good level; but there were still certain deficiencies in the processing, packing and labeling of poultry.

The quality of cheese, canned and powdered milk and milk pudding products has deteriorated. The inadequate material-technical base of most dairy stores also negatively affects the quality of milk products. Conditions for storing milk products in fact do not conform to technical standards.

The quality of flour and bakery products is unfavorably influenced by flour with a lower gluten content and the presence of pests in store rooms. The quality of bread was average, the quality of bakery products was unfavorably affected by permissive substitutes in raw materials, and the quality of cocoa powder has deteriorated.

With respect to chocolate and chocolate candy, defects in the quality of certain kinds from Figaro Bratislava could not be eliminated (leakage of fillings, poor composition, etc.). The inspection showed up greater problems with non-chocolate candy; these were mainly inconsistent contents of caramel fillings, smaller portions, wrappers becoming unsealed, etc. A technical commission operating from Cokoladovna sectoral enterprise was set up to deal with the matter.

With respect to varieties of fruits, vegetables and potatoes, buyer claims in 1979 increased substantially compared with 1978 and reached Kcs 59.6 million in the CSR. This is 5.8 percent of the total of supplies (in 1978 only 4.4 percent).

The biggest problems were connected with stored potatoes whose quality declined sharply in 1979 in the SSR compared with 1978 and the amount of total claims presented for fruit and vegetables actually came to 21 percent. The quality of stored potatoes was unfavorably affected not only by blight but also by considerable mechanical damaging caused in harvesting and post-harvest handling. Added to this was also dry rot and decay. Even though the quality of potatoes is checked with unusual care by inspectors during production and sales, the inspectors cannot eliminate the basic deficiencies caused during initial production by unsuitable seed potatoes and improper agrotechnology and harvesting technology.

Quality Variation in Industrial Products

The quality of textiles and clothing in 1979 continued to be unsatisfactory. A high proportion of deliveries which did not meet quality standards came from Pleas Havlickuv Brod (Cotton Industry VHJ [Economic Production Unit]), Slovenka Banska Bystrica and Trikota Vrbove (Slovakotex). The unsatisfactory range of selections of clothing increased over 1978. The quality of supplies from Odevni Zavody Trencin and Krasa Brno in particular did not meet requirements. Part of the cause of complaints was unsatisfactory workmanship on ready-made clothing and nonadherence to prescribe size categories.

An improving trend in quality is beginning to appear only in selected producers of textiles and clothing, such as knitware from Modeta Jihlava or clothing from Severka Cvikov and Otavan Trebon.

Quality variation also appeared in selections of footwear where, after previous improvement, the proportion of complaints increased again in 1979. The sharpest increase in complaints was against imported shoes, but there were also complaints about supplies from production organizations of both national Ministries of Industry. The main reason for the increased complaints was the poor quality of natural materials for uppers, the uneven quality of surface trimming, defects in workmanship of readymade shoes and in the finishing work of footwear, and poorer quality in attaching soles and heels.

In the selection of industrial consumer goods, quality is consistently improving only in fancy leather goods and in jewelry. There was also quality improvement in 1979 in domestic articles, notions, and drugstore items. Nevertheless, ever since 1976 we have not managed to eliminate the serious deficiencies of varying intensity in the quality of major consumer products, especially automatic washing machines, certain heating appliances and television receivers.

In the enterprises of Obchod Prumyslovym Zbozim [Industrial Products Sales] the greatest number of claims continues to concentrate on the group of technical consumer goods. In spite of unusual measures the level of quality reached by this group of products is still unsatisfactory (see tables). For instance, when television receivers were checked, low standards of quality were found in color from Tesla Orava, with obsolete product concepts and low resistance to handling, transportation and storing, with consequent claims in considerable number.

With respect to automatic washers (particularly the Tatramat 353 model, where the product quality was very unsatisfactory and even the stamp of approval for production was withdrawn for a some time) the objects of consumer complaints were faulty programmers, thermostats, sealing collars of load openings, leakage of tanks, incorrect drum mountings, surface defects and often lack of service. The main reasons for complaints about refrigerators were missing accessories, buckling of side walls and mechanical damage to accessories, switches and cabinets during transportation.

With respect to furniture, the proportion of complaints for the total volume of deliveries in 1979 was moderately lower. But one should not immediately conclude from this fact that quality has improved. In many cases the high proportion of claims against selected manufacturers was repeated. Quality inspection of selected products carried out by shop workers directly in the shipping depots showed defects in an average of 27 percent of inspected products.

Innovations Lagging

The introduction of innovations in food production can be rated as quite favorable up to 1978 with respect to a fairly considerable number of new products put on the market annually (about 150), as well as the tendency toward more efficient nourishment. In 1979, however, even this situation was not satisfactory. The plan of innovation in food products for 1979 included the introduction of 121 new or substantially modified products for the domestic

market. According to data from the Ministry of Trade, only 83 of these were adopted, or 68.6 percent, which is substantially fewer than in 1978.

More substantial innovations, however, are still not being made. These would include, for instance, dairy and bakery products made to retard spoilage, products requiring less work to prepare meals (prepared foods in aluminum containers, precooked rice in boiling bags, etc) as well as products which accelerate sales and reduce labor (for example, consumer packed eggs, etc).

With regard to textile goods, certain favorable results were achieved only in variety of assortments, but there were no actual innovations based on the production of new or modified fibers and materials.

In footwear selections, based on the innovative program, VHJ COP was able to provide greater supplies of footwear made of soft leather than had been agreed upon. On the other hand, the innovative program in VHJ OGAKO was not carried out. The enterprise was unable to provide enough new styles and deluxe models because of a shortage of production capacity and suitable materials and trimmings.

The greatest problems continue to show up in the selection of technical consumer goods where, in spite of a number of measures, the situation has not changed and the essence of innovations still consists only of modifications of currently produced models. There are still no major innovations which would result in reduced demands on energy and raw materials, in savings of time and effort connected with performing housework which would permit active use of free time, etc. In particular, there is a lack of small automatic washers, conventional washers with thermostats, color television sets with new types of color tubes requiring less electricity, mini-calculators, halogen lamps, dimmer switches, steam irons, mangles, dishwashers and many other products.

In spite of all measures taken, the innovative process for consumer goods has recorded no substantial improvement since the beginning of the Sixth Five-Year Plan, is not responding to stated objectives and is preventing the domestic market from effectively carrying out its economic, social and political functions. All the same, it must be emphasized that carrying out these functions is essential, especially under the present difficult conditions.

Table No 1

Proportion of Unsatisfactory Supplies on the Retail Market (in %)

	1977	1978	1979
Textiles and clothing			
Branches of the CSR Ministry of Industry:			
Linen industry	5.9	10.3	5.0
Cotton industry	4.9	3.6	2.9
Knitting industry	9.3	9.7	9.4
Footwear industry	12.5	12.9	12.4
Branches of the SSR Ministry of Industry:			
Slovakotex	18.2	18.2	17.6
Tech. consumer products			
Television receivers	17.6	17.6	15.0
Tape recorders	12.2	13.7	18.3
Phonographs	12.2	12.6	7.5
Radio receivers	11.1	5.9	3.6
Refrigerators	11.2	10.6	4.3
Automatic washers	20.2	17.9	6.0

Note: Deliveries to Prior department stores

Table 2

Claims Against Technical Consumer Products

Claims against	1976		1977		1978		1979	
	Number	Kcs in thsnds	Number	Kcs in thsnds	Number	Kcs in thsnds	Number	Kcs in thsnds
Total	88,669	235,760	106,369	299,109	107,116	341,439	107,891	340,198
Of which:								
Refrigerators	7,182	24,196	8,902	27,098	5,607	15,413	3,646	12,360
Televisions	24,457	113,434	30,207	154,920	33,019	188,832	25,913	174,132
Radios	8,809	15,471	8,776	17,219	9,381	19,597	12,103	26,705

Note: Data from Obchod Prumyslovym Zbozim [Industrial Products Sales]. The table also includes products conforming to CSN [Czechoslovak State Standards] quality but there were claims against them because service was not provided (on some items this comes to 40 to 60 percent of all goods under complaint).

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DEVELOPMENT OF ECONOMIC LEADERSHIP, ORGANIZATION DISCUSSED

Budapest NEPSZABADSAG in Hungarian 1 Oct 80 p 10

[Article by Zoltan Roman, director of the Industrial Economics Research Group of the Hungarian Academy of Sciences: "The Development of Leadership and Organization"]

[Text] Our economy will have to struggle with very difficult tasks during the Sixth Five-Year Plan beginning next year. Restoring the external and internal balance, the requirements of intensive development and accommodation to world economic changes demand a substantial increase in the effectiveness and competitiveness of production and a swift modernization of its structure. We were not able to handle these problems adequately even in earlier years when resources were more ample, years which were successful in many respects. Just this is the chief source of our present problems. We must now make progress under conditions in which the resources we can use for investment and technical development are severely limited, the rate of economic growth is modest, and for several years, instead of increasing wages and the standard of living, our goal can only be to preserve the level attained.

Under More Difficult Circumstances

Numerous circumstances suggest that in this situation we should attribute greater significance than before to the development of leadership and organization.

—Of the tools for economic growth and increasing efficiency, leadership and organization always require fewer resources than research and investment. Thus, in a period when we are forced to be economical, it is obvious that we must make better use of these tools and possibilities.

—We can produce new achievements to raise the technical level by world standards in only a few areas. Thus the development of innovative readiness and the swift transmission, adaptation, further development and economic exploitation of technical achievements are most important for us. This is basically not a function of investments, but rather of the system of economic guidance, of leadership and organization.

--In years past we diverted significant resources to investments, but frequently the return on these lagged behind what was expected. Sometimes this was caused by unforeseeable external market changes. But more frequently there were deficiencies in the guidance of investment activity, in organizing it, and setting its goals.

--As a result of our high degree of involvement in the world economy, leadership and organization come into direct contact, virtually daily, with the enterprises and markets of more developed countries, and this is not only as a result of the performance of our products. This medium of competition will not tolerate backwardness in the area of leadership and organization for very long.

--We have become more sensitive to weaknesses in guidance, leadership and organization in other areas of life--in public administration, health affairs and education too. Strong social demands urge a higher level performance of these activities and require a smoother and more efficient operation of the entire economy.

The Two Chief Causes of Backwardness

We can call an increase in the level of leadership and organization a "great reserve" in the true meaning of the word not only because we depend on the results to be expected from this to an extraordinary degree. It is also a great reserve because it is our experience that mobilizing it is more difficult than practically anything else. Taking over technical solutions, adapting new technologies or putting into operation complex machines and equipment are never simple tasks, but we see day after day that they are easier than changing habits, style of work and timing, easier than adapting leadership and organization as a whole to the new requirements.

The level of leadership and organization, whether we look at individual enterprises and institutes, individual branches or economic or social life as a whole, is influenced by innumerable intertwining economic, technical, human and social factors. In this way the "mediocre" level of leadership and organization can be regarded not only as one cause of our mediocre economic development, but also as a concomitant of it. At the same time, one of the keys for our rising out of mediocre development lies precisely here, in higher level leadership and organization.

A number of resolutions have provided a program for the development of the organizing work of the enterprises, and many experts and institutions are dealing with this. Still, according to various surveys, progress is slow in this area; the organizational efforts appear to only a small extent in organization itself, or in economic achievements. We can hardly explain this by saying that our enterprises do not have enough organizers; and in only a few places may a substantial role be played by the fact that they lack understanding or the technical tools. In my opinion there are two chief causes for the unsatisfactory degree of organization, for the

inadequate effectiveness of organization. One is the inadequate economic coercion and interest. The other is the difficulties deriving from the way the economy functions, from the deficiencies in material supply and cooperation, and from the general situation of the infrastructure and work discipline—or rather it is the failure to overcome and counterbalance these difficulties.

For this reason, in addition to the traditional tools for the development of organization (such as training, giving advice, exchanging experiences), we should turn our chief attention first to realizing the required economic interest and making our regulations more stringent, and second to improving the external conditions for a higher degree of organization. In regard to the former we can expect a great deal from a tightening up to economic regulation and a strengthening of the normative approach, but improving the external conditions for organization will require further steps based on a well thought out program.

To Plan in a New Way

We must rethink the goals of the development of organization as a function of the changes which have taken place in our economy and in the internal and external conditions for management. The significance of direct work organization is not decreasing in our economy because we still have very many tasks in this area. We must continue to develop work organization even if in the years ahead—as a result of the slowing of growth—we are not forced to do so by the (real or felt) manpower shortage such as has been experienced generally for several years. But we must note that the new requirements being made of our enterprises place in the foreground tasks with which we should aid the production of more modern, more valuable products, material and energy conservation, an acceleration in the accommodation to the demands of the domestic and foreign market and better utilization of training and intellectural capacity.

The most recent Council of Ministers resolution—that of 1977—used the expression "enterprise organization" instead of the expressions "operations organization" and "work organization." This suggests—in my opinion correctly—that we must organize work and the production of this or that operation, but also the activity of the enterprise as a whole. Making work easier and more attractive, saving on (or freeing) manpower and encouraging greater individual performance remain matters of prime importance for us but it is no less significant that we produce with what is spent products which are of better quality and more modern, which can be sold at a more favorable price and ensure a greater net profit in forints or foreign exchange. For this we need a development of organization which embraces the entire enterprise, we need a development of every function of leadership.

Among these functions I will discuss separately only the one which also indicates the basic goals of organization. We should constantly modernize the methods of economic and enterprise planning in harmony with the new requirements and possibilities. The treatment of social problems,

forecasting, mathematical methods and the use of computers are receiving greater scope in our planning; a new type of link between economic and enterprise planning is beginning to form in harmony with the conception of our economic guidance system. Future work will be concentrated primarily on how to make planning more flexible, taking into account our foreign economic sensitivity, the increased role of external factors and the limits on our forecasting. Strategies which seek answers to our problems, the development of alternatives which reckon with uncertain factors too and a better thought out coordination of the tools of planning and economic policy will receive greater weight in planning, in place of detailed, closed and rigid numerical prescriptions.

Modernizing the Organization

One of the far-reaching, responsible tasks of higher level leadership, of economic guidance, is adjusting the organizational system of the economy to the new requirements. Many simultaneous changes should be avoided; we deliberately refrained from such steps when we introduced the reform of economic guidance. But it was contrary to the thinking of the reform, which placed market contacts in the foreground, that in the years which followed an organizational centralization continued in every branch of the economy; the smaller management units--state and council enterprises and producer cooperatives--were combined together or joined to larger ones. (For example, from 1970 to 1979 the number of state industrial enterprises decreased from 812 to 702, the number of industrial cooperatives decreased from 821 to 673 and the number of construction industry cooperatives and joint enterprises decreased from 371 to 221.)

This process had to be stopped and future development had to be turned to a path which will lead to a more differentiated, more flexible enterprise structure which better accommodates to needs and ensures vitality with real accomplishments. Additional steps can be expected to resolve the earlier excessive diffusion of production and marketing, to bring production and research closer together and to encourage associations and undertakings. But we expect from the large enterprises a modernization of their internal guidance systems, an increase in the independence of their factories going beyond the sphere of strategic decisions and a strengthening of their market contacts.

A modernization of the institutional and decisionmaking system of economic guidance also figures in the government program. This must aid a better coordinated functioning of the various links of guidance, including branch, supervisory and functional ministerial guidance, and the realization of central decisions--in such a way as to create better conditions for enterprise independence, leadership and organization too. At this point the development of leadership and organization joins those general social-environmental relationships which significantly influence the effectiveness of this work.

8984
CSO: 2500

METALLURGY, MACHINE INDUSTRY ACHIEVEMENTS DISCUSSED

Budapest MAGYAR NEMZET in Hungarian 14 Sep 80 p 3

[Interview with Istvan Soltesz, minister of metallurgy and machine industry, by G. T.]

[Text] Metallurgy and machine industry comprise one of the basic sectors of Hungarian industry whose work is of great importance for the entire national economy. This sector employs more than one-third of the industrial work force. Last year the gross production value of metallurgy was 63 billion forints, while that of machine industry was 223 billion forints. This sector generates more than half of the portion of the national income produced by industry. The situation, achievements and tasks of this sector were the subjects of our interview with Istvan Soltesz, minister of metallurgy and machine industry.

[Question] How did the first 8 months turn out in metallurgy and machine industry? What can we expect by the end of the year? Will the sector fulfill its plans, especially with regard to quality requirements?

[Answer] Both metallurgy and the machine industry face substantial tasks in the 1980 economic year. Our work is focused primarily on quality-related requirements that are indispensable for the restoration of our financial and trade balance.

Based on the accomplishments of the first 8 months of the year, we expect that metallurgy will fulfill its domestic, ruble and nonruble export obligations. Enterprise efficiency is up to planned levels. Profits are slightly higher than prorated enterprise targets. Turnover of inventories improved by 6 percent.

Growth of production in the machine industry during the first half of the year was 1 to 2 percent above last year. In particular, export performance was good. During the first 8 months of the year we got ahead of schedule in the area of shipments to socialist partners. We expect to fulfill all of our obligations by the end of the year. Nonruble export shipments also accelerated. This was made possible by

the product base created by the expanded capacities from past investment projects. By the end of the year we can expect to reach approximately $1 billion in exports, while improving currency yields.

[Question] The end of this year will also mark the beginning of a new five-year plan period. Looking back at the past few years: how much progress has been made in the area of product and production structure modernization? To what extent did we reduce the percentage of obsolete, uneconomical products within the sector? What are the most important tasks of the Sixth Five-Year Plan in this regard?

[Answer] For the period of the Fifth Five-Year Plan, we targeted 21 product groups for accelerated development (machine tools, bus and motor vehicle subassemblies, agricultural and food industry machinery, telecommunications equipment and cables); 65 product groups for termination of production and 31 product groups for curtailment of production. For example, we stopped the production of traditional trucks, railroad passenger and freight cars and vacuum cleaners. (In the case of certain products it proved impossible to stop production because of important export interests or domestic market supplies.) As a result, the percentage of up-to-date, economic products grew from 30 percent in 1976 to 40 percent in 1980. In 1975, products targeted for termination of production represented 3.5 percent of total output. By 1980, their share declined to 0.5 percent.

We defined the tasks of the next period. The essential point is the need to improve the efficiency of machine industry production and the export potential of the sector by further developing the production structure. This means that certain areas of background industry, electronics, agricultural and food industry machinery, electrical energy industry equipment, motor vehicles, machine tools and consumer durables must be developed at an above average rate. At the same time it will be necessary to continue the curtailment or elimination of the production of uneconomical products. Our goal is to ensure that the share of competitive products saleable in all markets grows to two-thirds of output.

[Question] There are certain specific tasks related to the development of the organization and internal mechanism of metallurgical and machine industry enterprises. Where are you now in this process?

[Answer] The time is now right for reexamining the organization of metallurgical and machine industry enterprises with a view toward needed development of their internal mechanism. Our primary goal is to eliminate disproportionateness in the organizational structure of large enterprises in order to encourage flexible adaptation to foreign and domestic market conditions with sensible risk-taking by permitting the creation of a background industrial base for large units and eliminating the negative effects of an organizational monopoly situation.

The investigations encompassing the large enterprises have begun this year. In accordance with a predefined program we will examine the organizational and operational structure of a number of large enterprises. We will propose organizational changes if they are justified. In addition to organizational development measures initiated by the ministry and already on the agenda, we will continue to place a great deal of emphasis on supporting the creation of forms of cooperation among enterprises (associations, corporations and joint enterprises) that are based on voluntary agreement and are aimed at coordinated research and development, production and marketing.

We are analyzing organizational questions together with the internal functioning and management mechanism of enterprises. The chief requirement for developing the internal mechanism of enterprises is to increase the economic self-reliance of factories and plants, and improve initiative, internal accounting and the system of incentives. The goal is to make sure that economic regulators have a direct influence, free of distortions, on each unit within large enterprises. The general organizational level of enterprises must be substantially improved via modernization of their internal management and information system.

[Question] Development of the background industry and small or medium-size enterprises is often talked about. This is especially important for the machine industry. When are we going to make progress in this area?

[Answer] The ministry prepared a program for developing the background industry which has been discussed recently by the State Planning Committee. The financial resources of the enterprises involved in the development program are tied down, for the most part, with loan repayment obligations related to past investments. Therefore, state support for the development of the production of certain high-priority product groups is among the proposals submitted by the ministry for the preparation of the Sixth Five-Year Plan and the 1981 National Economic Plan. Due to the shortage of financial resources, the program will most likely be implemented via phased-in investments. These investments are intended not just to satisfy quantitative demand: we also envisaged substantial technological development and product structure modernization aimed at better quality, wider selection and improved economic efficiency. Our goal is, when possible, to increase, not decrease, the number of specialized small and medium-size enterprises.

[Question] Many products are in short supply. Industrial and trade enterprises often blame each other. What is the KGM [Ministry of Metallurgy and Machine Industry] doing to better supply the demand? How is it possible to harmonize the various interests in this area? (For example, to ensure that enterprises do not stop production of uneconomic, but necessary goods.)

[Answer] The list of shortage goods keeps changing. There are many reasons for this: demand is changing, customers require something different, and neither industry nor trade can follow this instantaneously. Startup of production, retooling, or expansion of production take a certain amount of time. Commerce finds this difficult since it has to face the customers who are waiting. Another problem affecting shortages is the size of production runs. Due to the overhead costs of large enterprises, small or medium-size production runs may become uneconomical. In these cases we try to find another enterprise to take over production. Artisan cooperatives, small council enterprises and auxiliary operations of agricultural cooperatives have made a significant contribution to the elimination of shortages in recent years. These initiatives are not always successful, however, since economic feasibility is a fundamental requirement even for small-scale enterprises.

I emphasize that with the Ministry of Domestic Trade we are annually comparing commercial needs and production opportunities in the areas of products judged most important from the standpoint of consumer supplies. This enables our foreign and domestic trade organizations to import the necessary products in a timely manner.

[Question] Machine industry has a decisive importance in Budapest. This leads to the question: Are there any concrete programs for developing industry in Budapest? In particular, any plans to eliminate obsolete plants or move polluting or noisy plants elsewhere?

[Answer] To begin with, let me point out that, since 1975, the proportion of machine industry employees in the capital has declined from 42 percent to 36 percent. During the preparation of the Sixth Five-Year Plan, within the Budapest metropolitan area, we are planning on the reconstruction of the manufacturing of products slated for high-priority development. This will be implemented primarily through investments aimed at the modernization of production equipment. We expect a 25 to 30 percent capacity increase in the area of services.

We are continuing the elimination or removal of plants that are obsolete, environmentally unsound, or in conflict with urban renewal interests. We have a 10-year plan that has been approved by the Budapest City Council. The magnitude of the task can be seen if we point out that almost 500 plants need to be moved, and 300 must be shut down.

[Question] What is the judgment of Comrade Soltesz regarding scientific research within the sector? What is the efficiency of the transfer of the products of "intellectual workshops" to everyday practice? What is your opinion regarding the importation of licenses and know-how? In general, how long does it take till production startup?

[Answer] The institutes and enterprises within the sector are, in essence, engaged in applied research and development. On the whole, I consider this development work successful. High priority targets were identified in national and ministry-level programs. Their implementation is supported, using central resources, under continuous monitoring. We have wide-ranging international contacts in the area of technical and scientific cooperation with a view toward speeding-up research and development. We obtained a portion of the engineering and scientific achievements we use from abroad, in the form of purchased licenses, know-how or cooperative projects. In 1979, a total of 370 licenses were utilized by 96 enterprises. The negotiations aimed at license purchases take an average of 11 months. Preparation of their utilization takes about 15 months. Production based on licenses resulted in sales receipts of 28.5 billion forints in 1979. This represents almost 10 percent of the gross production of metallurgy and machine industry. Despite this, we are still not satisfied with the results achieved thus far. In the future, our enterprises and institutes must pay more attention to the purchase of foreign intellectual accomplishments, as well as the rapid introduction of these results (and domestic developments) into industrial production.

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DECENTRALIZATION OF CENTRAL PLANNING ON HUNGARIAN MODEL ADVOCATED

Warsaw PRZEGLAD TECHNICZNY INNOWACJE in Polish No 39, 28 Sep 80 pp 12-13

[Interview with Prof Dr Habilitowany Aleksander Lukaszewicz, director of the Institute of Economic Policy and Planning, Warsaw University, by Marek Rostocki: "No Planning With Slogans"]

[Text] [Question] Ten years ago, in their book "Gra o jutro" [The Game for Tomorrow] authors Stefan and Andrzej Bratkowski wrote: "When we have a structurally guaranteed possibility of planning, why do we avail ourselves of it in such an inadequate and unsatisfactory way?" I am repeating this question, because today we are in the same spot, and maybe the situation in the planning realm is even worse.

[Answer] The structural planning guarantee is only a catch phrase. It does not describe the shape or range of planning or the sort of intensity in the detailed sense. Within this broad framework we need a precise determination of what the system of planning is for, what it can be, and what it should be. There is no doubt that the system for planning socioeconomic development, as it took shape during the period of the country's industrialization, has already fulfilled its mission. Today's problem is to build a planning system in a new structure to fit the new situation.

[Question] New situation, new planning. This is not a new thing. I would like to recall the words of one of the participants at the Eighth Party Plenum in July 1971: "The avalanche-type development of the economic and technical sciences and the accompanying propaganda concerning the role of economics have suggested that our directions and methods of operation will be correct, because they are based on science. Unfortunately, this science works best in books and various sorts of publications, but not always in practice."

[Answer] I have nothing to add, nothing to say. These words are also true today, which means that they have been forgotten for 10 years.

[Question] What should we expect from planning in the current situation?

[Answer] It must be related more than ever to the solution of problems concerning the functioning and management of the national economy. Planning is not and cannot be an autonomic, instrumental, and technical function. It must be a derivative of the system of the functioning of the national economy. All the socialist countries, Poland included, live through a period of looking for what I call a new identity for the socialist system. Within this fits both a new shape and a new system of planning. This new identity is to feature above all, as was said in Poland at the beginning of the 1970's and has been emphasized in practice, the planning to guide the solution of strategic problems. If we speak about the bolstering of central planning, this is how it should be understood. On the other hand, planning must always discourage symbiosis with current management, which is false even today, is not adapted to reality, and is absolutely ineffective.

[Question] In his book "Spoleczenstwo gospodarujace" [A Managing Society], Prof Janusz Kesiak mentioned the recent dispute of the 1950's concerning whether a central body should plan the number of pickles. I hope that the dispute has been resolved, although in practice this has varied in recent years.

[Answer] Planning is not a panacea, it never has been for anyone in any system and it never will be, that is, the only way to resolve socioeconomic problems. It is only a means which must be skillfully employed. That means, in a way which is understandable for those doing the planning and for those who are the beneficiaries of the planning. But if it is to be understandable, it cannot be bureaucratized to the point that it has recently reached. The degree of the bureaucratization of planning in Poland in the 1950's was similar to that now. Meanwhile the economy now is different, fundamentally different. This is where I would seek the causes for the fact that Poland's economy, structurally planned, has been an example in recent years of a lack of planning, which we all feel keenly. There has been a delusion that planning regulates anything.

[Question] What can we expect from planning in situations of economic crisis?

[Answer] For crisis situations like the current one special stabilization plans are needed to resolve the enormous and severe ongoing conflicts. It is too bad that they are not discussed. In the communique on the first session of the Presidium of the Government in its new form there was the statement that during the fourth quarter the government would control the economy efficiently. I must say that I do not understand what that means. Efficient control of the economy should occur in every quarter, yesterday, today, and tomorrow. If those words hide stabilization plans, then they contain something important. If not, then they do not mean anything. In talking about planning, we must use a language which everyone can understand, because it concerns the whole society.

[Question] The English aristocrat and philosopher David Hume wrote two centuries ago that the more superstition there was in a sect, the more authority chaplains had in it.

[Answer] In planning you can use camouflage, but what for? In the end camouflage always leads to conflict. There are numerous instances of this in Polish history too. The August conflicts also had their beginnings in camouflage, including planning camouflage. There are spheres of economic life that nobody ever talks about publically, because they are protected by state interests. The thing is not to misuse the concept to protect inabilities and errors in planning. The principle must be to talk about plans without emphasis or quasi-professional vocabulary. The essence of plans — this is very important — must be clear for the whole society. Planning camouflage used by the people running the economy, as has happened, sometimes hides arbitrary actions, which is bound to lead to social stresses.

[Question] What is the set-up of relations between the planner and the society which can protect us from such situations?

[Answer] Central planning must call for and rely on public opinion and acceptance, and therefore public participation. Planning without participation will never be successful. Participation can be assured through certain mechanisms of functioning of the economy and the state.

[Question] Of course the question which comes up is: what sort of mechanisms? I am proposing that they be linked to the problem of strategy in planning. In your most recent book "Rozwoj spoleczno-gospodarczy. Studia o strategii i planowaniu" [Socioeconomic Development: a Study of Strategy and Planning] you write: "Strategy which goes along properly does not deserve the name of strategy, because it changes with current policy." What sort of strategic goals should be defined by means of public participation?

[Answer] The pressure of current events creates the danger that long-range goals will be pushed back into second or third place, but we must not lose sight of them, because overall they determine the future. Up until now, as has been frequently written, the thing was that doctrinairely conceived central planning by directive dissolved the strategy in current management. The goals were the result of production aspirations, and the latter were the result of contests between reality and pious desires. Such a contest is not wise, and it is better not to get into one.

So how do we identify the goals which are to bear the name of collective goals? We know that the individual goals of various individual people, families, and enterprises do not add up to a collective goal. There are no arithmetic sums in social life. Should a group of experts identify the public goals? Surely not, because their understanding of social reality by the nature of things is warped and

incomplete. Can a political group do this, without the support of experts, a group which thinks that it can best identify the social aspirations and attitudes? No, they cannot do it either, because they do not have the expertise. Can this be the society? Theoretically yes, but in practice this is impossible. The mechanisms, for example, of parliamentary elections and referendum operate only periodically, and besides that, contemporary society is not a Greek agora. In addition, the society is sovereign and then again it is not. The preparations for the elections, for a referendum, are always accompanied by propaganda and a certain manipulation of public opinion, and this happens in everyday life too.

Squaring the circle then? Probably not that either. As in every social and economic effort in which our understanding of reality is incomplete, so too in planning we must strive to avail ourselves of all the possibilities which really exist. Hence, experts and politicians, and public opinion. This must be a continual process carried out at various levels of the social structure and well organized.

[Question] In this context, Professor, how do you see the role of the experts, or yours, that of scientists?

[Answer] They should supply alternatives, variants of development. For example, let us consider consumer aspirations. We want, we should, we can — and we deserve to — reach the level of economic development of Western Europe. At the same time we want to do this, for example, without destroying the natural environment and without excessive social diversification. Hence, it is the task of experts to define first of all alternative areas in which it is possible to choose goals. Once the goals have already been described and discussed with the society, the next step is programming. The programs should be alternatives, and here too a choice is possible. Then next come two or three variants of a multiyear strategic plan, that is, a long-range plan. On the other hand, the five-year plans, which should also be strategic plans, should already have a single version, but of course they should be flexibly adapted and revised. When I say "a single version," I am thinking about the fact that the five-year plan must have the broadest possible allocation of goals. Balancing functions should also operate in categories of values, because this is a condition to the flexible implementation of the plan.

[Question] We are talking about long-range plans and five-year plans. What about annual plans?

[Answer] The central planner should give up annual plans in the present directive form. Annual plans should come into being in autonomous economic units, in the enterprise or complex. These plans should exhaust the inspirations and be oriented towards goals contained in the government five-year plan, but they should not be centrally approved, or be brought up at sessions of the Sejm. It should be the task of

the central planner, in short, to regulate the state's economic policy, in practice, to guide the execution of the plans which the managing units formulate independently. Such a system exists and is working out in Hungary. The central planner should focus his activity on using the economic instruments at his disposal: credit, setting interest rates, prices, and the creation of competition, for example, through imports. The socialist economy has become too complicated to be able to control it effectively through the use of planning by directive. As has been recently proved, the producers are expressing in ducisive terms a protest against management by directive, stating at the same time that they should operate autonomically for the general public good.

[Question] Doubts have been expressed as to whether in the situation of an economic crisis basic reforms can be made in the economic system.

[Answer] One of the most important causes of the current situation is the fact that for years there has been a suspension of action aimed at the thorough rebuilding of the sociceconomic system and its functioning, including planning. I think that this is a basic error, because you can never define whether a given moment is that in which it is possible to begin a reform. The very nature of social processes condemns us to this uncertainty. For this reason it was a cardinal error to depart from the changes introduced into the economic system in 1972-1973. On the other hand to revise, to look for new points of balance, the word reform has been removed from the political vocabulary. For a few years more the Polish economy will harvest the bitter fruits of that decision.

[Question] Professor, there is no doubt that information is the decisive element of any planning process. How would you rate the quality of the information used by national planners, especially the central planners?

[Answer] This is really a sensitive problem for any planning. It has already been proved time and time again that the system of centralized planning by directive gives rise to misinformation, because if the plan is thrust on production units and is created without the participation of the working forces, then "down below" defense reactions are created, including misinformation, which later accumulates in the planning center. This is not changed by directives or by appealing to a civic sense of responsibility. Misinformation is written into planning by directive. It is a pathology of the system. The problem has been written up in detail in the planning literature. Let us add that it is probably the greatest defect of the mastery of central planning which extends beyond reasonable time limits. Information will not be falsified, if the one who generates the information has an economic stake in seeing that it is correct. It is in such a situation we find the enterprise, which creates its own production plan. We must go in this direction.

[Question] Some people say that because we are not coping with the progressive complexity of the Polish economy, we have to simplify it. And therefore bolster central planning and planning by directive.

[Answer] These are illusions. It is just the directive-parameter-type of planning and not central-directive planning which simplifies economic control. This stems from the fact that in the first instance there is a clear breakdown of jurisdiction: planning, that related to management, and information. If an economic unit is motivated to supply the central group with information about an autonomically formulated plan, then it will not find it in its interest to falsify that information. In addition, it will then provide the Planning Commission, the Ministry of Finance, and the Ministry of Labor, Wages, and Social Affairs with information which is already collocated and clear. I do not mention the ministries of the industrial subbranches, because their existence in the previous structure I feel to be inadvisable. The experts on organization problems have been calling for years for the transformation of the ministries of the industrial subbranches into staff units to determine subbranch strategy, groups deprived entirely of any management authority. Such a view has been presented also by many members of the Party-Government Commission on Improving the System of Functioning of the Economy of the State in the 1970's. It was dismissed. Today it is returning, and it will also return in the future, because it is simply correct.

[Question] If I understand well, in the above-mentioned perpetual motion discussion on centralization and decentralization, Professor, you came out for a strong enterprise endowed with legal status to insure its economic, planning, and similar independence?

[Answer] Yes, and more than that. I am coming out in addition for extensive, real jurisdiction for local officials in the realm of the planning and conducting of economic activity.

[Question] If bureaucratized central planning has so many obvious defects, why is it so durable?

[Answer] Oskar Lange already explained that back in the 1950's, saying the cause for the popularization of central directive-type planning as a system was the fact that the economies of the socialist countries were quasi-wartime economies at that time. Such structures were rather convenient for politicians, especially those deprived of economic imagination. What is more, the conviction developed that the working forces in the enterprises were not sufficiently mature for independent action. In addition the PZPR's role in guiding the socioeconomic processes was falsely interpreted in the notion that only a small group of politicians would notice the purpose of changes. In a way which has sometimes been dramatic reality has revised, is revising, and will revise such views, if anyone expresses them. Finally, factory workers, the working class, and the whole society is proving and will prove

their maturity, which is justification for a joint role in the planning of developmental visions and in the managing of the implementation of the developmental programs.

[Question] In 1969 the American weekly BUSINESS WEEK had an article about the planning experience of socialist countries and said, for example, that planning techniques like the method of interbranch input-output analysis are not used even in making decisions concerning the economic priorities or the selection of export markets. How would you assess the usefulness of the planning techniques we presently have at our disposal?

[Answer] As I said, planning is not a panacea. The world is too complicated for that. Nonetheless, there are many mature and tested planning techniques, and in addition in our country we have a large group of people who know how to use them. Why, since it is so good, is it so bad? Because when economic policy is unstable, inconsistent, and incoherent, planning becomes an idle machine. But this policy can be coherent only when there is a strategy for socioeconomic development. Not in the form of the slogan "That Poles might live better," but in the form of concrete programs for the development of the individual subbranches and industries and in the form of structural changes, including those in the programs used. Only then can the planning techniques be effective.

[Question] Thank you for the interview.

10790
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DRASTIC PRICE REFORMS FOR 1981 UNFAVORABLY ASSESSED

Warsaw ZARZADZANIE in Polish No 6, Jun 80 pp 7-8

[Article by Janusz Goscinski: "New Materials-Supply Prices"]

[Text] Recently, materials-supply prices and capital-goods prices have become the subject of lively discussions and of preparation of decisions at a high economic level. And rightly so, since, first of all, regulated prices many years ago—under different production circumstances in Poland and on the world market—deviated through the deteriorating settlement of accounts from the costs of producing and distributing nonconsumer goods. This is appropriate also since, second, prices of raw and other materials and of finished products on international markets have changed in a fundamental way, and Poland's economy has become significantly more open in recent years than it was at the beginning of the 1970's.

Planned price decisions, and also the "philosophy" represented by the chief price organ in Poland, depend on:

—the concept of introducing price changes on a specified day in a drastic manner and almost halfway between the ceiling of these prices to date and prices on international markets;

—mobilization of administrative and financial measures consisting—because of fundamental changes in the profitability of raw materials and fuels branches as compared with processing—of a change in the level of costs and value of production, in surcharge and liability rates, in sale prices, in correcting the wage and bonus fund, and in standards for computing the fund;

—the assumption that prices of means of production should correctly fulfill an informative function concerning social outlays made for production of given means of production, but they do not have to fulfill the condition of an instrument balancing supply with demand.

In connection with this fact, passive (informative) and active (selection) price functions are distinguished. But that is viewing the problem in

categories which I would define as false. For it is suggested that the informative function of a price should refer to production costs. And rightly so. Prices have to have some connection with production costs. And what determines costs. Productivity? Without a doubt. Productivity of fixed-capital goods? Of course. The scale of waste of time and materials? Naturally. And, thus, the level of organization of production processes? So it would appear from the responses given until now to the successive questions. And prices of materials, raw materials, tools, circulating-capital goods, etc and labor (salary rates in different wage systems) and means of production (rates of amortization of fixed-capital goods)? Naturally!

Production costs are therefore an outgrowth of costs of input and organization of processes. Of course, it is a question of average costs and of average input on an economic scale of the direct and indirect labor needed to produce a specific product.

But these are trivial matters, just as it is a trivial and generally known fact that the price of production covers production costs and the average rate of profit, and is a monetary expression of the transformed form of the value of a commodity. The world price in turn is a monetary expression of the international value of a commodity, and thus it can affect only a commodity which participates or could participate in the international exchange process.

Therefore, a simple, unequivocal answer cannot be given to the question whether materials-supply and capital-goods prices should be based on a cost formula or on world prices. And thus, an attempt is made extremely frequently to "draw out" adherents of linking domestic prices with fixed prices that are oscillating freely or are negotiated in international transactions.

But let us consider the issues in substantive, economic terms, and without the emotion characterizing the false discussions which are treating the essence of the problem and which are serving more to settle personal than economic matters.

Drastic price reforms were implemented in Poland in the years 1956, 1960, 1971 and 1976, and another price change is being planned for 1981. Following the reform of 1960 it was acknowledged that this would be the last drastic price reform and that in the future, prices should be formed in a flexible manner, with the movement of prices being treated as a process. Since that praiseworthy intention was espoused, however, we have already had three large price increases, and soon we will have a fourth. The optimists assume that this ought to be the last great price reform and, furthermore, that it should follow a course just like the one instituted in 1960. Consequently, it is postulated that we will be observing the principle of a slow, and not a drastic, movement of prices.

Let us realize in the first place that drastic price changes, repeated every few years, restore (if they are correct) balance between price and outlays

and thus, restore it only for the moment. For this is a static and not a progressive treatment of an economic problem. After 1 year, and sometimes after 2 years, prices frozen until the next reform stop fulfilling any functions, both informative functions and functions of equalizing supply and demand. All cost effectiveness loses sense, and parametrical control in the direction of balance in a given market becomes pointless. This solution is no solution, for it does not resolve anything. Soon prices do not inform correctly; unfortunately, they inform falsely. There is no third alternative!

Would a decision for a drastic price change be unjust? Be that as it may, it is still necessary at present. It is necessary not to settle something, but to start something!

The postulate of price stability following price reform is illogical in this situation. Stability instantly destroys the results of price reform! It does so relentlessly and consistently.

Commodity of domestic production	Commodity designation			Supplementary import	Kinds of prices occurring
	Materials supply	Consumption	Export		
m_1	1	0	0	0	domestic price
m_2	1	0	1	0	domestic price and transaction price
m_3	1	0	0	1	"
m_4	1	1	1	0	domestic price, retail price, transaction price
m_5	1	1	0	1	"
m_6	0	1	1	0	"
m_7	0	1	0	1	"

For the sake of discussions on the subject of prices based on the formula of production price, initial price, and furthermore, transaction prices as the main sources of the policy of using cost effectiveness criteria in economic control, let us try to approach the matter in an orderly way, using the accompanying table. It follows from this table that there are seven possible combinations, without considering the combination which occurs when the digit 1 appears simultaneously in the export and import columns. In analyzing the kinds of prices that can occur here, it seems that we can quite easily answer the question: in which cases should prices correspond to world prices, and in which cases would it be more justified to rely on domestic prices in a period between the present state and an open economy with convertible currency, leaving open for the time being what the domestic price means and which alternative solutions enter into consideration here.

Now let us make certain additional assumptions, namely:

—the Polish economy has become considerably more open in recent years than it was in the preceding decade. The share of foreign trade turnovers has grown quite considerably, influencing the size of the apportioned national income. And although Poland's share in world turnovers is small, smaller than our share in the volume of world production (see J. G., "The strategy of economic development—problems of selection," ZARZADZANIE, 1980, No 5), export expansion of the economy in the 1980's is still a strategic instruction.

—the market shows signs of fixed imbalance of materials supply and capital-goods supply.

—prices for materials of labor [raw and other materials] should be viewed in a sequence corresponding to the logic of production processes, and thus for the following groups:

—raw materials (the starting phase for manufacturing processes),

—grade I manufacturing (i.e. leading to the manufacture of semifinished products, upgraded raw materials etc),

—grade II manufacturing (i.e. manufacturing whose starting point is final products with useful features permitting either use in other production and distribution processes, or consumption).

A system with these three phases arranged in a series allows on the one hand for differentiated price solutions (and also other basic aspects of functioning, of course), that is, it allows for price solutions with varying grades for establishing their parameters, and on the other hand "carries" solutions from phase to phase, mitigating the inconsistency of solutions. This is best illustrated using an example.

Let us consider the raw materials group. Let us consider two raw materials, hard coal and copper. The first of these is m_1 in the table, because we earmark coal in huge proportions for materials supply (raw materials for manufacturing, and energy), in significant quantities for consumption (for example, residential heating), and finally for export. Copper is m_2 in the table, because we earmark it for manufacturing and for export. But the difference between the two raw materials is essential from a viewpoint which interests us. Coal also has a consumer character, while copper does not. Coal has considerably broader application both on materials supply and consumption scores. In practice, every production establishment and every household is a consumer of coal. And that means that prices for coal can be poles apart. The price for coal has a direct effect on production costs, and also on living costs. This is not the case with the price of copper. But in export the situation is as if reversed. Poland is no small exporter of coal, but it is an incomparably bigger exporter of copper. This means, as Prof J. Lipinski emphasizes, that Poland's exports influence world copper prices, which makes the price of copper a non-parameter quantity. But this is not so in the case of coal. And therefore,

it is an open question whether the price of coal should be oriented towards the world price. On the other hand, there is no need to fix copper prices in Poland at the world level, for it is precisely the cost of obtaining and concentrating the weight unit of copper, compared with the transaction price in export, which tells us more about our actions from the standpoint of economic efficiency than is the case with coal.

Moreover, it is similar in the manufacturing groups. Consequently, in categorizing goods as one of seven types, we also have to answer questions connected with the place of a given commodity in materials supply, in consumption, and finally in export.

But there is no doubt that the planned implementation of changes in materials-supply and capital-goods prices, mainly in the sphere of raw materials and energy, should be accepted under defined conditions. I would suggest including among them:

—defining the principles and course of achieving price movement (the creeping growth of prices or sometimes their lowering) in a continuous manner instead of having a policy of freezing prices and changing them drastically.

—designating a commodities list for means [tools and machinery] and materials [raw and other materials] of labor at prices based on transaction prices (average world or negotiated prices) and their modification, dependent on a change in the scale of production and in the role of specified kinds of commodities in foreign turnovers.

—determining a price formula for domestic prices, that is, replacing formulas for a price based on prime costs and average profit rate, for production prices or initial prices—as not corresponding to demands for correct economic information and "neutrality" of prices with respect to nonprice information about demand.

—adopting the principle of the parametric function of prices, and thus elaborating assumptions for such structural changes in the system of functioning of the economy as would lead to economic criteria for selecting and evaluating results in categories of economic efficiency.

—planning of and submission of mechanisms to the authorities for acceptance before a price increase, that is before the end of 1980, mechanisms which:

—would implement a formula for the base wage fund with slow, gradual movement of prices for means and materials of labor [raw and other materials],

—would subsidize deficits of means resulting from the need to continue production of goods whose production cost in Poland is higher than prices on the international market,

—would protect the national economy from having transferred to it the results of large price fluctuations, and also of speculative growth of prices on the world market, and more generally—from import of inflation.

—would restrict profit surpluses resulting from a favorable price system either with the help of a differentially graduated income tax or by taxing expenditures from funds created out of the mentioned profit.

This is certainly not a complete list of measures. But it seems that executive organs' practice of demanding from planners of a defined solution (not only regarding prices) the submission of plans for protection against negative and secondary effects of changes would increase their responsibility for the content and the results of proposed changes.

8729
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ECONOMIC JOURNAL VIEWS GRAIN SHORTAGE PROBLEMS

Warsaw ZYCIE GOSPODARCZE in Polish No 36, 7 Sep 80 p 6

[Article by Pawel Kapuscinski: "Grain--An Attempt at Balancing"]

[Text] It is still difficult to say what the results of this year's grain harvest will finally be. Certainly the harvest will be better than last year's, which was exceptionally poor (17.3 million tons), but the harvest will not be as abundant as that of 1978 (21.5 million tons). I would venture to say that the grain harvest should not diverge from the average harvest for the past 4 years, which was 19.8 million tons. This is not a precise estimate, but it suffices for the presentation of the real problems of our grain balance.

As we are all aware, the grain balance is characterized by a chronic and growing deficit. The supply of domestic grain, which falls behind our needs, is supplemented by the increasing import of grain, which is more and more costly. While in 1970 we imported somewhat less than 2.5 million tons of grain from abroad, (not including the other components of concentrated feed), in 1975 grain imports exceeded 4 million tons and continued to increase at a rapid rate in succeeding years until it reached 7.3 million tons last year. At the same time the situation on the concentrate feed market, for which the bulk of grain supplies are designated, significantly worsened (from 1972-1976 feed mixtures were sold without limitations on the so-called "free market," and later their sale became strictly regulated).

The Widening Gap

The widening gap between supply and demand has had two major causes: the stagnation of domestic production and the growing demands of farm animal raising. In the period 1971-1975, the average harvest (20.6 million tons) was more than a million tons higher than the average for the last 4 years. Even if we exclude the last disastrous year from this calculation, in the second half of the 1970's grain harvests were still lower than in the first half of the decade (the average for the period 1976-1978 was 20.6 million tons).

This was primarily caused by a reduction in the acreage sown with four grains (7.8 million hectares in 1970, 6.9 million hectares in 1979), since their yield was insufficient. It should be remembered that since 1970 the general area of lands under cultivation has decreased as a result of industrialization and urbanization, and also as a result of cessation of agricultural production on the poorest lands, which amount to more than 400,000 hectares. Moreover, structural changes in farming have contributed to the decline in acreage devoted to grain cultivation. Until last year in the socialized sector, grain covered approximately 40 percent of all arable lands (recently this index has somewhat improved), while formerly the users of lands from this sector (360,000 hectares in 1975 alone) sowed over half of their fields with grain.

An insignificant increase in yields (by 0.6 quintals per hectare on the average for the years 1976-1978 by comparison with the average for 1971-1975) did not compensate for the decline in the acreage of grain crops.

Our own declining grain production has been lagging behind our needs more and more, as defined, above all, by the amount of grain consumption as feed. The number of animals consuming grain in the pigsty and the cowshed has increased; since 1970 the number of cattle has increased by 3 million head, the number of pigs has risen by nearly 8 million, and poultry production has tripled. While the number of horses has declined during the period by 700,000, horses continue to consume over 10 percent of the grain designated for feed on peasant farms. The universalization of grain-consumptive methods (and preparations) for animal husbandry (of which we have written extensively and often), no less than the growth in the number of animals, has been a significant factor in the increase in grain feed consumption.

As a result, the amount of grain earmarked for pasture has increased from 9.6 million tons in 1970/71, to 15.4 million tons in 1978/79, and the consumption of industrial concentrated feed has risen from 4 million tons to 9 million tons.

Failing To Keep Pace With Modern Innovations

The recovery of our grain balance rests upon our overcoming--in reality, reducing--the disproportion between our stagnating grain production and the growing grain-consumptiveness of animal husbandry. The magnitude of this disproportion has been caused, to a great extent, by factors which would be difficult to class as objective. Not long ago we wrote on this subject. Let us only note here, however, that the main cause of the increase in the demand for concentrated feed has been the rapid universalization of industrial, grain-consumptive technologies of raising animals. The rate of introduction of these otherwise modern methods of animal husbandry has not been coordinated with the organization potential for guaranteeing the proper efficiency in the use of expensive concentrated

feed. This consideration relates, above all, to the socialized sector. But it must be added that in the private sector as well--as a consequence of declining manpower resources, the general demographic situation of the village and the convergence of many other circumstances (including the price structure)--a clear tendency has appeared toward a transition to a less labor-consumptive technology of feeding animals through the use of concentrated feed. In itself this would not be in error, if this phenomenon were accompanied by progress in the efficient use of grain for feed. If it had reached the level attained in the FRG, then for the current volume of animal production, animal husbandry would have consumed approximately 5 million fewer tons of grain. Thus the question of the rational use of grain in animal husbandry has appropriately begun to be given priority of late.

Objective possibilities for increasing grain production also exist--by means of an increase in the grains' share in sowings (according to a government program, all types of grain had to cover 8.5 million hectares in 1980) and, to an even greater degree, by means of the intensification of cultivation or increased yields. In May of 1980 the Materials Management Office published a study which listed the reasons that the average grain yields in Poland are lower by nearly 30 percent than the average for all European countries. These causes are of a somewhat theoretical nature--mass agricultural production does not lend itself easily to maintaining the technological discipline of experimental fields--but they are not taken "out of thin air," being based on scientific investigation.

It was calculated, for example, that as a result of a delay in the optimal sowing deadline we lose 1-2 million tons of grain annually. An improper sowing depth reduces our harvests by several hundred thousand tons. If we could perfect our chemical and mechanical protection of lands planted with grain against disease, pests and weeds, the increase in harvests--I have this on the authority of the authors of the study--would equal our entire grain import. A change in the generic structure of grain production could bring about significant benefits. It is entirely realistic to replace a portion of our acreage of rye and oats, as well as a portion of our potato acreage, with wheat and barley to yield an increase in our grain harvests of approximately 1 million tons. The above examples do not exhaust the list of the possibilities for intensifying grain production, in which (contrary to the commonly held opinion) the continued increase of mineral fertilization is not a decisive factor, particularly in the socialized sector (which in 1977 had higher applications of fertilizers than Dutch farms, which occupy first place in Europe).

Of course, overcoming these drawbacks of grain production is not a simple task. They do not stem from ignorance or from the indifference of our farmers. They are instead the result of the weak technical equipping of agriculture and the low level of its infrastructure (as, for example, the

unsatisfactory state of land reclamation) which bring about a situation in which agriculture fails to keep pace with the tasks placed before it by the whole economy. For example, meeting the sowing deadline, as farmers well know, is contingent upon the length of the harvest of earlier crops, and upon when the farmer will manage to prepare the field for sowing, to acquire fertilizers, seeds and the like. Sowing too deep is caused by the understandable caution of farmers, who very often do not have at their disposal materials of guaranteed quality. The causes of all remaining blunders, or rather departures from the correct technology of grain production, may be calculated in a similar manner. And all of these, particularly with regard to the individual farm, which produces three-fourths of our grain, have their causes, generally speaking, in the insufficient supply of farms with means of production.

Feed and Bread

But harvests are not only feed, they are bread. This is, after all, the most important item in the grain balance, connected not only with the general production of grain, but above all with the results of grain purchasing.

The food industries--milling, brewing, the spirits industry, concentrates and the like have an annual need of approximately 6 million tons. Last year 5.2 million tons of grain were used for milling (that is to say, for the production of) flours and cereals designated for the market, for bakeries and confectionary shops (in 1975, 4.5 million tons were used). This breaks down into approximately 1 million tons of rye, 4 million tons of wheat and a little barley.

Our rye is of excellent quality. On the other hand, domestic wheat, due to climatic conditions, is of inferior baking quality and must be supplemented with imported wheat with a higher gluten content. Technological considerations dictate that this added wheat should amount to approximately 30 percent of the wheat designated for milling, or a little over 1 million tons, i.e., approximately 20 percent of the total consumption of food grain. Meanwhile, the actual share of imported grain is approximately one-half, and in 1978/1979 reached two-thirds of our consumption. The PZZ [State Grain Workers] does not purchase even the amount of grain necessary for bread and flour. Last year the general purchase of grain amounted to 3.07 million tons, of which the PGR [State Farms] supplied 352,000 tons. (However, it must be kept in mind that state farms produce approximately 600,000 tons of grain for sowing as well), production cooperatives supplied 272,000 tons and agricultural circles, 161,000 tons.

A comparison of the planned purchase and direct consumption indicates that the full implementation of the purchasing plan is absolutely indispensable. For the time being the beginnings of the campaign do not look very promising.

For the last 10-day period of last month the purchase was lower than during a similar period last year. In part these results are explained and justified by the delayed harvest--last year at that time the grain harvest was further along (but the yields were poorer). Burdened with other urgent field chores, farmers store grain in stacks and in barns, putting off the threshing and delivery of grain until a more suitable time.

In all honesty it must be said, however, that there are also other causes of this insufficient purchase. The heads of state farms, who have their own feed mixtures at their disposal, and, to an even greater extent, individual farmers, want to gather a reserve of concentrated feed within their own domains in the event of problems with the delivery of industrial mixtures. This cannot be helped. In order to reduce the demand for feed, at the beginning of last year, a three-zloty equivalent for every kilogram in their possession which was not purchased. Through the end of July farmers collected an equivalent of 790,000 tons, i.e., 30 percent of that amount of feed which belonged to them. Small wonder that in the place of industrial feed they preferred their own grain.

It has been observed, however, that those farmers as well who produce more grain than they will consume on their own farms do not rush to deliver their grain to state purchasing centers. In part this has been tied up with the domestic situation, and particularly with the inflationary tendencies that have become more and more intense until recently--in the eyes of the manufacturers, grain is a currency which does not depreciate, but to a great extent has also been the consequence of the insufficient supplying of the village with the means of production, construction materials, fuels and machinery. Experience has taught the farmer that it is immeasurably difficult for him to exchange zlotys at the communal cooperative for, let us say, cement, and much easier to receive an allotment of the same cement from the communal boss, if in exchange he is obliged to make a delivery of grain.

Grain must flow into the state warehouses in a broad stream. In order for this to occur, farmers should have a clear knowledge as early as possible of the supply situation for feed--not for the next few months, but for the spring of the year to come. Perceptible improvement in supplying the village market should also take place. The recent government decision to increase deliveries of coal to villages by 900,000 tons may be taken as the first sign of this improvement.

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RESEARCH IMPORTANT IN ZOOTECHNICAL DEVELOPMENT

Bucharest ERA SOCIALISTA in Romanian No 15, 5 Aug 80 pp 12-16

/Article by Univ Prof Emil Negrutiu, corresponding member of the Academy of the Socialist Republic of Romania: "Relations Between Production and Research in Agriculture and Zootechnology"/

/Text/ The party administration's requirement to raise Romania's zootechnical output to 50 percent of its total agricultural output in a short time has major social implications. It is primarily intended to provide for a consumption of foods with a higher biological value than the products of vegetal origin and especially consumption of proteins, and also to meet the growing demands of industry and the export trade for diversified food and clothing products. As Comrade Nicolae Ceausescu pointed out at the Working Conference with Zootechnical Personnel in June 1980, zootechnology must be brought up "to the level of a main sector of agriculture and an important sector of the national economy as a whole."

It is also noteworthy that in terms of value this sector's share in the gross agricultural output increased from 33.3 percent in 1938 to 43 percent in 1979. This was accomplished by increasing the number of cattle by 78 percent, that of sheep by 55 percent, that of hogs by 295 percent and that of poultry by 176 percent. Moreover the total output of meat was increased by 234 percent, that of milk by 204 percent, that of eggs by 423 percent, that of wool by 158 percent, that of fish by 47 percent, that of honey by 470 percent etc. Yet the plan indices were not fulfilled either in numbers or in outputs, and these arrears must be recovered as soon as possible.

I should like to point out that Romania has been logging noteworthy total and annual growth rates since 1963 as compared with the evolution of numbers of livestock and of zootechnical production on the world level and especially in some countries like the United States, France, the FRG, the USSR, Bulgaria, Hungary, Yugoslavia etc. Romania is in first place in growth rates of numbers of cattle, hogs, and poultry and in third place in that of the number of sheep. As for production growth rates, Romania is in third place in output of beef (at the average slaughtering weight) and in second place in total output of

beef on the carcase. Romania ranks first in output of pork on the carcase, first in total output of wool, and third in output of mutton. It is in first place in output of poultry meat and in second place in output of eggs. In growth of the total output of milk, at the rate for this period and at the annual rate, Romania is in third place. But it comes fourth in the average yield per cow and is consequently far inferior in actual production.

In view of the numbers of animals and the outputs reached in 1963, the growth rates for the entire period and the annual rates can be considered adequate in comparison with other countries, with the exception of the individual output of milk. Yet the parameters specified in the programs have not been reached. It should also be noted that in comparison with the said countries Romania and Bulgaria rank second in number of animals per unit of agricultural area (reckoning the numbers of cattle and sheep in great cattle units), after the FRG, which has twice the number, or France, which has 25 percent more, having more cattle and less sheep. The other countries have considerably smaller numbers than Romania. Since Romania must further increase its numbers of livestock, it must specially emphasize creating the best conditions for care and maintenance of the value of the biological material.

Although the growth rates of the numbers of hogs and poultry were higher than those of the other species, in comparison with the above-mentioned countries Romania is in fourth and fifth place respectively in numbers per 100 hectares of arable land.

It should also be noted that in the demographic evolution for the period since 1970 Romania's annual growth rate is in first place in comparison with the said countries, and it still has the highest percentage of the active population employed in agriculture.

Romania ranks first in annual growth rate of food production, calculated in indices and on the basis of the average for 1969-1971, and there are practically no differences with the said countries in per capita and daily food consumption in terms of calories. But Romania comes last in consumption of proteins and fats of animal origin.

All the foregoing points indicate the progress made in increasing the numbers of livestock and livestock production, especially in the period of development of socialist agriculture, and scientific research has unquestionably contributed to that progress. But there are still too few units that accurately follow the recommendations based on scientific research, so that their implementation is sporadic. Meanwhile scientific research itself has failed to answer many questions.

At the Working Conference with Zootechnical Personnel Comrade Nicolae Ceausescu fully discussed the failures in this area and the need of eliminating the defects immediately, especially since the balance sheet of this five-year plan is basic to some highly important long-range tasks for purposes of implementing the provisions of the next five-year plan as well as the goals set for the year 2000.

The best possible coordination between research and production is necessary in order to increase the number of cattle by 54 percent, that of sheep by 42 percent, that of hogs by 54 percent, that of poultry by 20 percent, that of beehives by 40 percent etc. above the provisions for 1980 by the year 2000, and also to increase production of beef by 97 percent, that of pork by 95 percent, that of mutton by 132 percent, that of poultry meat by 72 percent, that of eggs by 52 percent, that of honey by 76 percent, that of silk cocoons by 34 times, that of fish in inland waters by 2.7 times etc.

Meanwhile it must be remembered that the rapid increase of livestock production and numbers requires a complete horizontal as well as vertical correlation between the agricultural systems, use of land, crop structure, development of the productive potential of the soil, crops and livestock, application of rationalized technology etc. because they are closely interdependent. The almost equal proportion of the numbers of livestock in the socialist sector and on the private farms calls for differentiated method and technologies of breeding and exploitation, with further application of intensive systems in the socialist sector and promotion of the semi-intens systems on private farms.

Dependence of Animal Husbandry Upon Crops

Development of animal husbandry is out of the questi without provision for a suitable fodder base. The attempts to intensify conversion of vegetal to animal products (which is generally very limited and not easy to improve) are promising, as well as those to obtain products similar to those produced by the "animal machine" directly from plants by industrial methods with more intensive conversion. But these efforts, especially the latter, could be considered only in order to supplement the foods of animal origin over a long range of several decades. At present two-thirds of Romania's crop production is consumed by livestock to be converted into products with a much higher biological value. Moreover, more than 30 percent of the total agricultural area is used to produce volume fodders, as in the case of natural pastures and arable lands planted in fodder crops (The former amount to 4.2 million hectares and the latter to about 800,000 hectares, making about 5 million hectares in all), to say nothing of the by-products like straw, stalks etc. that are obtained from other crops. Under these circumstances the volume fodders requirement can be met and even exceeded by producing yields per unit of area like those obtained in the leading units and the scientific research stations.

But I think this requires closer study by the scistific researchers, in collaboration with the planning organs, of the actual possibilities of improving the natural pastures on the basis of some works for mapping and evaluating them published by the Academy of Agricultural and Forestry Sciences. These works indicate that if most of the natural pastures are on the lands with the lowest natural fertility and especially the very eroded ones (the other lands being used for grain crops, vineyards, orchards etc.), they cannot guarantee fodder yields that are at all adequate even if radical methods with enormous consumption of energy are used. Therefore the way they are used must be reconsidered, including the technologies applied. While scientific research has determined technologies for cultivating pastures in various areas of Romania with

spectacular results even on saline, sandy or excessively moist soils, it still lacks solutions for the high hill and plateau zones that occupy considerable areas (29 percent) and show pronounced "disease" phenomena, some of which are extremely difficult to eliminate.

The production indices for the mountain and Alpine pastures, which account for 26 percent of Romania's total pasturage, are also to be reconsidered. Many experimental results (obtained at seven categories of altitude, from 600 to over 1,800 meters) will prove that use of good technologies including application of nitrogenous artificial fertilisers can produce an annual average of nearly 1,600 kg of dry substance per hectare on unfertilised soils and one of more than 4,000 kg of active substance per hectare on fertilised soils.

But other considerations also arise. Although it was provided that the areas in fodder crops in the arable zones will be the most fertile lands and close to the zootechnical production units, most of them are on the peripheries of these lands, where the fertility is lowest. The necessary fertilisers are not always applied to these areas and minor improvement efforts are made, to say nothing of the fact that the areas in fodder crops in the arable zones have been practically halved by planning in the last few years. It goes without saying that any recommendations made by scientific research concerning application of the various technologies and cultivation methods become ineffective under such circumstances.

As it was phrased in the discussion of development of agriculture on the basis of the energy balance (in ERA SOCIALISTA No 12 and 13 1980), it is indeed "hard to understand" why crop zoning is not observed, why crop and livestock production are not correlated, and why the yield of fodder crops contains only 40-50 percent of the required feed units per hectare. For it is essential to aim at the use of an agricultural system that will promote application of rational crop rotations and will also help animal husbandry.

Despite the recent improvements in zoning crop and livestock production, I think a realistic reappraisal is needed here because zonal and microzonal operations appear forced in a good many cases. The fundamental question arises, why in planning does growth of the livestock numbers and outputs come before the rate of improvement of the yields from the fodder base? The very fodder quota for volume fodders, as it was set for 1980 and in the long range for the year 2000, is one of the arguments in favor of the said reappraisal. The quota is expressed in percentages of feed units.

I consider it hazardous to specify that the quota for volume fodders in 1980 on the national level shall be made up 31 percent with "other resources." Although the very formulation of "other resources" seems rather uncertain, it is practically the equivalent of the feed units derived from the fodder crops from the arable areas combined with those from the natural pastures. This concept actually reflects a situation that has been going on for several years, even on the levels of some counties and agricultural units, and then we still wonder why we do not have assured fodder reserves and supplies.

The quota for the year 2000 will be made up 10 percent with "other res," which is feasible if the areas in fodder crops on the arable lands and the areas in successive crops are doubled, if the yields per hectare are increased, etc. The main problem for increasing the livestock numbers and outputs in 1980, and by the year 2000 as well, is to make up the entire fodder requirement and consequently the fodder quota realistically and completely, with provision for a normal protein ratio.

	% of feed units in the total for:	
	1980	2000
Fodder crops in the arable area	11	26
Natural pastures	24	27
Successive crops	7	16
Succulent by-products	3	4
Coarse fodders	24	17
Other resources (pastures on stubble fields and in forests and orchards, sugar-beet tops etc.)	31	10
Total	100%	100%

It can be stated that many studies have determined the content of feed elements of all fodder resources throughout Romania as well as structures and norms of rations for all the species according to age and production categories. The feed rations and norms are to be reviewed in the light of the conclusions of the Working Conference with Zootechnical Personnel. Feed structures and rations must be determined at the beneficiaries' request, according to the fodder supply and the particular purpose, in order to secure the best correlation of the zootechnical production plan with the fodder base, especially on the national level. I wish to make an essential point here, namely that if the fodder quota and the feed rations are not well balanced quantitatively and quantitatively, the livestock's potential for reproduction and production is impaired, the feed consumption necessary to obtain 1 kg of milk, meat or wool is increased, and the action of the factors for disease and death is intensified, especially in the case of the improved breeds.

The decline of the fertility indices and the recent increase in fodder consumption per unit of output were pointed out at the Working Conference with Zootechnical Personnel, as well as the rising death rate of the livestock. All this is mainly a result of feed imbalances and the wrong fodders, although I must say there are many units, some of which were mentioned at the conference, which strictly observe the foddering methods recommended by scientific research and consequently obtain excellent results. This favorable experience must be generalized to all production units.

Personally I do not think there could be any specialists in zootechnology, veterinary medicine or agriculture who do not know how to prepare the rationalized feed rations according to species and categories of age and production,

including fodder quotas, because these problems are specially emphasized in the instruction process just like the theoretical and practical methods of preventing and curbing sterility. But regrettably I was able to find not a few specialists working in zootechnology who sometimes display indifference and irresponsibility, to the detriment of the profession's prestige. Moreover there are many units that do not provide feed in the necessary quantity and quality, using inadequate and unsuitable methods of cultivating, harvesting, preparing, transporting and administering the fodders, including unqualified workers with no incentive to take proper care of the livestock.

I feel the worst defect is mismanagement of the existing fodders, from harvesting to administering them. To put a stop to this situation, it is very important to improve the training of all categories of workers, creating a veritable "animal husbandry cult." The party and state organs responsible for the zootechnical sector, which is so important to the entire economy, have heavy obligations in this respect.

Generally speaking they must begin by securing much greater and improved yields of all fodder crops, including those on pastures, while determining balanced ration structures and fodder quotas. This is essential because the greater the biologic potential of livestock production is, the more necessary it is to apply the breeding and exploiting technologies, with emphasis upon quantitative and qualitative foddering. Remember that 60-70 percent of the rations' total content of feed elements is essential to the animals' normal vital functions and only the remaining 30-40 percent actually meets the requirement for realizing their productive potential.

The foregoing points indicate some overall considerations for reviewing and improving the studies on procurement of the fodder base as a main prerequisite for long-range growth of the numbers of livestock and of the zootechnical output. In the light of the results as well as the long-range research programs we shall try to pinpoint some priority requirements and problems as follows:

- Generalization, with the aid of the administrative and executive organs, of the research findings that have a definite technical-economic effectiveness;

- Review of the network of research units as well as their adequate equipment and staffing so that they can cover all the distinctive regional characteristics, which vary greatly, in the field of pratology* especially and concerning both permanent and temporary pastures;

- Complete treatment and substantiation of the pratological studies with determination of the technical-economic effectiveness of the findings and greatly expanded checking and testing of the latter by feeding the yields to livestock;

- Development of studies of the characteristics of the pasture ecosystems, with differentiated determination of the methods of cultivation including the machinery systems specially adapted to the areas with broken relief, in close cooperation and collaboration with the regional pasture enterprises;

*Pratology is the science of pasturage.

- Development of varieties and hybrids for pastures and fodder crops with a quantitatively and qualitatively high productive potential, and determination of the most suitable mixtures for the particular local conditions;

- Determination of the most efficient agricultural systems on the zonal and microzonal levels, fodder crop rotations and types of conveyors for production of green mass and succulent by-products characteristic of the different seasons for purposes of making up the quotas with volume fodders;

- Determination of the most efficient technologies for pasturing livestock and for harvesting, preparing, preserving and administering fodders of all categories and especially the coarse and succulent ones;

- Updating production of mixed fodders of assured quality of ingredients and biostimulants, and preparation of manufacturing formulas for all fodder sources and of technological processes for the grinding and mixing centers;

- Determination on the national level of the units to produce fodder seeds of good varieties;

- Study and promotion of zoopastoral units with self-administration if their technical-economic effectiveness is certain, as it has been done in some mountain areas;

- Review of use of mountain and Alpine pastures for livestock species according to age and production categories and with improved methods.

Biologic Potential of Livestock and Its Real Expression

By virtue of its major gains since 1971, the socialist sector of agriculture holds a larger share of the livestock numbers than the private farms, especially those of cattle, sheep and hogs. Its share of horses is insignificant and that of poultry is almost equal. This situation calls for differentiated ways and means of applying the improvement processes and technologies, with many distinctive features.

In the case of cattle, thanks to a long process of modifying the primitive native breeds by assimilative interbreeding, the Baltata Romaneasca breed (36.6 percent), the Bruna de Maramures breed (35.6 percent) and the Friza breed (25 percent) predominate today. The Friza breed was recently introduced in order to develop a native type adapted to Romanian conditions etc. The increased total and indidual yields of milk and meat are due in general to the increased numbers, the improved breeding and exploiting methods, and the enhanced biologic potential.

On the basis of the genetic studies made and the outputs obtained, it can be said that the genetic potential of the Baltata Romaneasca and Bruna de Maramures breeds was considerably improved in time, thanks to the improvements made by importing the Simmenthal and Schwyz breeds. Yet this increased potential is not actually realized throughout the entire number of animals because the

proper conditions of care and especially of foddering are not secured, a point which I have made before. Thus there is a great discrepancy between the indices of production of milk and meat reached by these two breeds in some state and cooperative units (indices comparable to those reached in the countries of origin of the improving breeds) and those of the rest of their numbers, which produce yields that are quite unsatisfactory and far below their genetic potential. This is because they do not receive properly balanced rations or the necessar care, to the detriment of maximum exploitation of their genetic potential.

Many studies made in recent years on quantitative genetics and genetics of populations have established parameters for the whole active population of both these breeds that help to raise their productive potential. Specific programs and plans have also been instituted to bring the numbers of cattle up to the level of each county, especially in many units in Transylvania. But application of some of the proposed ways and means (such as testing the stock sires by their own phenotype, collateral relatives or especially their descendents) is only beginning because of delays in securing the necessary material base and forming specialized units for this purpose. Other countries using such methods have obtained spectacular results in improving the numbers of cattle. I also wish to point out that none of them has better conditions for this purpose than those provided by the big socialist cattle-raising units. Because of this situation we have been largely obliged to go on importing brood animals from the same stock of the said breeds because the countries of origin are making evident progress in improving them. It is certain that in the future too it will be necessary to import reproduction material -- not animals but mainly frozen seminal material from sires with the highest biologic value.

In discussing these efforts of Romanian research I have no idea that scientific activity in the field of zootechnology in general and in cattle improvement in particular is up to a standard that can meet the great demands of long-range development of this sector. On the contrary, I think zootechnical research must be entirely reanalyzed and its programs revised in order to develop this activity adequately and make it more effective in keeping with all that is more advanced on the world level in this field. I shall mention that upon the request of the Academy of Agricultural and Forestry Sciences we have prepared some material, in collaboration with the central and regional units and on the basis of some international documentation, on the policy and aims of improvement of livestock of all species, including poultry, bees, silkworms and furbearing animals. I hope this material can serve to improve the present and future research programs.

For example, I consider it rational and efficient for the cattle research programs to be differentiated according to breeds instead of products (meat or milk), because all breeds of cattle are raised and exploited for mixed meat-milk or milk-meat production in well-defined zones. This will make research much more uniform, being coordinated by the subject central institute, but with responsibilities for breeds as they are zoned. This applies to improvement studies as well as technological ones because the latter are also differentiated according to breeding and exploitation systems.

The studies on breeding, exploitation and improvement of cattle require not only an adequate material base but also enough well-trained personnel to ensure results through studies in depth that are ahead of the progress in the productive units. The value of the existing biologic material as well as the methods used in some research centers must not be below the standard of those in the productive units. If the characteristics, qualities and distinctive features of all the animals in centers, regardless of their number, are not at the peak of the improvement pyramid lines and families with an assured biologic value cannot be developed, and therefore the sires cannot be fully exploited as improvers for the production units that have selection farms. The coordinating research units must keep seminal material from the best sires and cooperate very closely with the National Reproduction and Selection Center, which has a very important part to play in the livestock improvement process.

In addition to the studies bearing directly upon improvement of livestock and technologies, it is also necessary to develop the economic studies, without which it is difficult to use the new findings in production. I think such studies will also permit better evaluation of the necessary investment and the labor effectiveness in various sectors of zootechnical production. Moreover, studies in greater depth must be made (especially in the complexes for industrial breeding and exploitation) on the relations between the qualities and the biologic requirements of the animals and how they are affected by various technologies that can produce physiological, etiological and other disturbances with effects upon viability, vitality, fertility and zootechnical production in general.

Similar problems also arise in the studies on improvement of the breeds of sheep with semifine and coarse wool. It can be concluded that in general the results of research on raising and improving poultry and hogs are satisfactory at present. But here too if the research centers are not developed rapidly I think in the near future the very parameters that will be obtained by biologic and technological research will be outdistanced by the production requirements. In fact, review of the network and material base of zootechnical research as well as its personnel is urgent for all educational and research units.

The steady annual reduction of workers in agriculture and zootechnology is making it urgent to conduct specific sociological investigations whose conclusions will permit more efficient organization of production and labor, fuller knowledge of relations between cooperative members and cooperatives, determination of better incentives for them, development of allied industries, etc. I maintain this because there are many factors (not always well enough known) with social implications that differentiate units and areas technically and economically that have similar conditions for stock raising. It is also very important for studies of this kind not to overlook the problems of stock raising on private farms.

Zootechnology is now a priority field for agricultural intensification and it will continue to be one in the future. Therefore activity in this field must be based upon the latest disciplines, the most effective results of scientific and technological research, and the favorable experience acquired in production.

For raising livestock, modeling life itself, and creating new breeds in order to increase their productivity all require a wealth of knowledge and experience. And it is the duty of every zootechnical specialist not only to use the latest research findings but also to make specific studies himself in keeping with the nature and requirements of his place of work.

5186
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EDITORIAL SAYS YUGOSLAVIA IS NOT 'OVERINDEBTED'

Zagreb VJESNIK in Serbo-Croatian 20 Sep 80 p 1

[Editorial by Djuro Zagorac]

[Text] We do not hide the size of our foreign debt from our working people and citizens. Various stories are going around about our foreign indebtedness, but the truth is accessible to everyone. Our foreign debt amounts to $15 billion. Is that too much, is it disturbing? The definitive judgment cannot be pronounced solely on the basis of that absolute amount. The amount of our indebtedness reckoned in our payments which come due every year, is less than 25 percent of the country's total inflow of foreign exchange. The payment of debts up to the limit of one-fourth of the inflow of foreign exchange is considered tolerant on the world capital market.

We can therefore say that we have a fairly large debt, but that as a country we are not overindebted.

Fifteen billion dollars does perhaps sound frightening at first. This is a large amount of money, a heavy burden it is not easy to get free of. But if we break down that dollar figure, we get a quite different picture.

Difficulties Because of Imports

There are slightly more than 22 million of us, and about 6 million are employed. In our development we have achieved the level of the moderately developed countries in the world. This year we will achieve a per capita national income higher than $2,100. If we set the foreign debt against human and material potential, then it turns out that it amounts to about $700 per capita or one-third of the annual national income. Since this is not a debt which must be returned immediately, the situation is altered fundamentally.

These $15 billion are to be returned over the next 15 years. If we reduce the obligation for repayment of the debt to a period of only 10 years, then our annual installment to repay that credit amounts to only $70 per capita, which is less than 4 percent of this year's national income.

Is this, then, a reason why we should be terribly worried?

Our foreign exchange difficulties have not occurred because of excessive foreign indebtedness, but because of imports of energy and equipment. Petroleum has had the greatest impact on upsetting equilibrium in the country's balance of payments. Whereas in 1975 we set aside less than 10 percent of the foreign exchange earned through commodity exports for petroleum, this year we will have to set aside 50 percent. Petroleum is immediately followed by expenditures for new imported equipment. Frantic development and huge allocations for investment projects, with which imported equipment keeps pace, constitute our largest economic problem concerning foreign exchange. Why?

The numerous new projects and the most up-to-date equipment are not satisfying expectations as to commodity production or the augmentation of exports. The main reason is that the import of equipment is in most cases based on imported components, raw materials and intermediate products. If we manage to untie that knot and reduce expenditure of imported energy to the necessary limits, then we will successfully solve our momentary difficulties with foreign exchange as well, which also takes care of the issue of foreign debt.

More Effective Undertakings

The context of current developments in the economy and the balance of payments is a very complicated one. Production and the laws of the domestic and world markets have collided with difficulties pertaining to the system, above all concerning consistent application of the law on foreign exchange. The principle that everyone who imports must himself provide the foreign exchange is obviously too difficult to carry out.

When all the circumstances are examined, it is difficult to enforce a system like that because the real financial conditions do not obtain. The steady and high rises of the prices of petroleum and equipment, the allocation of additional foreign exchange for them, cannot be made up for by commodity exports and income from invisibles. This gap is the greatest obstacle to consistent application of the law on foreign exchange. This has had an inevitable impact on all entities engaged in economic activity and on the level of production as well.

Disturbing phenomena have ensued. For instance, given the shortage of foreign exchange for imports, many ties in the supply of raw materials and intermediate products which the economy has had for several years have been broken, and there have been cases of an undesirable regional exclusiveness and various market deformations, and even criminal actions. Given that situation, we need more effective efforts. And even the postulates of the system, then, which are clearly noted in practice as a weakness and as a brake on faster development of the economy and socialist self-management, will inevitably have to be improved and added to.

7045
CSO: 2800

ECONOMIC DEVELOPMENT PLAN FOR SERBIA FOR 1981

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 26 Sep 80 p 8

[Article by D. Brdar: "Moderate and More Stable Growth"]

[Text] The Executive Council of the Serbian Assembly adopted a few days ago the draft resolution of the republic's socioeconomic development in 1981 and thereby defined the main lines of economic policy, which in the months to follow will be subjected to the broadest verification in the upcoming public discussion.

Economic policy in Serbia in the coming year, as set forth in the text of the draft, will be aimed at achieving continuity in economic development, at strengthening production and at implementing the stabilization measures. This will be done above all by strengthening and developing the socioeconomic relations of socialist self-management, by creating more stable conditions for the conduct of economic activity and by reconciling supply and demand. Production of food and energy and at the same time more rational use and conservation of energy in all forms will have priority in any case. In particular efforts will be stepped up to augment exports and reduce imports.

In 1981 a rise in labor productivity is anticipated which will facilitate a growth of about 2.6 percent in employment. Distribution of income and net income will be subject to achievement of stabilization, as will spending, which is not to exceed the available material limits. A slower rise of prices is also anticipated, accompanied by better supply of producers' goods.

Priority to Agriculture

As an activity of particular importance to the country's overall development, to the stability of the market, to supply of the population and the economy, and to reduction of imports and augmentation of exports, agricultural production will have priority. It is expected to grow by about 3 percent. Industrial output would increase about 5.5 percent, and labor productivity would rise about 1.4 percent. This would yield a growth of about 4 percent in the social product.

The growth of agricultural production of approximately 3 percent will be achieved, it is foreseen, by improving conditions for the conduct of economic activity in this sector and by better supply of manufactured fertilizers, livestock feed and equipment. Decisions on producers' sales prices, rebates, premiums and other incentives will be made in good time.

There will also be a need next year to provide funds to purchase about 20,000 hectares of land and to conduct proceedings to consolidate land by aggregation and reallotment on about 40,000 hectares. The land will be purchased mainly in the regions of Stig, the Morava Valley, the Danube Valley, Macva and Zajecar.

The bank specialized in the credit financing of agriculture, which is to begin operation next year, will also contribute to the growth of food production.

In the sector of foreign trade a 7-percent growth of exports is anticipated, which is more than the growth of the social product. Another aim is for imports to increase at a rate of 4 percent so as to improve the payments-balance situation and facilitate a larger inflow of foreign exchange. Conditions would also be created for more favorable circulation of foreign exchange and more direct dependence of imports and the outflow of foreign exchange on its inflow and exports.

More Balanced Energy Budget

Particular efforts next year will be made to furnish sufficient amounts of energy to supply all consumers. The draft calls for stepping up production of energy from domestic sources, fuller utilization of those sources, more efficient use and organized conservation. Meanwhile construction will also be speeded up on energy projects which have begun, on reconstruction and modernization of coal mines and construction of gas pipelines. Other necessary measures will also be taken to balance the energy budget.

Aside from energy projects, priority in financing will be extended to construction of capacities for production of food, steel, copper, cement and the heavy chemical industry. Construction of new projects will not be started in 1981 in nonproductive activities except for modernization of the railroads, construction of the section of the limited-access highway being financed by the International Bank for Reconstruction and Development, the Belgrade Airport, storage facilities for commodity reserves and utility projects in new urban settlements. Much the same will be the case in nonproductive activities, where the only facilities to be built are for basic health care and child welfare, elementary education in new urban settlements, and projects being entirely financed through local optional contributions. Investments in housing construction will be adjusted to the financial capabilities of associated labor, but a larger commitment of the private funds of individuals will keep pace with them. Economic policy measures will particularly encourage the pooling of capital by organizations

of associated labor, joint investments and investments of foreign capital in domestic work organizations. Among other things this should be favored by monetary policy, which will on the whole support the projected growth and changes in the structure of production, establishment of better adjusted commodity-money relations and achievement of more ramified and favorable economic relations with foreign countries.

Overall economic policy measures will ensure a slower rise of prices, which in the coming year will reflect the relationship of prices on the domestic and foreign markets more than in the past. In line with these commitments, the rise of prices of industrial products will be one-third lower than this year, and that of farm prices will be slightly higher than the rise of prices in industry. Retail prices and the cost of living will be one-fifth lower than in 1980. Nevertheless, an overall price rise of 20 percent is assumed.

In 1981 the draft resolution calls for continuation of the policy governing distribution of income aimed at strengthening and improving the material base of associated labor and at setting proportions in distribution of net income so as to facilitate a rise in the accumulative and reproductive capability of organizations of associated labor. It calls, then, for a growth of only 14.5 percent over this year in funds to meet general public needs. Funds to meet the needs for social services, except for pensions, would increase 40 percent more slowly than the total growth of this year's income in basic organizations of associated labor, but no more than 18 percent slower than the growth of the social product, and funds for personal consumption would increase 2.5 percent slower than the growth of the social product.

7045
CSO: 2800

MONEY SUPPLY, JANUARY-AUGUST 1980

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 24 Sep 80 p 8

[Text] After a mild growth in the first half of the year the money supply increased 30 billion dinars in July and August, or 7 percent over the end of June. Of that amount the increase was 17 billion dinars, or 56 percent, in the accounts of organizations of associated labor in the economy, which has contributed considerably to improvement of their liquidity. In addition, this growth was by and large offset by the slower inflow of money in the first half of the year.

The growth of money assets was also sizable for self-managed special-interest communities in the economy, while in noneconomic activities the growth was 4.8 billion dinars, which is 15 percent of the growth of the money supply that occurred. This development in July and August differs essentially from the tendency in the first half of the year, when the growth of money in noneconomic activities occurred thanks to a reduction of that held by organizations of associated labor in the economy.

The changes in August bring the total growth of the money supply in the first 8 months of the year up to 55 billion dinars, or 15 percent over last December. This growth is somewhat larger than was counted on, but it is in line with the resolution on the policy for implementing the Yugoslav Social Plan, which allowed for the money supply and credit to increase no more than the envisaged nominal growth of the social product.

Distribution of the Money Supply

The distribution by sectors shows that in the first 8 months liquid assets of organizations of associated labor in the economy showed a slower growth than growth in noneconomic activities and holdings of individuals. Within the economy there was a considerably faster growth of assets in the social service fund and miscellaneous deposits than of assets in giro accounts.

In noneconomic activities there was an appreciable growth of assets in the accounts of sociopolitical communities, public funds and other organizations, including self-managed special-interest communities. The money

assets of the population (cash, giro accounts and current accounts) increased more than is usual for this period of the year. In part this occurred at the expense of a slower growth of savings balances in banks, since there was a faster use of cash for major commodity purchases and for payment of services.

In the second half of this year payments in process are not to be included in the money supply. This is a consequence of a change in the methodology for composing the money supply which has been made by the Yugoslav National Bank. This change guarantees that the money supply will consist only of money with which payments can be made at any time, which is not the case with assets represented by payments in process.

Principal Sources

The principal source of the growth of the money supply were bank credits, which increased slightly more than 200 billion dinars. However, all of this was not reflected on the expansion of the money, since the effect of the growth of credit was in part canceled by foreign exchange transactions of banks and the movement of nonmonetary borrowings. In view of the measures taken to speed up the growth of exports and slow down imports, it is expected that this tendency will change in coming months and that under the impact of the larger supply of foreign exchange for sale there will be a change in the pace at which money is being created on this basis. This imposes the need for the banks to consistently hold their lendings within the prescribed limits so as not to allow an expansion of the money supply beyond the limits that are in line with the goals of stabilization.

Total outstanding bank credit increased in the first 8 months about 205 billion dinars, which is slightly more than the growth envisaged by the Order of the Board of Governors on Guiding Bank Lendings. However, since this growth also included credits to renew areas damaged by the earthquake in Montenegro, for more rapid economic development of underdeveloped republics and Kosovo, and for housing construction, which were exempted from restrictions, this growth is mainly within the limits set by the resolution on economic policy for this year.

The largest portion of the growth of credit in the January-August period (about 80 percent) was oriented toward organizations of associated labor in the economy and was used for production, for purchase of producer's goods and for export, and about 20 percent of the growth pertains to noneconomic activities and individuals. With respect to maturity there was a change in the tendency, since short-term credits began to increase faster than long-term lendings, which shows that the credit financing of investment projects is gradually slowing down.

Money Supply by Sectors, in billions of dinars

	As of 31 Dec 80	Changes Aug 80	Changes Jan-Aug 80	Aug 80 / Dec 79	Aug 80 / Aug 79
Organizations of associated labor in the economy	147.5	2.7	12.9	110	126
Self-managed special-interest organizations in the economy	28.2	0.9	6.5	130	135
Noneconomic sectors	143.4	4.0	15.2	112	117
Individuals	110.6	1.5	19.9	122	132
Money supply	429.7	9.1	54.5	115	125

7045
CSO: 2800

VARIED BUSINESS OF FEDERAL ECONOMIC COUNCIL OUTLINED

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 27-29 Sep 80 p 4

[Text] According to a release by the Federal Secretariat for Information, in a meeting last Thursday chaired by vice chairman Branislav Ikonic the Federal Executive Council took up several issues of current economic policy, the sociopolitical system, nationwide defense, the federal budget and our country's foreign relations.

In the meeting the council examined the drafts of amendments of the SFRY Constitution and supported the basic solutions proposed. The council also supported the position taken by the Commission for Constitutional Affairs of the SFRY Assembly that uniform solutions should be adopted with respect to the proposals pertaining to the Federal Executive Council.

The Program for Grain Production Augmented

The proposed version of the program and measures for production of grains and industrial crops in 1981, which calls for producing 18 million tons of grain next year, was also examined and adopted in the meeting. Within that total wheat production in 1981 would be 6 million tons, or 18 percent more than in 1979; corn production would be 11 million tons, or 11 percent more than in 1979. There would be an appreciable increase in the production of other farm crops as well. It was thus foreseen that 7.8 million tons of sugar beets would be produced, which is 26 percent more than in 1979, and an absolute increase of 1,445,000 tons.

About 935,000 tons of sugar would be produced from this amount of sugar beets, which would represent a 19.8-percent increase over 1979. This would make it possible not only to meet the total needs of the domestic market, but also to provide certain amounts for export. Sunflower production would be 594,000 tons, which is 13 percent more than in 1979. This would make it possible to produce about 250,000 tons of oil, which along with other amounts of oil produced from other raw materials totaling 325,000 tons, would make it possible to fully meet the needs of the domestic market and to sell certain amounts on foreign markets.

If the production envisaged in the program adopted is to be achieved, the council indicates that all participants who have an influence on development of the agroindustrial complex must step up efforts to contract for production, to adopt joint plans and to extend more fully self-management organizational forms and relations based on shared income.

New Prices of Farm Products

In order to create favorable economic conditions for increasing the production of grains and industrial crops the council, following cooperation with the republics and provinces, approved in its meeting the new producer-sales prices and support prices of the principal farm products in the 1981 harvest. The deadline for setting these prices was 1 October of this year.

The producer-sales prices and support prices for wheat in the 1981 harvest will be 6.80 dinars for grade one, 6.40 for grade two wheat and 6.00 dinars for grade three wheat.

The new producer-sales prices of corn were set at the level of 5.30 dinars per kilogram, and the support prices of corn were set at 4.77 dinars. On other farm products the producer-sales prices and support prices were set as follows: rice 15.00 and 13.50, respectively; sugar beets 1.40 and 1.26, respectively; sunflower seed 11.50 and 10.35, respectively; soybeans 12.50 and 11.25, respectively; rapeseed 11.50 and 10.35, respectively; cotton 27.00 and 24.30, respectively; tobacco 78.00 and 70.20, respectively; fattened young beef 48.00 and 43.20, respectively; fat hogs 42.00 and 37.80, respectively; fattened sheep 41.00 and 36.90, respectively; broilers 35.00 and 31.50, respectively; milk 9.00 and 9.00, respectively; and wool 135.00 and 121.50, respectively.

Halting the Excessive and Unjustified Inflow of Disability Pension Recipients

The report on administration of the old-age and disability insurance system, which the council also adopted in this meeting, aside from indicating constructive results in this domain, stated that along with efforts to improve this form of protection, measures should also be taken to prevent all cases of unjustified expenditures in this domain because this is an extremely important form of expenditure which is rising steadily. Particular importance in this regard is attributed to the activity of halting the unjustified and excessive inflow of disability pension recipients, which is having an adverse effect on the trend of total expenditures in this domain.

It is indispensable in this regard to enforce more consistently the uniform objective criteria for evaluation of disability and to take steps to improve and promote the system of workplace health and safety standards.

In examining the report on the work of the labor inspectorate the council commissioned the public inspection agencies to step up their activity in

preventing shortcomings, irregularities and illegalities in the enforcement of workplace health and safety regulations and employment relations and at the same time pointed out the need for steps to be taken to bolster these agencies in terms of organization and personnel.

The council was also informed about the supply of medicine on the domestic market and commissioned the Federal Secretariat for the Market and General Economic Affairs and the Federal Committee for Labor, Health and Social Welfare to prepare and submit to the council a report on the situation on the market following the council's recent decisions and to propose new measures for complete normalization of the situation in this sector.

Finally, the council also ratified the agreement on our country's scientific and technical cooperation with Italy and adopted several pieces of proposed legislation for ratification of international agreements.

7045
CSO: 2800

DATA ON STATUS, OUTLOOK IN PRINCIPAL SECTORS, INDUSTRIES

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 15 Sep 80 pp 27-29

[Text] A survey of the situation in work organizations after operation in the first half of the year points up the fact that in the leading sectors and industries there has been a slower growth of production from the standpoint of their share in output. There is little prospect that the situation will change essentially by the end of the year. Especially since a still larger shortage of processing materials and spare parts is expected. Moreover, import restrictions, which have had certain constructive effects, have also had certain bad effects, above all the shortage of raw materials and spare parts, which is certainly not to be underestimated. Finally, problems in primary distribution are pointed to everywhere as a cause of irregular supply of goods of all kinds.

Electric Power Industry

In 8 months of this year 34,912 gigawatt-hours of electric power were produced in Yugoslavia, which is 8 percent more than last year at the same time. Hydropower plants generated 18,842 gigawatt-hours (thereby exceeding last year's output at the same time by 4.4 percent), and thermal plants produced 16,070 gigawatt-hours (an increase of 12.7 percent). It is worth stressing here that coal-fired thermal plants were employed much more than thermal plants using liquid fuels, the former increasing their output by 18 percent, while the output of the latter dropped by one-fourth from the same period of last year.

Electric power consumption rose 11.2 percent. Deliveries to direct consumers increased 8.2 percent, and deliveries to power distributers 12 percent, which indicates a faster growth of residential consumption. Exports of electric power amounted to 1,170 gigawatt-hours (1,539 gigawatt-hours at the same time last year), and imports were 843 gigawatt-hours (628 gigawatt-hours in 1979).

There were no major problems in the power supply last winter, mostly thanks to the very favorable hydrological conditions. The growth of consumption between 8 percent and 12 percent over last year is estimated for this

winter, but since much of this depends on weather conditions, it is not very likely that we will get by without restrictions.

Coal

Production is up 8 percent. Between January and the end of August about 30 million tons of coal were produced.

In spite of the growth achieved, production is far below target. The main reason is that the new thermal plants did not go on line when they were supposed to, and the mines had no one to produce for. However, this applies only to lignite mines. Mines producing better grade coal--for general consumption--have small capacity and most probably will not be able to meet all needs.

Petroleum

About 2.1 million tons of petroleum were produced, or half of the planned annual output. Petroleum imports amount to about 5.3 million tons, which is less than half of the imports envisaged for the entire year.

In the first 6 months about 450,000 tons of petroleum derivatives were imported, which is one-third of the amounts planned for this year. The importers were mainly those work organizations which do not have refineries in their area.

Plans for this year called for exporting 870,000 tons of derivatives (worth $260 million), as follows: 200,000 tons to refuel vessels and aircraft and 670,000 tons of primary gasoline--under a contract concerning cooperation. Exports amounted to 358,000 tons in the first half of the year.

A shortage of almost all derivatives is expected by the end of the year: mazut, diesel oil, heating oil, liquefied gas, primary gasoline, industrial oil, and also antifreeze. Only the supply of motor gasoline, aircraft fuel and asphalt should be without problems.

Metals

In the complex of metals production and manufacturing the reasons for inadequate production (below what was planned) lie in the stricter conditions on imports. There are individual differences from industry to industry. Ferrous metallurgy exceeded the 6-month target only in production of gray pig iron (6.8 percent), while production fell short of the targets between 3.4 and 16.5 percent in all other processing phases. The principal cause of the inadequate production lay in reduced production of iron ore, which again is lacking because of limited capacity, reconstruction of the ore flotation facility at Varas, temporary shortages of coke and the lack of spare parts for transport and processing equipment.

Production of the ore of the principal nonferrous metals was higher than planned, but production of concentrate and of finished metal was below the target. Once again this was because it was not possible to enrich the low-grade domestic ore with imported substances or because certain producers were unable to import equipment necessary for the envisaged production.

Metal manufacturers in all five industries achieved an average growth rate of 3 percent over the same period last year. On the whole, however, even here the results were below expectations. Once again the reason lay in the poor supply of raw materials and producer's goods, both imported and from domestic sources, but also because of a less favorable market as a consequence of a falling off of demand for capital investment projects. Export of the products of the metal manufacturing industry were up 26 percent over last year, but they were below the growth of exports of the industrial sector and the economy as a whole.

None of the industry in the metals sector sees particular opportunities for augmenting exports by the end of the year for the simple reason that this kind of activity is limited by the production capabilities, and this in turn cannot be increased in the case of nonferrous metals under the present conditions for setting prices.

Nonmetallic Minerals

The physical volume of output of nonmetallic minerals was 3 percent below last year in the first 6 months of this year. Production for the various groupings and products did vary, however. For instance, production of quartz sand rose 21 percent in this period. Asbestos fiber production was also up, but production of asbestos ore was down because facilities at these mines were not built and there were difficulties in obtaining manpower in them. For that reason it is expected that imports by the end of the year will amount to 13,400 tons of long-fiber asbestos and 19,355 tons of short-fiber asbestos. It will also be necessary to import refractory clay, white bauxite and raw magnesite, for which manufacturers of refractory glass will provide the foreign exchange by exporting their own products. Feldspar production in the first half of this year increased 10 percent over the same period of the previous year, and production is expected to be even larger by the end of the year because of the new separation facility for processing potassium feldspar which is being put into operation. Less bentonite was produced in this period than was planned, and exports were also lower. By the end of the year it is expected that 10,000 tons of bentonite will be exported to the eastern market.

The manufacturing of nonmetallic minerals in the first 6 months of this year showed a 7-percent overall growth compared to the same period of last year in spite of the difficulties in obtaining raw materials and the shortage of fuel necessary for operation of manufacturing facilities. All the manufacturers will be looking to imports by the end of the year because of the shortage of raw materials. Glass producers, for instance, plan to

import 30,000 tons of soda ash, refractory producers will import 25,000 tons of burned magnesite, 20,000 tons of chromite, and 35,000 tons of raw magnesite. Manufacturers of porcelain electrical products will import 10,000 tons of kaolin. As we have said, the funds will be provided by exporting their own finished products.

Chemical Industry

The chemical industry has a share of about 10 percent in the country's total exports, which means that it is not primarily an exporting industry if this is compared to the volume of its output. In the first half of the year, however, exports rose 10.7 percent, and new facilities put into operation contributed greatly to this. By the end of the year expansion of existing facilities and addition of new ones will increase plastics production still more, and an essential growth of exports is expected in this sector, primarily to convertible areas (Italy, West Germany, Iran and Greece).

The only producers of plastics (PVC) which have an assured supply of the principal raw material (VMC [(?) vinyl chloride monomer]) are HIP [Pancevo Chemical Industry], and through it OHIS [Naum Naumovski Organic Chemical Industry of Borce], whereas Jugovinil of Split and Polikem of Zadar are not provided for, and it is certain that they will increase their indebtedness with the national bank in order to obtain a supply of the raw materials.

Polyethylene production will mostly go to the domestic market, which up to now has been mostly supplied from imports.

Increased exports of plastic manufactures is expected, above all plastic containers and household products.

The pharmaceutical manufacturing industry, whose capacities substantially exceed domestic consumption, have increased both production and export if we compare the first half of this year and last year. The export target of 2.5 billion dinars in the grouping for this year is regarded as realistic, but provided the present situation in the supply of the raw materials is overcome.

At Pliva in Zagreb they say that they are held up in their production and exports because of lateness in adoption of measures to regulate export incentives.

Producers of paints and varnishes have since the beginning of the year been short of foreign exchange to import raw materials and producer's goods, so that the production of varnishes and enamels (the most important products) are down 21 percent from the first half of last year. Production of other articles has increased as have total exports.

Fertilizer production is down 1.5 percent from the first half of last year, while 46.5 percent of the annual production plan has been fulfilled. Exports increased 41 percent in quantitative terms, and 46 percent of the annual plan has been fulfilled. The export target for the second half of the year is 390,000 tons of fertilizer (slightly over 320,000 tons were exported in the first 6 months), which would mean a value of about $90 million. This export volume will be possible if a permit is issued for BASF fertilizer and for urea.

Fertilizer production is down, the producers say, because of the more expensive raw materials, difficulties in obtaining foreign exchange and low prices on the domestic market. They are seeking an average 47-percent price rise on the domestic market and permission to increase exports. The manufacturers also complain of the 50-percent reduction of export incentives.

Production of chemicals for plant protection is up, but exports are short of the target. In the season when certain of these chemicals are consumed the foreign exchange was lacking to import the concentrates.

Producers of synthetic and artificial fibers have assured sales in the convertible areas, and a further growth of exports is expected.

Production of finished rubber products fell 3.9 percent short of the plan because of higher prices of foreign and domestic raw materials, difficulties in obtaining rights to foreign exchange and low prices on the domestic market. Exports were up 31.3 percent quantitatively, but in the second half of the year opportunities for foreign sales are greater than planned exports. If exports are to be increased, foreign exchange must be provided to import raw materials, and sufficient amounts must be purchased from domestic sources.

Forest Products Industry

The volume of production in timber exploitation is 2 percent greater than in the first half of last year, or within the limits of the expectation for this year.

Production in the primary processing of wood was up 3 percent, which is seen as a low growth, and production of plywood and panelboard was down almost 20 percent (because of inadequate supply of principal raw materials). Better supply and larger output are expected in the second half of the year, which is in any case typical of timbering in the wood industry. Finished wood manufacturing was up 6 percent and sales up 10 percent; furniture production rose 5 percent and sales 10 percent; production of containers was down 1 percent, inventories were down 19 percent, and sales were up 1 percent. In the production of construction fabrication a 7-percent increase was noted, sales were up 11 percent and inventories were down 7 percent.

In the pulp and paper industry production was up 6 percent over the first half of last year, which is 1 percent below the planning target. Estimates for the entire year show a 5-percent growth of production over last year, distributed as follows: 1 percent for pulp (1-percent reduction in the first half), 8 percent for paper, cardboard and paperboard (9 percent in the first half) and 5 percent for manufactured paper and cardboard products (6 percent in the first half of the year). Except for lumber exports showed a slower growth in the other sectors, but a significant pickup in the pace is expected in the second half of the year.

Textile Industry

The growth of output of the textile industry, which in the first half of the year was 5 percent (for yarn and fabrics) and 7 percent (for production of finished textile products), will show a somewhat slower growth (according to estimates) in the second half of the year (the reason lies in this industry's considerable orientation--70 percent--toward imported raw materials), and for 1980 as a whole it is expected that the growth of yarn production will be 3 percent and that of finished textile products no more than 5 percent over last year.

Yet the exports of the textile industry in the first half of this year were up 29.7 percent over the same period of last year. Larger exports of finished garments contributed mostly to this increase. The value of exports in the first half of last year was 3,755 million dinars, and in the first half of this year it was 4,871 million dinars. However, it is expected that the growth of exports, thanks to the altered rate of exchange of the dinar, could amount to all of 40 percent by the end of this year, and the value would be 13,200 million dinars.

Leather Industry

The leather manufacturing industry also showed a larger output in the first half of this year than last year. The increase was particularly pronounced for footwear of artificial leather (161 percent over the same period of last year), leather accessories--59 percent and footwear from textile products--57 percent. The other groups of products showed a far smaller growth.

Exports are up 41 percent over the first half of last year, the largest growth of exports were for leather accessories--all of 129 percent, and then leather garments--97 percent. Exports of footwear were up 12 percent over the same period of last year.

Printing and Publishing Industry

Printing and publishing showed a 6.5-percent increase in the first half of the year, while paper and cardboard manufacturing was up 7.2 percent. The principal problem of work organizations in this sector is the supply of producer goods. Paper producers have had to export on a massive scale--

leaving the domestic market without many papers--so that it could import pulp.

Total exports of the printing and publishing industry were up 80 percent. Exports of the paper manufacturing industr[illegible] also growing, especially exports of paper sacks and bags, containers, cardboard and wallpaper. Exports of the products of printing and publishing were considerably larger to the region with bilateral agreements.

At the same time imports were up 9 percent, though the plan called for their reduction. The largest increase was in imports of books in foreign languages, miscellaneous forms, and paper and cardboard containers.

The printing and publishing industry confronts a shortage of printing paper, and production has used up stockpiles; the difficulties have only "shifted" to the next period. Paper and cardboard factories are calling upon work organizations in printing and publishing to make term deposits of capital for the capital investment projects of their reconstruction and to make payments 1 month in advance of delivery. The prices of certain papers have also increased 60-70 percent since the beginning of the year, and there are cases where paper and cardboard factories are asking to be paid in foreign exchange.

Construction

According to the data of the Bureau for Market Research, the physical volume of output of construction workers in the first half of this year was only 4 percent over the same period of last year, while construction prices were up 23 percent (according to the same source). The increase in the value of work items completed, judging by the data of the Federal Bureau of Statistics, is about 26 percent, and the total value of work items performed is about 103 billion dinars. The higher prices of construction materials is considerably greater, construction workers think, than that indicated in the computations of the Federal Bureau of Statistics (about 16 percent) in view of the considerably higher individual price rises of the principal materials (cement, reinforcing iron, etc.).

By contrast with the economy as a whole, in the construction sector during the first half of the year there was an absolute and relative drop in the value of work done on capital investment projects on the foreign market, which is taken to be a consequence of the lack of funds for the credit financing of the work (to that end they are seeking a system of financing which would meet the demands of the investor, especially in the developing countries, even at the cost of taking credits abroad), and then the nonexistence of consulting services and the fact that agreements were not concluded concerning joint efforts abroad, and so on.

Agriculture

The general association of agriculture and the food processing industry envisages a drop in the yields of spring crops (corn, sugar beets and sunflowers), above all because a smaller area was planted than last year.

A corn harvest of 9.5 million tons is expected this year; last year the harvest was slightly over 10 million tons, which was 6 percent more. A slightly smaller drop is expected for sugar beets: last year the harvest was 5,925,000 tons, and forecasts for this year range around 5.7 million tons, which means 4 percent less. Last year 525,000 tons of sunflower seed were harvested, and this year 360,000 tons are expected, which is a drop of 30 percent.

Meat production will be at last year's level, which means that about 1.26 million tons will be produced (2 percent less than was planned). Milk will be up over 1979: last year's output was 4.3 billion liters, and a 5-percent growth is expected this year. It is estimated that about 4.4 billion eggs will be produced, which is 3 percent more than last year. The association believes that 232,000 hectoliters of oil will be produced (8 percent more than last year).

The planning target for exports of raw and processed food will apparently be exceeded. Instead of the planned $790,872,000, $845,738,000 are expected from exports. In the first 6 months of this year exports of these goods reached a value of $426,514,000. It is thought that exports of livestock products, which should amount to $391,407,000 (estimate) this year, will not seriously jeopardize the meat supply on the domestic market. The exceptionally poor fish catch for the first half of the year will reduce exports by 16 percent. It is expected that exports of grain will attain a value of $116,564,000, and exports of fruit and vegetables $166,662,000.

7045
CSO: 2800

AGRICULTURAL ORGANIZATION PLANS FOR CROATIA, 1981-85

Zagreb VJESNIK in Serbo Croatian SEDAM DANA Supplement 20 Sep 80 p 7

[Article by Milivoj Stipanicic: "How To Bring the Idle Billions Under Cultivation"]

[Excerpts] The guidelines for preparation and correlation of development plans in the Socialist Republic of Croatia for the period from 1981 to 1985 emphasize the particular importance of detailed formulation and conduct of land policy. The package program embodying land policy in Croatia, which was prepared by the Republic Committee for Agriculture and Forestry, has been favorably received by the Commission for Social Planning and Development of the Executive Council of the Croatian Assembly, and it has been adopted by the Executive Council as the basis for positions and as a proposal for coordination and stimulation of actions in proceedings to prepare the republic's social development plan up to 1985.

Costs

Opstinas have requested a still larger volume of land consolidation through aggregation and reallotment, though it is not easy to achieve the target even of the proposed 200,000 hectares. Nevertheless, this measure is not debatable at all: experience with land consolidation through aggregation and reallotment in Slavonska Posega Opstina proves better than any documentation that following these proceedings the yield increases an average of 10 or more quintals of wheat or corn per hectare. Consequently, land consolidation through aggregation and reallotment on the planned 200,000 hectares would in 1986--and every year thereafter--provide at least 800,000 cars of wheat and 12,000 cars of corn more than before land consolidation. This, then, would be a part of the "new production," which in hilly and mountain areas would also be facilitated by the possible 100-percent participation of the republic in the geodetic costs of land consolidation. This undertaking would also add 40,000 hectares to the area of agricultural organizations under cultivation. The costs would be covered in the first 5-year period: the added output would amount to nearly 20,000 cars of wheat and 30,000 cars of corn!

Land consolidation through enlargement, rounding off the holdings of socialized farms, which would be conducted on a planned 10,000 hectares which up to now have mostly been left uncultivated, would increase yields in the social sector by 20 quintals per hectare, which means that enlargement proceedings alone, without any thought of higher costs, would yield new output (in the medium-term period) of 2,000 cars of wheat and 3,000 cars of corn.

The brisk sales of farmland in Croatia are a kind of concomitant of the continuing strong tendency toward reduction of the farm population. The rate of the rural exodus is obviously not dropping, and we should also count on this fact in the future.

According to estimates, approximately 200,000 hectares of land are now offered for sale in Croatia, running all the way from nearly worthless swampland all the way to first-class plowland. Depending on position, the vicinity of towns, the occupation of the farmer or the owner employed outside agriculture, the price varies, and often it is absurd. It ranges from almost token amounts all the way to "astronomical" heights. In the purchasing program, however, it is assumed that at least 40,000 hectares of land would be purchased between 1981 and 1985, that it would be uncultivated or little cultivated land, and that the average price would be 15,000 dinars per hectare. The value of the new production obtained from the purchased land would abundantly cover the purchasing cost even within the same 5-year period.

Production

In the new medium-term plan large new areas of socialized land will go into production which have not previously been suitable for food production for one reason or another. The reference is to about 20,000 hectares where irrigation and drainage operations are under way or are scheduled to begin; this work will ensure higher security for the investment. This also includes land in Crnec-Polje, where intensive animal husbandry will be developed following irrigation and drainage work. It is expected that Crnec-Polje alone will add another 10,000 hectares to the socialized sector toward the end of 1985, which will also be the amount added by reclamation work in the karst poljes in Istria and Dalmatia. This "new land" is intended for specialized production of crops of which there is a shortage and which bring an extremely high income, such as tangerines, winter vegetables, grapes, tobacco, certain types of fruit, and so on.

This is all land which has not been under cultivation up to now. If we add to this another 100,000 hectares which are to be reclaimed in order to increase yields in the private sector (more than half of the land reclamation plan pertains to the private sector), this rounds out the picture of the land program.

Increased Output of Agricultural Organizations in Croatia as a Consequence of the Proposed Measures of Land Policy in the 1981-1985 Period, in cars

	1981	1982	1983	1984	1985	Total, 1981-85	1986 and Each Year Thereafter
			Wheat				
Land consolidation through aggregation and reallotment on 40,000 hectares (20% of 20,000 hectares)	120	440	680	1,140	1,460	3,840	1,600
Land consolidation through enlargement on 10,000 hectares	40	160	400	640	760	2,000	800
Purchase of 40,000 hectares, of which 30,000 hectares will be brought under cultivation	200	760	1,440	2,000	2,320	6,720	2,400
Reclamation on 40,000 hectares	224	728	1,428	1,764	2,100	6,244	2,240
Total	584	2,088	3,948	5,544	6,640	18,804	7,040
			Corn				
Land consolidation through aggregation and reallotment on 40,000 hectares (20% of 20,000 hectares)	210	660	1,170	1,710	2,190	5,940	2,400
Land consolidation through enlargement on 10,000 hectares	60	240	600	960	1,140	3,000	1,200
Purchase of 40,000 hectares, of which 30,000 hectares will be brought under cultivation	300	1,140	2,160	3,300	3,480	10,380	3,600
Development of 2,000 hectares of new land counted in terms of corn	1,800	6,000	11,700	17,700	22,200	59,400	24,000
Reclamation on 40,000 hectares	336	1,092	1,932	2,646	3,150	9,156	3,360
Total	2,706	9,132	17,562	20,216	32,160	81,876	34,560

Summary Survey of the Proposed Actions and Measures of Land Policy in the 1981-1985 Period

Measure	Investments (Expenditures) in 1981-85 Period, in millions of dinars	Anticipated New Output, in cars: In 1981-85 Period		Anticipated New Output, in cars: In 1986 and Each Succeeding Year		Value of New Output, in millions of dinars: In 1981-85 Period	Value of New Output, in millions of dinars: In 1986 and Each Succeeding Year
		Wheat	Corn	Wheat	Corn		
1. Land consolidation through aggregation and reallotment 200,000 ha	1,876	19,800	29,700	8,000	12,000	2,059.20	832.00
2. Land consolidation through enlargement of socialized holdings 10,000 ha	--	2,000	3,000	800	1,200	208.00	83.20
3. Purchase of 40,000 ha		6,720	10,080	2,400	3,600	698.88	249.60
4. Development of 20,000 ha	1,000	--	59,400	--	24,000	2,376.00	960.00
5. Reclamation 100,000 ha	2,002	11,128	16,692	4,160	6,240	1,157.29	432.64
Total	5,478	39,648	118,872	15,360	47,040	6,499.37	2,557.44

7045
CSO: 2800

KOPAR PORT TRAFFIC, FACILITIES, PLANS

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 27-29 Sep 80 p 12

[Article by A. Jovanovic: "Exports Should Be Increased, but on Proper Terms and Conditions"]

[Excerpts] The plan for the volume of traffic for the current medium-term period has already been fulfilled by the Port of Kopar. The financial rescue program which was adopted at the beginning of 1978 when there were losses in business operations because of old technology and inadequate capacity, will be completed by the end of this year. The period allotted to accomplishment of that program was 3 years, and it can now be said that there is no question of its fulfillment.

"The most important thing is that we have managed to stabilize our business operation," says Bruno Korelic, president of the business board of the Port of Kopar. "We have the exceptional efforts of the workers, who, to be sure, had incentives for good work, to thank for the results achieved.

"The system governing distribution of funds for personal incomes is linked to the results of work, there is no limit on earnings, so it is quite normal that every worker should strive for higher output and better work. Also through the optional contribution whereby funds are allocated from net personal incomes we created the possibility of building 200 housing units for workers whose housing situation was the most drastic. We are also completing a residential hotel with 200 beds for unmarried persons."

Labor Productivity Up 26 Percent in 3 Years

This kind of operation and new technology, which was also envisaged by the financial rescue program, have made it possible for the labor force of the port to raise labor productivity 26 percent. In 1977, for example, the volume of transshipment per worker was 709 tons of cargo, in 1978 it was 899, and this year it was 960 tons. Before adoption of the financial rescue program the work force numbered 1,960, but now it numbers 1,600.

"Among the results achieved we single out the modernization and expansion of the capacity of the port," Korelic emphasized. "The first phase of construction of the container terminal for 50,000 units has been completed; in its technology it will be the most up-to-date terminal in the country. We have thus increased our capacity to 75,000 containers, and in just 1 year we have achieved results to justify it.

"In carrying out this investment project, as with all others, we have endeavored to employ as many domestic contractors and producers of equipment as possible. We have been collaborating on very good terms with Metalni, Litostroj, Indos, Metalni in Zenica, Gradis, with the organization Slovenija-ceste and others. We did, of course, have to import equipment which domestic industry does not manufacture."

The first phase of construction of 300 meters of docks has been completed for bulk cargoes and for receiving vessels with a carrying capacity of 80,000 tons, which allows a draft of 14 meters. Construction, i.e., rounding out the facilities, of the terminal for tropical fruit and frozen products has also been completed.

"We have built adequate coolers and storage facilities with a capacity of 7,000 tons," Bruno Korelic continued. "We imported a special system for transshipment from vessels into warehouses or railroad cars, thereby nearly doubling our cargo-handling capacity. We invested 1.6 billion dinars in mechanization, in paving new areas with asphalt and other projects."

Plans Also Require New Investments

In view of the social goals and the needs of the economy, the work force in Kopar is striving to become involved as broadly as possible in international trade. A foreign exchange inflow of 1 billion dinars is planned for the last year of the next medium-term period. Other participants in the republic's transportation whose operation is associated with the port are to accomplish a foreign exchange inflow of 3 billion dinars. If altogether they are to achieve 4 billion dinars in foreign exchange, the port must carry out its part of the program.

These plans necessitate expansion of capacity for cargo handling by another million tons of general cargo, and in integrated transport there must be capacity for transshipment of 150,000 containers. This means completing the second phase of construction of the container terminal and docks for bulk cargoes and introducing up-to-date technology in all areas where live labor is still used. Over the next 5 years the port will need 3.47 billion dinars of investment projects to carry out this program, but its fulfillment will make it possible in 1985 to transship 2.85 million tons of cargo--655,000 tons of exports, 991,000 tons of imports and 1.2 million tons of transit cargo.

The Port of Kopar is oriented toward an international market where prices are set, as Korelic says, on the basis of supply and demand. Its services are of good quality, but at the prices it receives it is difficult to meet its obligations and to invest so as to withstand the competition of other ports.

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7045
CSO: 2800

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ECONOMIC AND INDUSTRIAL AFFAIRS

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4 November 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2060

CONTENTS

INTERNATIONAL AFFAIRS

World, CEMA, CSSR Grain Production Assessed
(Josef Kraus, Petr Tucek; HOSPODARSKE NOVINY, 5 Sep 80) 1

ALBANIA

Stockpiles of Unsellable Goods Damage Economy
(BASHKIMI, 29 Sep 80) 14

GERMAN DEMOCRATIC REPUBLIC

West German Commentaries on GDR Economic Situation
(Various sources, various dates) 15

Portrait of GDR Economics Chief, by Angela Scherzinger
Impressions of Traveler, by B. Asmus
Development Since the Wall, by Werner Obst
Low Productivity, Listless Workers, by Peter Schiwy
Mid-Year Economic Status, by Doris Cornelsen

HUNGARY

Minister Interviewed on Situation of Consumer Goods Supply
(Vilmos Saghy Interview; NEPSZABADSAG, 21 Sep 80) 36

ROMANIA

National Socioeconomic Plan for 1981 Published
(SCINTEIA, 18 Oct 80) 42

Role of Trade Unions in Ensuring Plan Fulfillment
(Petru Despot; MUNCA DE PARTID, Sep 80) 57

Use of Profits in New Economic Mechanism
(Cornel Iuga; MUNCA DE PARTID, Sep 80) 63

WORLD, CEMA, CSSR GRAIN PRODUCTION ASSESSED

Prague HOSPODARSKE NOVINY in Czech 5 Sep 80 pp 8-9

[Article by Eng Josef Kraus, CSc. and Eng Petr Tucek, Research Institute of Economics of Agriculture and Foodstuffs]

[Text] Cereals are still the most important and vital products of agriculture for human nutrition and their economic and political importance can only be compared with the most important energy raw materials. This year's cereal harvest was good, in fact some areas can be expected to harvest record yields of some cereals. And FAO estimates expect an overall marked increase in harvest yields also in the other CEMA member states in spite of the inclement weather during the first half of the vegetative period and the widespread natural catastrophy in Poland. But even with these promising prospects, CEMA countries will still import certain amounts of cereals from third countries as a result of the steady increase in the animal production volume. This is why the world situation in cereals is important to us. According to latest information the world wheat and feed grain harvest is expected to exceed last year's by 3.5 to 4.4 percent. Since in the 1980-1981 season the overall world consumption of cereals is expected to rise by about 1.4 percent, especially in feed grains, no essential change in grain stocks is expected at the end of the season. U.S. and Canadian grain production will probably drop as a result of great drought. The expected lower harvest in important production and export countries, the United States and Canada, combined with the expected increase in Chinese imports, will result in an increase in world prices. Therefore, the results achieved by Czechoslovak grain production must not obscure the still acute and socially highly important objective--the achievement of self-sufficiency.

Czechoslovak grain production exhibits a steady long-term rising trend. In the first 4 years of the Sixth Five-Year Plan the average harvest yield was 45 percent higher than that in the years from 1966 to 1970. In spite of the impressive increase in harvest yields it is still necessary to supplement part of consumption by imports primarily because of the very rapid increase in the consumption of feed grains. Even though the average annual cereal imports in the first 4 years of the Sixth Five-Year Plan exceeded somewhat the corresponding imports during the Fifth Five-Year Plan, the long-term outlook clearly points to a decrease in our purchases of grains on foreign markets. Already

by comparison with the 1966 to 1970 period the average annual imports of cereals in the last 4 years amount only to slightly less than 84 percent annually or--expressed in absolute numbers--the mean annual import was reduced by almost 300,000 tons.

Of even greater indicative value are data documenting the proportion of our imports in the so-called visible consumption, for example, in the overall available quantity of the product corresponding to the sum of domestic production plus imports.

Over the period of the Fourth Five-Year Plan in individual years 17 to 24 percent of the above consumption was supplied by imports, with the average being 20.3 percent. In the Fifth Five-Year Plan the proportion of imports dropped 9 to 19 percent, or by an average of 13.2 percent over the whole five-year plan. In the first 4 years of the Sixth Five-Year Plan Czechoslovak self-sufficiency kept increasing, and in spite of the poorer harvest last year due to unfavorable weather during the vegetative period, a further decrease occurred in the above proportion to between 7.3 and 17.5 percent, or to an annual average of only 13.0 percent. In 1978, for example, the proportion of imports in the overall Czechoslovak visible consumption was only 7.3 percent. This figure represents the absolute lowest relative grain import by the CSSR in its entire postwar history.

Prices and Imports

In spite of the above-mentioned favorable signs on Czechoslovakia's road to self-sufficiency in cereal production, the impact of grain imports on the foreign balance of payments within the agricultural and foodstuffs complex has been one of the main factors standing in the way of balancing exports with imports. In view of the long-term increase in the world price of cereals, whose average annual increase exceeds the corresponding decrease in the physical volume of our imports, the monetary value of Czechoslovak cereal imports rises. If the value of the volume of the average import of cereals in the years between 1966 and 1970 is 100 points, then the average value of imports in the following five-year plan dropped to 81 points, but in the first 4 years of the Sixth Five-Year Plan the corresponding average increased to 132 points. Compared to the average for the Fourth Five-Year Plan, the average price of a ton of cereals imported to the CSSR in the period from 1976 till 1979 increased by 58 percent. Even though this average figure hides both a change in the type of purchased cereals, as well as some shifts in the territorial composition of imports, the resulting impact on the above-mentioned balance of payments in this sector is clear. Since improvement in self-sufficiency in agricultural products in the temperate zone must be viewed also as a process aimed at the gradual reduction of the negative foreign trade balance of payments by agricultural and food products, the rate of decrease in the physical volume of cereal imports has been insufficient till now.

The rise in the average import price of 1 ton of cereals raised the question of the corresponding increase in the world price. In view of the fact that wheat and corn constitute key Czechoslovak imports, comparative calculations were carried out with six price quotations for wheat on important world markets and two price quotations for corn. The calculations reveal that so-called world

wheat prices quoted by key world exporters--the United States, Canada, Australia and Argentina--increased in the period from 1976 to 1979 by 114 and 124 percent over the price quotations in the years 1966 to 1970, and that their rise continues. The highest world prices of wheat in the 1966 to 1979 period, for example, over the entire period under review, were recorded--disregarding the extreme increase which occurred between 1974 and 1975--in 1979 when they rose to roughly two and a half times the world prices prevailing from 1966 to 1970. A similar increase occurred in the price of corn, which approximately doubled from 1976 to 1979 over prices prevailing from 1960 to 1970. Therefore, if over the same period Czechoslovak import prices of cereals rose by a mere 58 percent--in comparison with the 100 to 124 percent increase on world capitalist markets--then the results of our economic import indicators is undoubtedly a success achieved by Czechoslovak foreign trade, attained solely because of the possibility of the mutual exchange of goods within the framework of the integrated socialist market of CEMA member states.

Key Suppliers

In the entire postwar history of Czechoslovak foreign trade with agricultural and food products, cereals constitute clearly the most important product group. Cereals' proportion of the overall imports of agricultural products and foodstuffs fluctuated between 30 and 7.8 percent in the period from 1949 to 1979 with the lowest point reached in 1978. In view of the expansion of the import assortment of agricultural and food products, and mainly as the result of the described improvement in self-sufficiency in cereal production over the long run, a steady decrease in the proportion of this group of commodities in overall Czechoslovak imports can be expected.

The key--and in some time periods exclusive--suppliers of cereals to the CSSR were CEMA member states. The importance of cereal imports from fraternal CEMA countries in the past 35 years for the Czechoslovak economy has transcended by far the agricultural and food sector, and has been pointed out many times as a unique example of international cooperation of socialist countries in the economic sector.

Between 1950 and 1979 Czechoslovakia imported from CEMA countries a total exceeding 37 million tons of cereals, of which more than 450,000 tons were seed grains. The average annual import thus was approximately 1.2 million tons. The lion's share was consumer and feed wheat, of which 25 million tons were imported--or about 67 percent. The importance of feed grains, especially corn, whose proportion of overall imports in recent years has been around 45 percent and which in the sixties was a mere 10 percent, is rising. Also the imports of seed grains exhibit absolutely and in percentage a rising trend which is fully in accord with the growing importance of cooperation between the CEMA member states in the grain improvement area and demonstrates the specialization polarization in preproduction stages proving in this way--in accord with the harvest indicators exhibited by the Czechoslovak grain producing industry--the high degree of efficiency in this sector of international socialist division of labor.

Imports of cereals to the CSSR were effected also from capitalist states, even though in incomparably smaller quantities. This factor permits one to make some comparisons which unequivocally demonstrate the advantage gained by cooperation in a given area with CEMA member states.

The following comparisons which we were able to make only for some grain types, and only in certain years because part of the imports from capitalist countries represents a qualitatively different merchandise, are chosen so as to represent the price indicators of products of approximately corresponding quality. But they only serve for information because of some specific aspects of deliveries of cereals from CEMA and capitalist states which it is impossible to quantify exactly. In the period from 1967 to 1976 approximately the same quantities of corn were imported from CEMA countries as from capitalist countries. The comparison of prices paid for imports from the two territories expressed as a 10-year weighted average reveals that the average delivered import price from capitalist states in the period under review was 45.7 percent higher than the average delivered import price from CEMA countries. In other words--if the CSSR had been forced to import all corn between 1967 and 1976 from capitalist states, it would have had to pay approximately Kcs 1.2 billion more for this merchandise.

The above comparison, expressed as a 10-year weighted average, has the advantage that it eliminates short-term fluctuations of capitalist markets and expresses price differences more precisely than similar comparisons for individual years. But if prices paid for corn imported from CEMA and capitalist countries are compared for individual years of the time period under discussion, then corn prices from capitalist states exceeded corresponding prices from CEMA states by 35.7 percent (minimum) to 101.8 percent (maximum).

A similar picture emerges from the comparison of prices paid for Czechoslovak imports of corn from CEMA countries with annual averages of quotations for American corn, which represent the world price.*

Even though this comparison serves only for information due to difference in parity (U.S. prices do not include transportation)** even here a marked difference in price favoring imports from CEMA countries can be noted. Price quotation averages for American corn in individual years from 1976 to 1978 were higher by 24.7 to 47.3 percent than Czechoslovak import prices from CEMA countries calculated at then prevailing official conversion rates.

Similar or even more marked price differences can be found by comparing prices paid for imports from CEMA countries with prices of grains in capitalist countries in the case of other cereals. Due to irregular imports from capitalist states such comparisons cannot be performed in a time sequence. For example, the export price of rye in 1972 on capitalist markets was higher by 65.8 percent than the price for the same commodity in CEMA countries, barley imported in 1967 from capitalist countries cost 144.1 percent more than the same grain purchased in CEMA countries. The difference in the price of wheat bought on markets of the territories under comparison--disregarding the difference in quality of part of the merchandise from overseas--in the years from 1967 to 1977 is within a range of from 4 to 144 percent in favor of purchases in CEMA countries, with the price difference growing larger with passing years.

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* U.S. Yellow No 2 FOB Gulf Ports, spot export prices with 30 days for shipping.

** In 1976-1978, for example, grain transport costs from the U.S. to European ports amounted to about 17 to 20 percent of the delivered price (including insurance, storage, takeover and transfer).

These relative data reveal that Czechoslovak grain imports from fraternal CEMA countries are decidedly more favorable as far as price is concerned compared with imports from capitalist countries. Under existing conditions, when we are forced to shift part of our grain purchases to capitalist markets, the reason for the overall increase in the cost of the imported grain is becoming clear, even taking into account the long-term drop in the physical volume of the imported grain which only underlines the urgency of accelerating the rate of achieving self-sufficiency.

Grain Production in CEMA countries

In view of the relatively large extent and good quality of agricultural land, individual CEMA countries and CEMA as a whole can become an important resource for developing the national economy more rapidly. In some of the European socialist countries (and even more so in the USSR), especially in the Bulgarian People's Republic, the Romanian Socialist Republic and the Hungarian People's Republic, the relatively extensive and high quality agricultural land taken together with the other natural conditions constitutes a comparable, if not better, long-term natural resource than the deposits of oil, natural gas, iron ore or of any other available raw material. The status and problems of the international division of labor in the production of grains in the world and in CEMA countries must be assessed from this fundamental viewpoint.

The passive integration of most CEMA countries in international division of labor in grain production began mostly only after the war when on the one hand grain consumption increased rapidly, while on the other hand, the grain production increase failed to keep pace with the rising consumption. It should be said that the Bulgarian People's Republic, the Polish People's Republic, the Romanian Socialist Republic and the USSR did not have a passive foreign trade balance before World War II. In the last 5 prewar years also the CSSR had on the average a positive trade balance in cereals. The situation of the present day territory of the GDR cannot be assessed for lack of data, but this country did not become a large importer of grain until in the postwar period. But the overall situation is largely distorted by the fact that the current and prewar situation cannot be compared with regard to level of consumption, especially of animal food products, and that also the domestic consumption of cereals was markedly different from what it is today.

Just for information purposes it should be mentioned that in the CSR in the years from 1934 to 1938 average grain production exhibited an active balance in the amount of approximately 90,000 tons, while of course meat consumption did not amount to even half of what it is today. Of the domestic consumption of grain, which in the period from 1934 to 1938 amounted to an overall volume of 5.5 million tons, 46 percent was used for human consumption, 39 percent as feed and the balance as seedstock and losses due to storage. In the years from 1974 to 1978 of the average overall consumption of 11 million tons, human consumption was 23 percent, feed consumption 70 percent, and the balance consisted of seedstock and losses.

A rough analysis of the past 30-year development of agriculture in the community of CEMA countries demonstrates the achievement of marked successes in production. They are essentially based on a marked increase in productivity per unit of land, while only insignificant changes occurred in land areas devoted to grain production.

As Tables 1 and 2 demonstrate, the average grain harvest of cereals and legumes in CEMA countries which in the 5 years from 1951 to 1955 was approximately 131 million tons, rose during the last completed five-year plan from 1971 to 1975 to 255 million tons, for example, double the 1951 to 1955 production. But international comparison reveals at the same time that considerable reserves still exist within the community of CEMA countries. According to FAO data the situation for the completed 5-year periods is as follows (Table 1):

Table 1. Long-term Development of Grain Production in the World, in CEMA Countries and EEC Countries

	1951-1955	1956-1960	1961-1965	1968-1970	1971-1975
World grain production	783.3	939.3	1,019.9	1,188.3	1,376.2
CEMA	130.9	168.1	180.4	227.1	255.2
% (svet = 100)	16.7	17.9	17.7	19.1	13.6
EEC	45.7	52.9	58.8	68.7	105.1
% (svet = 100)	5.8	5.6	5.8	5.8	7.6
World production	100.0	120.0	130.0	152.0	175.0
RVHP	100.0	128.0	138.0	174.0	195.0
EHS	100.0	116.0	128.0	150.0	228.6

The volume, rate of growth and share of CEMA countries in world grain production have risen, but slower than in the EEC countries. The land areas under grain cultivation rose in the years from 1971 to 1975 by 18.1 percent on the world scale, while in CEMA countries the increase amounted to a mere 7 percent. The land under cultivation increased in the USSR, the CSSR and the Mongolian People's Republic, while a small decrease occurred in the other countries.

On a world scale, compared with the years from 1951 to 1955, grain yields in the years from 1971 to 1975 increased by 1.2 to 1.7 tons per hectare, in the developing countries by 0.6 to 1.0 tons per hectare, in CEMA countries by 0.9 to 1.7 tons per hectare and in EEC countries by 1.8 to 3.8 tons per hectare. Therefore, considering the growing demand, the rate of growth of yields per hectare in CEMA member states was unsatisfactory, which is also the reason why these countries continue to import considerable quantities of cereals. Currently, the principal importers of cereals are the USSR, the Polish People's Republic, the GDR and the CSSR.

A detailed analysis of the world grain market and the current situation prevailing in grain production in member states reveals clearly that cereals are in constant short supply, especially feed grains, and that grain consumption is increasing at a faster rate than production. Member states are forced to import ever-increasing quantities of grain from third countries. If, for example, the index of the grain volume export from CEMA countries dropped to one-third in the period from 1961 and 1978, then the import index over the same period increased four and a half-fold.

The growth rate of net imports by CEMA countries exceeded considerably the growth rate of harvest yields. For example, in the years from 1966 to 1970 average net grain imports constituted only 0.7 percent of the overall harvest yield, while the average import share rose for the period from 1971 to 1975 to 5.6 percent, and reached in 1978 a full 10.1 percent of overall grain production. In recent years this requirement could be met essentially only by imports from third countries, and as a result compared with 1970 (100 percent) the cost of grain imports rose 10-fold in the period from 1971 to 1975, and 23-fold for the period from 1976 to 1978.

The proposed planned grain production till 1990 is based on programmed targeting. Experience has shown that if the basic food requirements of the population are to be met as well as the feed requirements of animal production and the requirements of other sectors of the national economy, and if adequate grain reserves are to be laid in, then the production target must be a ton of grain per inhabitant. In its 1978 resolution the USSR Central Committee Plenum set for the years from 1981 to 1985 the goal of harvesting an average of 238 to 243 million tons of grain, and raising this goal to a nationwide average of 1 ton per inhabitant by 1990.

Currently in the CEMA community average grain production in the years from 1966 to 1970 was 654 kilograms per inhabitant, which in the period from 1976 to 1978 rose to 806 kilograms, and therefore should rise by 1990 by an additional 194 kilograms, or by 24.1 percent. In 1978 the situation in individual countries with respect to meeting the production norm of 1 ton of grain per inhabitant was as follows: production was highest in the Hungarian People's Republic with 1,266 kilograms, followed by the USSR with 908 kilograms, the Romanian Socialist Republic with 873 kilograms, the Bulgarian People's Republic with 800 kilograms, the CSSR with 735 kilograms, the Polish People's Republic with 623 kilograms and the GDR with 591 kilograms.

It is unlikely that each member state will meet this norm because primarily Cuba, the GDR, the Polish People's Republic and the CSSR are unable to meet it either because of ecological conditions, or the small arable land area per inhabitant, but CEMA as a whole can and must meet this goal.

On the basis of the expected demographic development by 1990, the average level of consumption, and the necessary grain exports, the average annual CEMA grain production by the last year of the forecast will have to amount to 430 million tons. This also means that, compared with the situation existing in 1976 to 1978, average annual grain production will have to increase by 130 million tons, i.e., by 43 percent. If from the period 1960 to 1970 till the period 1971 to 1975 the annual grain production growth rate was 2.3 percent, and in the years 1971 to 1975 till 1976 to 1978 it had already reached 3.2 percent, then the expected production increase needed to reach the goal is exacting but realistic. On the assumption that by 1990 the land area under grain cultivation will not undergo a marked change, then with a consumption level of 430 million tons annually the average grain yields in the community will have to increase to 2.8 tons per hectare, for example, by 0.9 tons per hectare over the yields achieved in 1976 to 1978. Correspondingly, on the basis of the intensity of production achieved, the production growth rate wil-

markedly accelerate in the most advanced producer countries, specifically in the Hungarian People's Republic, the Bulgarian People's Republic, the GDR and the Romanian Socialist Republic. By analogy also in the CSSR per hectare grain yields cannot be expected to drop below 4.5 tons per hectare.

All the preceding calculations demonstrate conclusively that CEMA countries face exacting goals if CEMA as a whole is to achieve self-sufficiency in grain production, but the calculations also show that this goal is achievable both from the standpoint of achieved average production growth rates and the production results achieved in the preceding 30 years.

The Outlook of the World Grain Market

In a situation where the exporters of cereals to CEMA countries are third countries and especially exporters from North America, the developments on world grain markets and specifically the current development of harvests of key producers and exporters of wheat and feed grains, the stocks of the most important exporters and the current and expected price trends are of great interest to us.

During the vegetative period in 1978 weather conditions were so favorable that wheat harvests in almost all cultivation areas reached record levels. According to FAO estimates the harvest exceeded that of 1977 by 15 percent, with the USSR, West Europe, Australia and Argentina achieving an especially marked increase in production. Lower wheat production in the United States was the result of measures instituted to limit cultivation areas. In spite of the record harvest, world wheat trade remained at the level of the preceding year. Traditional exports and the imports by the Chinese People's Republic were comparable to those in 1977 to 1978. The overall volume of world trade was about 71 million tons. The sum of excess stocks of large export countries was at the end of the economic year 1978 to 1979 approximately the same as that of the preceding year, but a marked shift occurred: while the stocks in Canada, Australia and the EEC increased, they decreased in the United States. Against all expectations, no price decrease occurred. On the contrary, following a period of stability wheat prices rose markedly towards the end of the year. The explanation must be sought in the structure of supply and demand. With the record harvest in the USSR, Australia and Argentina, there was no pressure on the world market. Moreover, the USSR was contractually obligated to buy the agreed quantity of wheat from the United States. But the demand from developing countries was higher than expected and could be met only by the United States, because the other exporters experienced transportation difficulties.

According to available estimates, the 1979 harvest failed to achieve the record level reached last year. The International Wheat Council estimates the harvest to be 414 million tons, which is lower by 8 percent. The development in individual areas again differed considerably.

The size of the area under cultivation and yields in West European countries decreased. In EEC countries yields turned out to be better than expected. The Mediterranean basin suffered a drought. In socialist countries the harvest was first affected by frosts and in the spring by a drought.

Table 2. Overall Grain Harvest Yields of CEMA Member Countries for the period from 1951 to 1978

	1951-1955	1956-1960	1961-1965	1966-1970	1971-1975	1971-1975 / 1951-1955		1976-1979[1]	1978	1979[2]
Bulgaria	4,219	4,527	4,563	6,454	7,485	+ 3,246	176.8 %	8,034	7,581	8,323.8
Hungary	6,103	6,644	6,905	8,400	11,527	+ 5,424	188.8	12,445	13,526	12,322.1
GDR	6,366	6,130	5,869	6,991	8,760	+ 2,313	138.3	8,964	9,905	8,926.6
Cuba	--	--	--	--	397	--	--	485	471	446.4
Mongolia	35[1]	118	289	246	366	+ 331	1,045.5	371	355	360.5
Poland	12,324	14,433	15,427	17,387	21,241	+ 8,917	172.3	20,014	21,816	17,570.0
Romania	3,416	9,350	11,101	12,949	14,974	+ 6,558	177.8	19,256	19,075	19,388.0
USSR	88,528	121,468	130,335	187,562	181,554	+93,025	205.0	208,975	237,176	179,020.0
CSSR	4,963	5,466	5,858	7,111	9,436	+ 4,473	180.1	10,042	11,122	5,347.6
CEMA Total	130,955	168,134	180,424	227,087	255,242	+124,287	194.9	263,558	320,342	255,694.0

Source: 1. Ekonomicesko-statisticeskij obzor, SEV Moscow, February 1980.
2. Statisticeskij bjulletin SEV, 1979.

In the United States, the area under cultivation increased somewhat, and wheat production was estimated to increase by 17 percent due to the good harvest. In Canada the harvest yield was lower, mainly as a result of a long-lasting drought in the peripheral growing areas. In contrast, good harvests were reported from Argentina and Australia.

The spring harvest in India was very good. In spite of this, India was forced to use its grain reserve because the rice harvest was lower as a result of very irregular monsoon rains.

Pakistan did not succeed in attaining its high production goals. The very good harvest result in Brazil was thwarted by steady rains during harvest time. Also the USSR--especially in the case of winter crops--failed to achieve the expected results, while the harvest of spring grains was good.

Obviously, the drop in world wheat production by approximately 35 million tons had no marked effect on the world supply situation. The USSR can be expected to use its reserves from the record 1978 harvest, limit the feeding of wheat, and replenish its reserves by imports only to a minor extent. This import will clearly increase world trade by 5 million tons to 76 million tons. Higher imports by socialist countries, Middle Eastern countries and North African nations are also expected, while the imports by Latin American countries will decrease by about the same order of magnitude.

Export countries are fully able to meet the demand both from the new harvest and also from reserves which will decrease by an order of magnitude of about 5 million tons. The United States continues to be the primary grain exporter. According to preliminary official estimates, wheat exports from the United States should be 38 million tons.

Before the 1979 harvest prices increased markedly, which after that fluctuated between $200 and $210 per ton of hard wheat delivered to Rotterdam. In the second half of the 1979 to 1980 economic year a certain price fluctuation can be expected with a general trend pointing to rather stable development.

The year 1978 was also a year of a successful feed grain harvest which (without rye) reached approximately 732 million tons (Table 5). Favorable weather conditions resulted in high yields in almost all growing areas. U.S. corn yields rose by 11.6 percent to 63.5 quintals per hectare, and the overall corn harvest was 180 million tons. The Soviet Union had a very good corn harvest, while a drop was reported from Canada and Brazil. By the end of the 1978-1979 economic year a certain limit in supply occurred because the corn cultivation area in the United States was reduced, the situation in the USSR contributed to an increase in world trade and a lower harvest was expected in European socialist countries and West European countries. Prices rose steeply, but only temporarily. Thanks to exceedingly favorable weather conditions in 1979, a record quantity of 224 million tons of feed grain was expected to be harvested in the United States. The remaining exporters had rather lower harvests than in 1978.

Table 3. World Wheat Production and That of the Most Important Export and Import Areas

Area	Period 1961-1965	1975	1976	1977	1978[1]	1979[2]
West Europe[3]	44.6	53.0	57.2	53.4	63.8	59.5
	14.8	24.1	28.7	28.6	30.6	26.4
USA	33.0	57.8	58.3	55.4	49.0	57.5
Canada	15.4	17.1	23.6	19.9	21.1	17.3
Argentina	7.5	8.6	11.0	5.3	8.1	8.0
Australia	8.2	12.0	11.7	9.3	18.2	15.0
India and Pakistan	13.3	31.8	37.5	38.2	39.7	44.9
USSR	64.2	66.2	96.9	92.0	120.8	85.0
People's Republic of China	22.2	41.0	45.0	40.0	51.0	56.0
World total	254.4	354.8	419.9	385.7	449.2	415.3

1. Preliminary
2. Preliminary estimate
3. West Europe including Yugoslavia

Table 4. Wheat Balance of Key Exporters (in million tons)

Country and year of harvest[1]	Excess stocks	Harvest	Quantity available[2]	Consumption	Export
USA					
1978/79[3]	32.0	49.0	81.0	23.4	32.5
1979/80[4]	25.1	57.5	82.7	23.5	36.0
Canada					
1978/79[3]	12.4	21.1	33.5	5.3	13.1
1979/80[4]	15.2	17.5	32.7	5.3	14.0
Australia					
1978/79[3]	0.8	18.2	19.0	2.8	11.5
1979/80[4]	4.7	15.0	19.7	2.8	13.0
Argentina					
1978/79[3]	0.5	8.1	8.6	4.3	3.8
1979/80[4]	0.5	8.0	8.5	4.5	3.5
1978/79[3]	7.2	47.3	58.8	40.0	8.6
1979/80[4]	10.5	45.6	59.9	41.5	10.0

1. U.S.-June/May; Canada and France-August/July, Australia and Argentina-December/November.
2. Includes also imports
3. Preliminary
4. Preliminary estimate.

Table 5. Feed Grain[1] Production in the Most Important Import and Export Areas of the World

	1961-1965	1975	1976	1977	1978[2]	1979[3]
	23.7	40.7	40.6	40.1	43.2	40.0
[4]	57.5	87.1	79.3	93.7	96.3	95.8
USSR	42.3	85.8	102.2	85.4	93.0	79.0
USA	132.0	184.7	193.5	203.5	217.3	224.0
Canada	12.5	19.5	20.7	22.0	19.9	17.5
Argentina	7.9	13.8	12.7	16.4	18.7	16.5
	275.9	431.7	449.0	461.1	488.4	472.9
	446.3	624.0	686.1	694.3	732.5	715.0

1. Corn, barley, oats, feed grain mixes, cheroot and sorghum.
2. Preliminary
3. Preliminary estimate
4. Including Yugoslavia

In spite of the record 1978 harvest world trade with feed grains expanded rapidly (Table 6). While the traditional importers in West Europe and Japan increased imports only slightly, because their own harvest was adequate, socialist countries increased their imports further to satisfy the ambitious goals in the meat consumption area. The Chinese People's Republic imported great quantities. Also imports by Middle Eastern and North African countries increased. Brazil had to balance its own lower harvest by imports to maintain the existing level of animal product consumption. Trade with feed grains rose also due to countries from East Asia which are developing their economies and are markedly increasing their animal production as a result of increased demand for meat.

The United States was the main gainer of the expanded feed grain trade by increasing feed grain exports by more than 5 million tons and supplying currently almost two-thirds of the total world feed grain demand. In the 1978/1979 economic year the volume of feed grain trade was 89 million tons. With the marked increase in the demand for meat and meat products, the demand for feed grains has also risen, primarily in the United States, the USSR, in European countries and the Far East. In spite of this the record harvest made it possible to increase stocks in importing and exporting countries. In 1980 the world feed grain trade probably will exceed 100 million tons for the first time. The traditional volume of trade with the principal importing countries in West Europe and Japan will probably not exceed the customary level, but an increase in feed grain imports by the USSR can be expected, even though the situation remains rather unclear as a result of the discriminatory policy of the United States towards the USSR.

In the 1978/1979 economic year world market prices exhibited a steadily rising trend. In the fall of 1979 prices fluctuated then dropped primarily as a result of the ample harvest in the United States, rising inflation, and the pessimistic economic outlook in the United States, where feed lot production is expected to shrink, and export reserves for 1980 to increase. Excess reserves can be expected to diminish and prices on world markets to fluctuate.

Table 6. Grain Imports by Important Importers and Import Areas (Business Year From July to June in millions tons of grain units)

Import areas	1961/ 1965	1975/ 1976	1976/ 1977	1977/ 1978[1]	1978/ 1979[1]	1979/ 1980[2]
			Wheat and wheat flour			
West Europe[3/4]	12.1	7.8	5.7	7.4	6.7	7.5
Of this EEC[4]	4.6	6.4	4.2	5.4	4.5	4.5
European socialist countries	5.0	4.1	5.9	4.8	4.5	5.0
USSR	2.4	10.1	4.6	6.3	5.0	11.0
Central and South America	4.8	8.8	8.8	9.5	10.5	10.0
Near East	2.3	3.3	4.7	8.3	6.2	7.0
Far East[5]	7.8	11.6	8.4	6.3	7.4	6.1
Japan	3.1	5.9	5.5	5.8	5.6	5.6
People's Republic of China	4.4	2.3	3.2	8.6	8.1	7.0
North Africa	2.8	7.1	7.2	8.8	9.4	11.4
World total	46.0	68.8	61.5	71.6	71.0	77.0
West Europe[3/4]	19.2	24.8	35.6	25.5	24.0	25.0
Of this EEC[4]	15.9	17.1	26.9	15.2	14.8	16.3
European socialist countries	2.5	7.6	5.0	8.4	8.3	10.0
USSR	0.1	15.5	5.7	11.7	10.0	21.0
Japan	3.4	13.5	15.9	17.0	17.9	18.5
World total[4]	31.9	76.4	82.6	83.3	90.0	100.0

1. Preliminary
2. Preliminary estimate
3. Including Yugoslavia
4. Without mutual trade
5. India, Pakistan, Bangladesh, South Korea, Taiwan and Indonesia.

8664
CSO: 2400

STOCKPILES OF UNSELLABLE GOODS DAMAGE ECONOMY

Tirana BASHKIMI in Albanian 29 Sep 80 p 1

[Article: "Let Us Avoid and Prevent Stockpiles"]

[Excerpts] For completely subjective reasons, there have been cases where certain articles have remained unsold for a long time. The maintenance of stockpiles or of slow-moving goods is a phenomenon which is very bad for the economy, and the party has continually given its attention to this problem.

During the past two or three years, the ministries, the executive committees of the peoples councils and the enterprises have done careful work to put into economic circulation those goods which were formerly outside the economic circuit and not to create stockpiles or slow-moving goods. This problem has been analyzed many times, and the results have been obvious, especially on the part of enterprises in the communications and construction areas. The Ministry of Domestic Trade has organized exhibits of goods and has placed them in all selling units. It has organized fairs in the cities and villages and has moved goods from one unit to another. The Ministry of Construction has published a bulletin presenting the situation of various types of goods and machinery and has distributed the bulletins to all enterprises of this system, for the purpose of re-distributing the products according to the needs of each enterprise.

However, duties in this sphere are not being carried out as they should be. Some enterprises of the Ministry of Light Industry and the Food Industry distributed only 56 percent of the products within the system in 1978 and 1979, leaving the major part of the goods to be distributed in 1980. The enterprises of this ministry have not executed their duty of reworking and making over those products which could not be sold in their original state.

CSO: 2100

WEST GERMAN COMMENTARIES ON GDR ECONOMIC SITUATION

Portrait of GDR Economics Chief

Duesseldorf WIRTSCHAFTSWOCHE in German Vol 34 No 36, 5 Sep 80 pp 72-73

[Article by Dr Angela Scherzinger, Department for 'GDR and Other Eastern Industrial Countries," German Institute for Economic Research (DIW), West Berlin: "Guenter Mittag--Loyal to Reform Course; East Berlin's Highest Ranking Economic Manager Portrayed by Angela Scherzinger"]

[Text] GDR scholar Dr Ernst Richert provided what seems to be the most apposite characterization of Dr Guenter Mittag, SED Central Committee Secretary for economics: "Mittag is short on the use of ideological slogans, but when he does use them, he does so precisely...somehow the total societal interest still remains paramount. In the course of his long career this has become part and parcel of him."

Typical for the style of the GDR economics chief are his factual and sober manner, his pragmatism in regard to economic detail, his diligence and his discipline. This permits him to accept joint responsibility for the various economic stages and course corrections which occurred in past years in the GDR. It would be a mistake to rank him with the group of technocrats and thus juxtapose him to the ideologists or party officials. Mittag is loyal to basic SED decisions which he helps to influence more or less from within the Politburo.

No doubt there are some conflicts about ends: It is possible for the need to secure the party's power--and the political system--to clash with compelling economic requirements. However, so far it has been erroneous to believe with recently deceased GDR scholar Prof Peter Christian Ludz that one may describe party experts like Guenter Mittag as a "counter elite" and expect them to turn toward a more factual appraisal let alone a partial liberalization of the system as a whole.

Guenter Mittag's origin and party career predestined him for success in the GDR. He was born in 1926 in Szczecin (now Poland), the scion of a worker's family. After graduation from middle school he served an apprenticeship

with the German Railroad. He has been a member of the SED since 1946. At only 24 years of age he became a salaried employee of the SED Central Committee, initially in the department for trade and supply. He advanced to head of the department for railroad, transportation and communications in 1953. At the same time he completed correspondence courses at the Friedrich List Advanced School for Transportation, Dresden, and in 1958 received a doctorate in economics. In the same year he was appointed a Central Committee candidate. His political career proper began in 1958: He became secretary to the economic commission at the Politburo, set up by then party chief Walter Ulbricht and later abolished. In 1962 Mittag entered the innermost leadership circle of the party: He became a member of the SED Central Committee secretariat. The secretariat is in fact the supreme command post for the entire party apparatus. It might be described as the center of the internal party executive and also as a kind of brains trust for the SED Politburo. The individual members of the secretariat have their own (experienced) staffs and maintain constant contacts with the corresponding departments of the Central Committee. In other words, as a rule a member of the secretariat also heads certain departments of the Central Committee, which relate to his sphere.

Though currently Guenter Mittag is responsible within the secretariat only for the section industry and construction, within the Central Committee he is in charge of the various industrial sections as well as two overlapping departments, including the important research and technical development section.

In 1963 Mittag's status was rounded off and consolidated with his appointment to the Politburo which is the de facto decision-making body of the party. This personal union--member of the secretariat and member of the Politburo--signifies a position of tremendous power. In his capacity as member of the secretariat Mittag is involved in the preparation of Politburo decisions affecting his sphere, enjoys the corresponding advance information and is therefore always able later to influence Politburo decisions.

For some years, from 1973-1976, Mittag lost his job in the Central Committee secretariat and, therefore, his dual function. He was demoted to first deputy premier. There has been much speculation about the reasons for this demotion. Still, even in those years Mittag kept his position in the Politburo and, since 1976, once again exercises his former function in the secretariat.

The public got to know Mittag--together with Dr Erich Apel, then chairman of the State Planning Committee--in the early 1960's, when these two established the "new economic planning and managing system."

At that time many economists criticized the old economic system, especially for the devastating consequences of planning by volume only (the so-called ton ideology), the neglect of quality and efficiency, cost

structures distorted by artificially steady prices, and the lack of incentives for technical advances. The economic reform of 1963 was basically designed to partially expand the decision-making scope of enterprises and provide for an improved ratio of central planning to enterprise responsibility. Certainly not planned was a system-explosive transition to a market economy, because in those years also the central authorities alone decided all fundamental issues of structural policy.

It was quite in character for cautious Guenter Mittag to cover his rear even then. In October 1964 he said that capitalist management methods should be divested of "their capitalist shell" and their "rational core" made to serve the GDR economy. At no time did he question the primacy of overall economic targets.

It is therefore not surprising that Guenter Mittag was able politically to weather the later abandonment of the reforms, differing therein from his fellow reformer Apel who committed suicide in 1965. It is quite impossible to prove that Guenter Mittag at any time opposed the recentralization of the economic system, which occurred in December 1970.

At the present time the GDR is once again confronted with serious economic problems: The foreign trade situation, especially the inflation of raw material and fuel prices, has resulted in a substantial trade deficit with its Western and Eastern partners, accompanied by correspondingly heavy interest payment burdens.

To secure appropriate growth and improve export opportunities it will be imperative to raise productivity.

In this situation the GDR economic leaders are once again seeking to initiate reforms. Doubtless one of the most important measures is the change in economic organization by way of the establishment of combines--noticeable in the past 2 years. Guenter Mittag is one of the prime advocates of this restructuring effort.

The merger of individual enterprises into larger units (combines) is designed to raise the efficiency of the available production factors and encourage technological progress. The second aspect is likely to be of particular importance for Guenter Mittag. In this connection it is surely no accident that the emphasis on the introduction of microelectronics was a special feature of the 1977 Sixth SED Central Committee Plenum. No doubt, either, that Guenter Mittag--mindful of the need for modernization and efficiency was a prime mover.

Impressions of Traveler

Frankfurt/Main FRANKFURTER ALLGEMEINE in German 28 Aug 80 p 1

[Article by B. Asmus, datelined Frankfurt, 27 August: "As If From a Faraway Land: A Travel Report From the GDR; Western Credits Act Like an 'Artificial Kidney' for the Economy"]

[Text] Entry to the near and yet so far neighboring country took relatively little time: One hour for passport, identity and baggage checks, and the "state border" is behind us.

Later that day relatives in Chemnitz, now called Karl Marx Stadt, proudly show off their new color television set. Price: M6,500. They say they were lucky to get it after standing in line for a long time. "What else are we to do with our money?", is the answer to our question whether this high price is worth it. The financial situation over there resembles ours before the 1948 monetary reform: A lot of money around, little to buy. Household linen, furniture, china, spare parts and much else is scarce. Prices rise on the sly: Suddenly the store no longer stocks the old brand of drink; offered at twice the price is a bottle with a new label, which tastes exactly the same. The same applies to many items of daily demand. The government tries to skim off the excess money by prices so inflated that they seem breathtaking to us. The success of this maneuver is minimal. Money is beginning to lose value. The consequence: Retreat to private transactions, increasing black market and barter deals, declining work ethic and productivity.

We talk of the energy situation. A few years ago the old central heating boiler was converted from coke to natural gas. At that time it was possible to get a furnace by complex barter deals. Electricity and gas for lighting, cooking and heating cost M600 per annum. Now my relatives hope that there will not be gas rationing this coming winter. The gas from the Soviet Union is in short supply, new household installations are no longer approved. Whenever a bottleneck occurs, industry enjoys priority.

Up to now the private sector has been spared energy problems. Gasoline is available for private cars at a price of M1.60 per liter. Reduced were the motor fuel allocations to enterprises and public transportation; some bus routes were abandoned. Our hostess says that "this year our factory outing was canceled because, due to the fuel shortage, the city bus company was unable to provide a vehicle."

On the road, on the other hand, we are surprised by the many trucks and tractors which spew huge clouds of smoke—unspent diesel fuel. Fuel injection valves—an item costing a few pennies—are scarce, that is why the engines are badly adjusted.

Despite the constant din of propaganda "more output with less material and energy use!", industry is unable to use many of the possibilities for conservation because the required heat exchangers, pumps or controls are not carried in the plan. Amendments to the production plan take up a lot of time. In addition the division of labor within CEMA has adverse effects: Certain pumps, for example, are made exclusively in Czechoslovakia, certain devices only in Poland.

On the other hand it is possible quickly to obtain from the West that which cannot, for system-related reasons, be speedily produced at home. Imports from the West thus act like an "artificial kidney" for a patient threatened with circulatory collapse: Supplies made possible by Western loans exercise a tremendous "multiplying effect."

We note in particular the "plan fulfillment propaganda" in preparation of the Tenth SED Congress scheduled for April 1981: No newspaper lacks triumphant announcements of voluntary additional obligations incurred by work collectives, ever new reports of "plan advances" already achieved or firmly promised. The natives take hardly any notice of these slogans, just as we barely register detergent advertising. The next morning a neighbor, employed as an engineer in a transportation firm says: "Some time ago my enterprise notified the authorities that a new garage building was ready for use although not even the main structure was completed. Vehicles were still parked outside for months afterward."

Still, work does not always proceed so slowly: When, on the eve of last May's "Youth Festival," unknown perpetrators blew up the Soviet monument at the entrance to Karl Marx Stadt, a construction crew hurried along the very next morning to repair the damaged concrete plinth; a crane quickly set upon it a brand new T-34 "memorial tank."

A line of waiting people stands in front of a tire store. I join the line. Inside the sales clerk explains: "Instead of the 100 new tires ordered for this month we got only 10. We won't even get retreads before the end of the third quarter!" For many of those waiting in line this news means the abandonment of travel plans using their own cars and also reveals the reason for the many accidents we saw on straight sections of the motorways, despite a 100 km speed limit: Worn tires, worn steering controls and lack of replacement parts. One day earlier the newspaper had praised the excellent "plan advance" of the Pneumant Tire Factory.

Many items suitable for export to the West have disappeared from the domestic market, such as ceramic tiles which are popular for remodeling the usually old apartments. They are available only at the "Genex" gift service in exchange for hard currency and priced at DM32 per square meter. The same GDR-made tiles cost less than half that amount at building supply dealers in Stuttgart, Hamburg or Dortmund.

In the evening a friend of our hostess comes to visit. She is a surgical nurse in a nearby hospital. Her hospital also is affected by the supply bottlenecks. She gets only one freshly laundered gown per week for her theater duties. Bandages have to be reused. That makes for additional work for sterilization and drying while increasing the danger of infection.

Development Since the Wall

Frankfurt/Main FRANKFURTER ALLGEMEINE in German 9 Aug 80 p 9

[Article by Werner Obst, formerly with the Office of the GDR Council of Ministers, now living in the FRG: "Not Too Much Export, But Too Little Production--The GDR After 19 Years of the Wall"]

> [Text] GDR officials constantly reaffirm that the standard of living there is so low because too many goods need to be exported. This assertion seems to meet with understanding even among critical residents of the GDR. The following article, though, claims that "the GDR does not export too much, it produces too little." This indeed is the rub. The author is particularly well qualified to make such a statement; before fleeing to West Germany he handled basic economic issues in the "office of the GDR Council of Ministers" for many years. [The editorial board]

The wall dividing Germany will be 19 years old on 13 August. It is a sad date in history anyway; moreover the GDR's "Western state border" is now more unsurmountable for Central Germans than ever before. In contrast to Western detente expectations, the SED leaders have made their border with the Federal Republic more and more "secure." Does the wall thus ultimately meet its requirement to protect the slowly emerging socialist state consciousness? That which Federal citizens visiting there record as "state consciousness" still prevails only among a minority of the people. GDR citizens assess this minority as ranging from 20 to 30 percent. That was the case in the 1950's, and to this day nothing has changed with regard to this magic dimension. Upon closer scrutiny what seems like state consciousness over there is nothing more than love for the homeland.

Definitely important for the people's political instability is GDR economic misery. Although we mean well when we tell them that the GDR has the highest standard of living within the Eastern Bloc, to them it sounds patronizing--tantamount to someone telling us in the Federal Republic that we have a higher per capita output than Spaniards or Italians. We would feel such a remark insulting, because it has always been like that. We are equally at fault for assuming that Central Germans consider their greater efficiency (by comparison to Russians, Poles or even Rumanians) something special. In fact it is also a matter of course for people over there, and their standard of comparison is the Federal Republic. Of course in such a comparison they are bound to record a steadily growing prosperity gap vis-a-vis the West.

That is the problem of the Central Germans. Before the war productivity was greatest in industrialized Central Germany, falling off in direction Rhine and the Alps. The five-cornered region Magdeburg-Berlin-Dresden-Plauen-

Eisenach was the center of German machinery, vehicle and aircraft construction. Forty percent of the chemical industry were settled there; in 1938 some 65 percent of all exports from the German Reich came out of the present GDR territory. In 1980 the GDR will export goods to the value of some 57 billion Valuta marks, equivalent to DM34 billion; the Federal Republic's exports amount to about DM350 billion. At this time, therefore, the GDR would account for only 9 percent of total German exports. More than anything else that demonstrates the relative economic decline of this once highly developed German region--and the people over there are fully aware of that. Of course they are just as ignorant about the causes of the shortcomings of the planned economy as people in the West are about the actual facts of the superiority of the market economy.

In Leipzig the visitor to the Fair is always told by the people affected that the standard of living is so low because too much is exported. That, however, is not really the case at all because--relative to the respective domestic national product--both German economies record an export rate of 23 percent. As the GDR foreign trade mark is worth only 60 pfennigs on the world market, per capita GDR exports are worth DM2,000, the Federal Republic's DM5,700. And yet the stores here are full of merchandise. Consequently it is not that the GDR exports too much, it simply produces too little.

Moreover, despite inflation, unemployment and weaker growth here the GDR falls further and further behind the Federal Republic. That is the real and cardinal problem of the first socialist state on German soil.

Monthly net wages and salaries per employee in 1980: Federal Republic just on DM1,800; GDR M780. At the same time the current average purchasing power of the currencies is about equal for private consumption. As to social expenditure--the GDR manages just about one third of our services, and annual savings here are by now five times greater than over there. Compared to the equivalent GDR occupational groups our blue and white collar workers and civil servants currently dispose of roughly seven times the money and real property.

At this stage the GDR is a classical lowwage country. A sales clerk earns M500 net, a skilled worker M800, a middle manager M1,200-1,500, and a top manager--such as the general director of a state combine with 10-30,000 employees--gets M2,500 monthly. This alone shows quite clearly why the SED leaders must hermetically seal the borders. Quite apart from any political considerations, the people there would run away merely for the opportunity of earning twice to three times more over here. In 1980 the Federal Republic will achieve a gross national product of some DM1,500 billion; the GDR may manage about M300 billion.* Per gainfully employed person and man hour we achieve DM32.60, the GDR manages M16, in other words just on 50 percent of our productivity.

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* GDR at West German prices. Estimated by German Institute for Economic Research (DIW), West Berlin.

It would need total alienation from reality to expect a happy future for GDR socialism through 2000. All signs indicate that a critical stage will be reached in 1980--with the accompanying consequences for the political system. To appraise the situation differently we would have to believe that the SED leaders will be able to keep a firm grip on their own people despite the even greater income and property differences to be expected between now and 1990. In other words, the SED leaders were unable to accomplish the real strategic goal of the construction of the wall now approaching its 19th anniversary. That much is certain. Actually the hope that the wall would be temporary was bound to be an illusion.

To be sure, the GDR was at a disadvantage after World War II. It did not obtain aid by way of the Marshall Plan, it had to pay more reparations per head of the population and, between 1949 and 1961 alone, lost another 3-4 million people to emigration. However, even after the construction of the wall the GDR could not keep up. That is the problem.

Low Productivity, Listless Workers

Cologne RHEINISCHER MERKUR in German No 31, 1 Aug 80 p 11

[Article by Peter Schiwy: "GDR Economy--The System Which Induces Listlessness; SED Calls for Productivity"]

[Text] The plan discussion is in full swing from Stralsund to Plauen, from Magdeburg to Frankfurt/Oder. By a clumsy rather than airoit propaganda campaign GDR state propaganda agencies try to arouse the working people to give some impetus to the socialist planned economy. A new five-year plan will begin on 1 January and, scheduled 100 days later on 11 April, is the Tenth SED Congress, a major event for the GDR and already widely touted in official propaganda. The Central Office for Statistics of the East Berlin party government describes the economic growth in the first 6 months of this year as "dynamic and stable." The produced national income grew by "more than 5 percent"--in terms of the full year the plan provided for no more than a 4.8 percent growth rate. Twelve months ago, in the summer of 1979, the Central Office for Statistics was completely silent on this figure.

But this time also the balance sheet is not nearly so satisfactory as the propagandists paid by the SED would have us believe. Almost exclusively the figures refer to data which make comparisons quite difficult for Western experts.

And yet, if the socialist economic planners had any self-confidence at all, they need not fear to admit their serious difficulties. It is after all quite obvious to everybody that the world economic anxieties are by now besetting the socialist planned economies of the East also.

The GDR is no exception though--thanks to its relative advanced industrialization--it is still better off than other state economies in the East, now shaken by crises. The view across the "Oder-Neisse border of peace" toward Poland must be gratifying to many an East Berlin planner.

However, it seems as if socialism would never be sufficiently productive in operation. The beginning and end of the dilemma is exceedingly low productivity. As a result the SED now calls for an improvement "exceeding the hitherto customary extent." The propaganda slogan says: "Achieve more profit from every mark, every working hour and every piece of materials."

Official reports from the GDR also indicate that the price level of industrial goods has risen dramatically. At the same time, while last year industrial goods production rose to a total of M5.5 billion, this year's increase to 10 billion provides no more than a 5.9 percent rise.

The GDR consumer notes that many products can be bought only for more money, regardless whether it is a matter of household linen or other household goods which are not among the much subsidized basic necessities. The rate of increase for these subsidies demonstrates that it is more and more expensive to provide them to keep basic necessities cheap: It stands at 8.7 percent.

This is accompanied by a change in consciousness which has so far failed to be compensated by propaganda and is therefore something of a constant problem. The man in the street is losing any sense of value. The fares on public transport bear no relation whatever to the value of the energy-consuming service, the price of bread does not in the least correspond to the work of the farmer nor the processing by miller and baker: They are no longer criteria of a price and value consciousness.

This fatal result is reflected in the state of repair of older buildings in the GDR and other Eastern Bloc countries. Rents are held artificially low and do not cover costs; the revenue is totally inadequate to finance restoration let alone new construction. Nevertheless fortunate GDR citizens obtained more than 54,000 new housing units (1,600 more than in the first 6 months of 1979). That is an immensely important figure in a country where the baby boom persists--every 2 minutes another child is born in the GDR.

The party makes no bones about that which matters: "Primarily to raise export profitability and improve the export structure." This phrase hides a permanent problem inherent in the GDR and other Eastern Bloc countries. Their offer of products often fails to meet the quality criteria of Western markets.

Little success has so far been achieved by the efforts to obtain higher revenues by suitable and technically advanced products. This is where the circle of anxieties closes: Greater productivity and efficiency would help, but both are lacking where the system itself generates indifference among the workers.

Up to now the officials have not found a recipe for dealing with this situation. The system is limping.

Mid-Year Economic Status

West Berlin DIW-WOCHENBERICHT in German Vol 47 No 31, 31 Jul 80 pp 327-332

[Analysis by Dr Doris Cornelsen, department head, German Institute for Economic Research (DIW), West Berlin: "Good Growth Conditions in First Half Year--GDR Economic Situation in Mid-1980"]

> [Text] For the last year of the 1976-1980 Five-Year Plan the GDR economic leaders had planned a just under 5 percent growth of the produced national income and industrial production; it was intended thereby to stop the trend to slowly declining growth noticeable for the past few years. Conditions were favorable in the first half year. In contrast to the first half of 1979 production was able to develop in all sectors without restrictions due to severe weather conditions. The fulfillment and overfulfillment reported in the half-year account is therefore not surprising.

The report of the Central State Administration for Statistics[1] for the first half of 1980 shows the following (percentage growth by comparison to the corresponding period of the previous year):

	First Half 1979	First Half 1980	Annual Plan 1980
Produced national income	1) 2	5	4.8
Industrial goods production	2) 3.2	5.9	4.7
Retail trade turnover	1	5.7	4.0
Investments	0.7	- 2	0

1) Estimated.-- 2) Per calendar month. Published was a 4.4 percent growth rate adjusted by working day.

This result, though, is somewhat vitiated if we relate it to the production process of last year. The excessively severe winter weather in the early part of 1979 had caused considerable disruptions in the transport system, energy supply and--consequently--production as a whole. In the second quarter the development quickened, and in the course of the year some of the losses were made good. Against this background the results of the first half of this year are less impressive than the initial comparison of annual growth rates would imply. This applies in the first place to the

transportation and construction sectors which are particularly dependent on weather conditions, but it holds true for industry also.

Industry

For industry the plan fulfillment report indicates a 5.9 percent rise in goods production in the first 6 months. This rate of growth is exaggerated by about 1-2 percentage points because a corresponding loss of output occurred in the previous year. In the second half of 1980 the growth rate is certain to be rather lower due to slightly above normal production levels in the second half of 1979. Still, a little better than 4 percent growth would be quite sufficient to fulfill the annual plan (+ 4.7 percent).

The slight stabilization of production growth seems to be the consequence of improved production organization following combine establishment. This organizational change was largely completed in 1979. In March 1980 the SED Central Committee conducted a major exchange of experiences with the general directors of combines; however, reports of that conference were exceedingly short on facts. All that emerged was the unanimous resolution of the combines to raise output in 1980 beyond the plan to the extent of 2 working days.

Changes did occur, on the other hand, with regard to the assessment of performance.[2] Since March 1980 "net production" and "basic material costs per M100 goods production" have been among the prime indices of planning, reporting and performance assessment. This is to encourage intensification of production and stimulate the thriftiest possibly consumption of energy and raw materials. The index figure "industrial goods production" which has been (and is likely to remain) the decisive indicator, has an adverse side effect: A plan is more easily fulfilled with greater material expenditure and material intensive previous work. Honecker therefore described the improvement of performance assessment as a key to the reduction of expenditure for previous work. ("That which profits the national economy must benefit the enterprises also") However, the new indices will not be helpful if simply incorporated in the vast complex of enterprise data. Instead their fulfillment must actually be made the criterion for the amount of allocations to enterprise funds. Reports so far received fail to show clearly the value assigned them with regard to enterprise performance assessments or the consequences of fulfillment or nonfulfillment.

Earlier indices on the reduction of the specific consumption of energy and raw materials aimed in the same direction of "materials economy." The 1980 plan had adopted the targets of the five-year plan and partly raised them (for rolled steel): Specific energy consumption in industry was to be lowered by 5 percent, rolled steel consumption in the metal processing industry by nearly 7 percent. The plan fulfillment report noted complete success. Savings were certain quite feasible because specific materials consumption in the GDR is generally far too great even now. Higher commercial prices for energy and raw materials have certainly contributed to more rational

materials use. More price increases for energy raw materials took effect in the GDR on 1 January 1980. In future regular annual price rises are to occur in this sector.[3]

If we compare the five-year plan targets with the subsequent annual plans we may arrive at some assumptions about changes in the medium-term[4] goals of industrial policy. To begin with we see that--in contrast to the principles of the planning order--it was not possible to draft the annual plans as "sections" of the five-year plan: The growth targets initially planned have generally been somewhat scaled down. This reduction was particularly evident in the chemical industry, machine tool construction and light industry. The skeleton directive for the current five-year plan realistically permits amendments to the "annual plan sections" of the five-year plan: The prerequisites are fundamental changes ("changed demand," "new demand") and evidently excessive or insufficient utilization of capacities ("consideration for the development achieved in earlier plan years").

The lower growth rates for the chemical industry may be due to a fundamental change in the medium-term goals of industrial policy. In view of rising oil prices the GDR is not financially able to continue the expansion of oil processing on the former scale;[5] if it is attempted to replace oil by domestic brown coal, conversion difficulties tend to be considerable. The more cautious planning for this industry therefore takes into account the inflation of oil prices. Consequently not one of the enterprises producing largely on a basis of oil figures among the combines singled out for praise in the plan fulfillment report (output increases of 10 percent or above).

A similar change in the basic course of industrial policy may have resulted in the reduction of the initially planned growth rates for light industry (textiles, clothing, leather goods). It was pointed out that the materials base for this sector is likely to grow far more slowly in future.[6] Decisive here is likely to be the fact that, due to the severe competition from the developing countries, exports of the products of light industry fail to meet the constantly reiterated requirement of "foreign exchange profitability."

The lowering of plan data for equipment construction and machine tool construction, on the other hand, is probably the result of inadequate output successes. Both planned and actual indices for electrical engineering/electronics and device construction still conform to the five-year plan.

Farming

The plan fulfillment report claims a normal result for farming. Though poor weather is mentioned, it is pointed out that output of animal and crop production has progressed as planned.

Notable in the period under review were some changes in farm policy. In May 1980 the GDR Council of Ministers adopted a resolution on new management

regulations in agriculture and the foodstuffs industry,[7] which will take effect in 1981. Their gist is as follows:

-- Reduction of earlier subsidies for replacement parts: From 1981 crop production enterprises will be granted only half the subsidies allowed in 1980, animal production enterprises will not receive any;

-- A differentiated rise in farm producer prices--coupled with the maintenance of stable consumer prices--from 1981 on: In crop production this involves mainly price increases for rye, potatoes and protein-rich feed crops; in animal production milk and beef (calves, grain-fed beef cattle, slaughter cows and heifers);

-- The abolition of preferential treatment for industrialized facilities within animal production enterprises: No longer will preferential prices be paid. Nor will there be any more investment subsidies for the construction of such facilities;

-- A differentiated reassessment of taxes to be paid to the state budget: From 1981 on the enterprises will generally pay higher taxes, dependent on the profitability of their production and rising to a maximum of 50 percent of profits.

At the same time the higher cost of replacement parts is intended to encourage thrifty use, higher prices to improve profitability and the increased taxes are to balance the rising subsidies required to maintain stable consumer prices (while producer prices are climbing). The decision explicitly states that the measures designed to affect the structure should not normally result in additional burdens on the state budget.

It is a prime concern of the latest farm policy decisions to reduce the present--and apparently very marked--profitability differences between the various production sectors in agriculture. It is also possible that a definite output stimulation for beef production is intended, because it has long been the aim to reduce the proportion of pork. The decisions may also be interpreted to mean that the speed of "industrializing agriculture" is to be somewhat reduced. An end is made of the price disadvantages suffered earlier by traditional production in cooperatives and individual smallholdings. Presumably the authorities want to prevent the impression that the illusion of greater profitability justifies the setting up of industrialized facilities.

In any case, after a long period of featherbedding, farming is now cautiously to be brought closer to the necessary cost/yield considerations. Several recent remarks by the economic leadership demonstrate that problems do exist in this sector. Farm issues loomed large at the Eleventh SED Central Committee Plenum in December 1979. The directive[8] on the drafting of the 1981 plan--the third of its kind--mentions farming for the very first time. Among the usual calls for the development of new reserves is the postulate

that agriculture should reduce losses, organize a more favorable cost/yield ratio and improve breeding results. Without abandoning large-scale subsidies it is to be assumed that this sector's need for subsidies will in future be more closely scrutinized from the aspect of efficiency.

Investments

Accompanied by more severe implementing regulations the planning of (material) investments envisaged stagnation for 1980 and, in view of the rising volume of incompleted investments, reduced in particular the start of new projects. The first half year results (M21 billion) of completed investments[9] are slightly below the level of the comparable period of 1979. Still, a substantial--9 percent--growth was recorded for industrial investments. This is probably accounted for by the completion of some major projects. In the period under review planning and implementation also clearly showed the concentration of resources on industry. For all other sectors investment resources are in short supply--excluding only housing construction. In other words, the necessary renewal and expansion of fixed assets is bound to fall short of requirements even in important sectors of the infrastructure such as transportation.

The Seventh Construction Conference[10] dealt with long-term prospect of the construction industry. The production targets to 1985 correspond to the growth rates of the current five-year plan; conservation is emphasized: Construction delays are to be cut and expenditure lowered. Substantial savings are called for especially with regard to energy consumption in the production of building materials and in construction output; thermal insulation is to be improved in order to cut household energy consumption. Construction expenditure is to be lowered for industrial investments and, wherever possible, structures are to be modernized instead of expanded. In this medium-range conception also housing construction is still to be "the core of the socialist program." It will continue to enjoy priority.

Income and Consumption

The half-year report records the greatest success with respect to the development of private consumption: Retail trade turnover rose by 5.7 percent, the rate was 9.3 percent with regard to industrial goods and 2.4 percent for essential and nonessential foods. In this connection also we must take into account the fact that the base of the first half of 1979 was very low. At that time retail trade turnover rose by a total of only 1 percent, due to stagnation in the trade in industrial goods. Moreover we must remember the price effect. In addition to obvious price increases this was helped along by assortment shifts and the slow advance of specialty stores. According to reports in the regional newspapers more and more goods are available only in the relatively expensive "equisite" and "deli" stores. While, in 1978, official data reported the turnover in those stores at less than 2 percent of total retail trade turnover, the percentage is likely to have doubled in the meantime.

However there is a remarkable discrepancy between the development of retail trade turnover and the increase in the population's cash income. While the retail trade turnover rose by nearly 6 percent, net cash incomes increased by only 3 percent. This is an extraordinarily small growth; the raise in social security pensions of December last alone was more than 10 percent. When we eliminate this from the increase in net cash incomes, the growth of income for gainfully employed persons is no more than 1 percent. Admittedly there are some special factors which must be taken into account: The annual end of the year bonuses, for example, are rising more and more slowly because many enterprises have achieved the legally fixed upper limit (basically M900); moreover, less overtime was worked and paid in 1980 than in 1979. Still, even these elements cannot hide the fact that the latest income development is obviously lagging behind the increase customary in the past. The discrepancy with the development of turnover once again underlines the circumstance that the availability of goods rather than the development of incomes limits consumer spending.

Foreign Trade

Since the end of 1975 the GDR has not published any import or export figures. We must therefore content ourselves with computations and estimates. At the start of this year we gave here a preliminary survey of 1979 foreign trade. Meanwhile we have received data from the partner countries for all of 1979, so that it is possible now to provide a final estimate of foreign trade trends in 1979. A change in the preliminary findings arises largely from exceptionally large exports to the CEMA region, while imports from that area have barely increased. The trade balance with CEMA was therefore generally favorable, but the deficit in trade with the Soviet Union continues. Western trade yielded a record deficit of 6.5 billion valuta marks.

We have few figures for the first half of 1980. The plan fulfillment report quotes a 16 percent growth of exports; including a 38 percent rise to the developing countries and a better than 33 percent increase in exports to the Western industrial countries. Foreign trade turnover with the Soviet Union rose by 14 percent.

Partner country data available so far show major differences with respect to the various countries and groups of countries. Soviet statistics report that exports to the GDR increased by more than 25 percent in the first quarter of 1980, exports from the GDR by only 10 percent. In the goods exchange with the other CEMA countries we may assume that GDR exports increased more than imports; there are some indications also of arrears in the contractual deliveries by CEMA partners. The growth rates for imports and exports in trade with the Western industrial countries are enormous; the same applies to inner-German trade (GDR purchases: + 30 percent; GDR deliveries: More than 40 percent; in both instances January through April). However, as regards GDR purchases almost the entire increase is attributable to rising prices; as regards deliveries price increases amounted to about 15 percent.

Outlook

Planning and implementation in the last year of the current five-year plan reveal that the GDR economy now pursues changed development conceptions. The preeminence of foreign trade is more and more evident, all other sectors lag far behind. In nominal terms the GDR has succeeded in raising exports and imports to about the same extent in the five-year plan period so far completed--as long as we include all annual values. In other words the increase in exports in real terms has exceeded that of imports. This remarkable development did not manage, though, conclusively to dispose of foreign trade problems. A trade deficit with the Soviet Union has existed since 1975. In trade with the West the accumulated deficit again rose quite substantially in 1979; the rising interest burden is likely to result in a more cautious import policy.

Output has managed still to grow to a remarkable extent--despite the restrictions arising from materials conservation, the shortage of investment resources and the deficient offer to the public. Though the GDR's restrictive publication practice makes any analysis of economic development extremely difficult, we cannot fail to recognize that the slow-down in growth stopped in the second half of 1979. It is therefore logical to assume early successes for combine establishment. It remains to be seen, however, whether this is a once-only improvement in standards. It is equally uncertain whether the people will remain willing to perform, given the supply and foreign trade problems.

Table 1—Indicators on GDR Economic Development—Percentage Changes Compared to the Previous Year of the Same Period of the Previous Year

		1978 (1) 1.Halbj.	1978 (2) Jahr	1979 (1) 1.Halbj.	1979 (2) Jahr[8]	1980 (1) 1.Halbj.[8]	1980 (2) Jahr
		Ist					Plan
(3)	Produziertes Nationaleinkommen	5	3,8	[9]2	4	>5	4,8
(4)	Industrie — Industrielle Warenproduktion	5,2	5,0	[10]3,2	4,8	5,9	4,7
	Bereich der Industrieministerien						
	Industrielle Warenproduktion	5,4	5,4	[10]3,6	5,3	6,1	5,4
	Arbeitsproduktivität	5,1	4,6	[10]3,2	4,4	[11]5,7	4,5
(5)	Produktion des Bauwesens	4,8	4,4	[9]-2	[9]2	3,7	[12]5,3
	dar.: Baumaterialienproduktion[1]	5,2	5,6	1,2	3,1	4,6	.
(6)	Bauwirtschaft — Fertiggestellte Wohnungen, insgesamt (Anzahl in 1000)	76,6	167,8	74,1	162,7	77,8	163,0
	davon: im Neubau	48,9	111,9	52,0	117,4	54,4	116,1
	dar.: Eigenheime	6,1	11,9	6,4	12,6	6,8	10,7
	durch Modernisierung	27,7	55,9	22,1	45,3	23,4	46,9
(7)	Landwirtschaft — Tierische Marktproduktion[2]	2,5	2,9	[9]0,4	0	[9]2,7	0
	Viehbestand[3]	1,5	0,2	[9]0,7	[9]1,0	[9]2,1	.
	Brutto-Bodenproduktion[4]		-1,1	.	[9]-2,8	.	.
(8)	Verkehr — Gütertransportmenge	3,5	2,8	[9]-4	[13]3,2	7,0	5,0
	dar.: Eisenbahn	0,6	0,4	[9]-2,7	[13]2,5	6,3	.
(9)	Post- u. Fernmeldewesen — Gesamtleistung	7,5	5,9	4,9	3,3	2,3	2,5
(10)	Binnenhandel — Einzelhandelsumsatz, gesamt[5]	3,4	3,4	1	3,2	5,7	4,0
	davon: Nahrungs- u. Genußmittel	3,5	3,4	3	2,7	2,4	3,4
	Industriewaren	2,9	3,4	0	3,7	9,3	4,7
(11)	Außenhandel — Umsatz, gesamt[6]	.	5,6	.	12,3	.	12,0
	davon: Einfuhr	.	1,7	.	11,3	.	.
	Ausfuhr	10	10,3	7	13,5	16	.
(12)	Investitionen — gesamt[7]	[14]3,3	2,9	0,7	2,4	[9]-2	[16]0,0
	dar.: Industrieministerien	7	[15]6,4	.	4	9	[16]2,4
(13)	Nettogeldeinnahmen der Bevölkerung	3,5	3,5	3	2,8	3	4,0

(14) 1) Einschließlich Produktion von Vorfertigungserzeugnissen.- 2) Summe des staatlichen Aufkommens an Schlachtvieh, Milch und Eiern; bewertet in Getreide-Einheiten (GE).- 3) Viehbestand am 20. 5. bzw. 20. 11.; bewertet in Großvieh-Einheiten.- 4) Gesamtheit der pflanzlichen Erzeugung; bewertet in GE.- 5) Zu laufenden Preisen.- 6) Einschließlich innerdeutscher Handel; zu laufenden Preisen.- 7) Ohne Generalreparaturen; einschließlich Investitionsbeteiligungen im Ausland; zu Preisen von 1975.- 8) Vorläufige Angaben.- 9) Geschätzt.- 10) Kalendermonatlich, d.h. bei den im Planerfüllungsbericht genannten Daten wurde die arbeitstägliche Bereinigung rückgängig gemacht.- 11) In der Industrie.- 12) Bauproduktion des Ministeriums für Bauwesen.- 13) Gütertransportleistung, d.h. transportierte Gütermenge bezogen auf die dabei zurückgelegte Streckenlänge.- 14) Ohne Auslandsbeteiligungen.- 15) In der Industrie.- 16) Materielle Investitionen.

(15) Quellen: Statistisches Jahrbuch der DDR 1979; Statistische Praxis; Volkswirtschaftsplan 1980 (GBl. der DDR. Teil I/1979. Nr. 45); Mitteilungen der Staatlichen Zentralverwaltung für Statistik über die Durchführung der Volkswirtschaftspläne in den ersten Halbjahren (Neues Deutschland vom 15./16. 7. 1978, 14./15. 7. 1979, 12./13. 7. 1980) sowie des Jahres 1979 (Neues Deutschland vom 17. 1. 1980); Biuletyn Statystyczny. Nr. 4/1980 sowie Berechnungen und Schätzungen des DIW.

Key:

1. First half year
2. Year
3. Produced national income

[key continued on following page]

4. Industry--Industrial goods production
   In the scope of the industrial ministries
   Industrial goods production
   Productivity
5. Construction output
   Including building materials production
6. Construction industry total completed housing units) 1,000 units
   New construction)
   One-family homes)
   Modernization)
7. Agriculture--Animal market production
   Livestock stocks
   Gross crop production
8. Transportation--Volume of freight carried
   By railroad only
9. Posts and Telecommunications--Total services
10. Domestic commerce--Total retail trade turnover
    Essential and nonessential foods
    Industrial goods
11. Foreign trade--Total turnover
    Imports
    Exports
12. Investments--Total
    Industrial ministries
13. Net cash incomes of the population
14. Footnotes: 1) Including production of primary products.-- 2) Total of the state yield of slaughter cattle, milk and eggs; valued in grain units (GE).-- 3) Livestock stocks on 20 May or 20 November; valued in large animal units.-- 4) Total of crop production; valued in GE.-- 5) At current prices.-- 6) Including inner-German trade; at current prices.-- 7) Excluding major overhauls; including investments abroad; at 1975 prices.-- 8) Preliminary data.-- 9) Estimated.-- 10) By calendar month, in other words the adjustment by working day of the data mentioned in the plan fulfillment report was rescinded.-- 11) In industry.-- 12) Construction output of the Ministry for Construction.-- 13) Freight transportation services, that is the volume of freight carried related to the distance traveled.-- 14) Excluding foreign investments.-- 15) In industry.-- 16) Material investments.
15. Sources: 1979 GDR Statistical Yearbook; STATISTISCHE PRAXIS; 1980 Economic Plan (GESETZBLATT DER DDR, Part I/1979, No 45); Reports by the Central State Administration for Statistics on the implementation of plans in the first half years (NEUES DEUTSCHLAND, 15/16 July 1978, 14/15 July 1979, 12/13 July 1980) and for 1979 as a whole NEUES DEUTSCHLAND, 17 January 1980; BIULETYN STATYSTICZNY, No 4/1980, also DIW computations and estimates.

Table 2--Plan Estimates for Industrial Goods Production in the Sphere of the Industrial Ministries in the 1976-1980 Five-Year Plan Period

(1) Bereich des Ministeriums für ...	(2) Zuwachs 1980 gegenüber 1975 in vH[1]		(3) Volkswirtschaftspläne der Jahre ...[3]				
	(4) gesamt	(5) jährlich[2]	1976	1977	(6) 1978	1979	1980
			Zunahme gegenüber dem Vorjahr in vH				
Kohle und Energie (7)	28,4	5,1	4,9	3,9	4,8	4,9	4,4
Erzbergbau, Metallurgie und Kali (8)	27,3	5,0	4,9	4,0	3,4	2,9	4,3
Chemische Industrie (9)	44,5	7,6	7,4	6,2	6,7	5,8	5,7
Elektrotechnik, Elektronik (10)	45,7	7,8	7,7	7,0	8,7	8,7	7,3
Schwermaschinen-und Anlagenbau (11)	39,6	7,0	6,2	6,4	6,7	6,2	6,0
Werkzeug- und Verarbeitungsmaschinenbau (12)	56,0	9,3	9,1	7,6	8,0	7,5	7,8
Allgemeiner Maschinen-, Landmaschinen- und Fahrzeugbau (13)	42,0	7,3	6,6	7,2	6,7	7,9	7,1
Leichtindustrie (14)	40,0	7,0	7,4	5,2	5,9	3,9	2,4
Glas- und Keramikindustrie (15)	44,1	7,6	8,5	7,2	6,9	5,0	6,2
Bezirksgeleitete Industrie und Lebensmittelindustrie (16)	33,5	6,0	6,7	6,1	5,9	5,5	4,4
Industrieministerien, insgesamt[4] (17)	37,9	6,6	6,7	6,0	6,2	5,8	5,4

1) Ansätze des Fünfjahrplans 1976 bis 1980 (GBl. der DDR. Teil I/1976, Nr. 46, S. 524).- 2) Errechneter durchschnittlicher jährlicher Zuwachs.- 3) GBl. der DDR. Teil I: 1975, Nr. 46, S. 740; 1976, Nr. 46, S. 533; 1977, Nr. 37, S. 415; 1978, Nr. 42, S. 458 und 1979, Nr. 45, S. 458.- 4) Einschließlich Ministerium für Geologie. (18)

Key:

1. Sphere of the Ministry for...
2. 1980 percentage growth compared to 1975
3. Annual economic plans for...
4. Total
5. Annual
6. Percentage increase compared to the previous year
7. Coal and Energy
8. Ore Mining, Metallurgy and Potash
9. Chemical Industry
10. Electrical Engineering and Electronics
11. Construction of Heavy Machinery and Equipment
12. Construction of Machine Tools and Processing Machinery
13. Construction of General Machinery, Agricultural Machinery and Vehicles
14. Light Industry
15. Glass and Ceramics Industry
16. District Managed Industry and Foodstuffs Industry
17. Total industrial ministries
18. Footnotes: 1976-1980 Five-Year Plan estimates (GBl Part I/1976, No 46, p 524).-- 2) Computed average annual growth.-- 3) GBL Part I/1975, No 46, p 740; 1976, No 46, p 533; 1977,No 37, p 415; 1978, No 42, p 458; 1979, No 45, p 458.-- 4) Including Ministry for Geology.

Table 3. GDR Foreign Trade by Groups of Countries

	(1) Ausfuhr			(2) Einfuhr			(3) Umsatz			(4) Saldo	
	(5) in Mrd. VM[2]		(6) Zuwachs in v H[3]	(5) in Mrd. VM[2]		(6) Zuwachs in v H[3]	(5) in Mrd. VM[2]		(6) Zuwachs in v H[3]	(5) in Mrd. VM[2]	
	1978	1979		1978	1979		1978	1979		1978	1979
Alle Länder (7)	46,2	52,4	13	50,7	56,4	11	96,9	108,8	12	- 4,5	- 4,0
davon:											
Sozialistische Länder (8)	34,4	38,5	12	35,5	36,4	3	69,9	74,9	7	- 1,1	+ 2,1
dar.: RGW-Länder (9)	32,8	36,9	13	33,9	34,7	3	66,6	71,6	7	- 1,1	+ 2,1
Westliche Industrieländer[4] (10)	9,1	10,9	20	12,9	17,4	35	22,0	28,3	29	- 3,8	- 6,5
Entwicklungsländer (11)	2,7	3,0	11	2,4	2,7	13	5,0	5,7	13	+ 0,3	+ 0,3

(12) 1) Zu jeweiligen Preisen; Wertstellung fob; Verkäufer- bzw. Käuferland.- 2) VM = Valuta-Mark, statistische Rechneinheit zum Ausweis des Außenhandels der DDR; Umrechnungskurs: 4,67 VM = 1 Transfer-Rubel (TRbl); der Umrechnungskurs zu den westlichen Währungen schwankte mit den Paritätsänderungen zwischen dem Rubel und den konvertiblen Währungen; für 1979 galt: 1 VM = 0,599 DM.- 3) Gegenüber 1978.- 4) Gruppenausweis "Kapitalistische Industrieländer".

(13) Quellen: Berechnungen und Schätzungen des DIW anhand der Angaben in: den Planerfüllungsberichten 1978 und 1979, dem Statistischen Jahrbuch und dem Außenhandelsjahrbuch Polens, dem Statistischen Jahrbuch des RGW sowie Partnerlandangaben.

Key:

1. Exports
2. Imports
3. Turnover
4. Balance
5. In billion valuta marks
6. Percentage increase
7. All countries
8. Socialist countries
9. CEMA countries
10. Western industrial countries
11. Developing countries
12. Footnotes: 1) At prevailing prices; value date fob; seller or buyer country.— 2) Valuta marks--statistical accounting unit used for GDR foreign trade; conversion rate 4.67 VM equals 1 transferable ruble (TRbl); the rate of exchange with Western currencies fluctuated with the changes in parity between the ruble and convertible currencies; the rate for 1979 was 1 VM to DM0.599.— 3) Compared to 1978.— 4) Group return "capitalist industrial countries."
13. Sources: DIW computations and estimates based on data in 1978 and 1979 plan fulfillment reports, the statistical yearbook and foreign trade yearbook of Poland, the CEMA statistical yearbook and data from partner countries.

FOOTNOTES

1. NEUES DEUTSCHLAND, 12/13 July 1980.

2. DIE WIRTSCHAFT, No 3/1980.

3. See the pertinent orders in GESETZBLATT DER DDR, Part I, No 18/1980, p 165, and No 19/1980, p 185.

4. In March 1979 the GDR Central Administration for Statistics stopped monthly reports. Since that time no short-term analyses by industries have been possible.

5. "We now know that only insignificantly more crude oil will be available for oil processing through 1990," DIE WIRTSCHAFT No 7/1979, p 19.

6. PRESSE-INFORMATIONEN, No 3/1980, p 2.

7. BAUERNECHO, 6 June 1980.

8. Joint Directive by the SED Central Committee Politburo, the GDR Council of Ministers and the FRGB Federal Executive Board on the preparation of the 1981 plan, in NEUES DEUTSCHLAND, 8 July 1980, p 3.

9. Plan and actual data are not fully comparable due to different investment interpretations (plan: "material investments" equals production of investments, including incompleted projects; actual: "investments" equals investments completed in the half year under review.

10. See NEUES DEUTSCHLAND, 20 June 1980.

11698
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MINISTER INTERVIEWED ON SITUATION OF CONSUMER GOODS SUPPLY

Budapest NEPSZABADSAG in Hungarian 21 Sep 80 p 5

[Interview with Vilmos Saghy, Minister of Domestic Trade, by Csaba Egerszegi: "On the Supply of Goods"]

[Text] Just as everyone in Hungary understands soccer, everyone understands trade, because we, the buyers, receive daily impressions, good or bad, in the shops we visit. The goods available in our shops and stores are a partial reflection of our work and our economic life. And while production of goods takes place mostly behind plant doors, the work of trade is open. The smallest mistake in this area can be seen and felt immediately. Therefore the availability of goods, and contact with consumers, are also political questions. Supply of goods to the population is an important part of our policy concerning the standard of living. The importance of this was given strong emphasis in the 12th Congress, as well as in the June session of the Central Committee, considering the economic tasks of the current year. Accordingly one of the main tasks before us in economic work is to provide for an appropriate supply of goods. We asked Dr Vilmos Saghy, minister of Domestic trade, how we can accomplish this.

[Question] In the current phase of our development, trade is not concerned just with supplying sufficient quantities of basic products. We also require that within each particular line of goods the buyer be able to find in the stores the thing he is looking for. So the variety of goods available is an important qualitative element of the standard of living. For this reason we will begin our conversation with the facts: How would you describe the supply of goods this year?

[Answer] It is difficult to give an unambiguous answer to this question. More than 200,000 kinds of goods are handled in trade, and even when goods supply is good, a few hundred or a few thousand items can be unavailable. Goods supply to the population is determined mainly by whether there is a continual availability of goods. In order to evaluate our present situation, we must look back at the end of last year and the beginning of this. Then we had greater than usual purchases of building materials, durable consumer goods, and some clothing items. At the same time, however, several branches of industry failed to fulfill their

delivery quotas. In the first quarter of this year commercial inventories declined by 10 percent. During this period--even though there was a continual supply of food, basic clothing items, and fuel--the list of unavailable items grew in several areas of production.

The government has made great efforts to increase the inventory of goods and to eliminate deficiences as quickly as possible. We have increased production of many clothing items, automatic washing machines, color televisions, and building materials. We have restricted purchases by governmental organizations, partly through economic and partly through administrative measures. All of this was done in order to increase the amount of goods available to the population. Enterprises engaged in domestic and international trade have been substantially more active in making import agreements with socialist countries. This year the quantity of goods arising from exchanges and from local traffic along the borders is increasing. We have increased somewhat purchases of consumer goods from developing and capitalist countries. The trade enterprises have also expanded their earlier activities in making production agreements.

As a result of these measures, the number of unavailable goods is decreasing gradually, and trade inventories by the end of August were 10 percent above the level of the same time last year. This year supply of basic items such as food was continual and abundant. We had difficulties in vegetables and fruits because of weather factors that delayed ripening. The amounts of these items offered for sale declined and prices increased. In recent weeks, however, supply has increased significantly and prices have moderated.

Supply of baby foods has improved significantly. The same cannot be said of products for diabetics, unfortunately. During the past 8 months our inventory of clothing items has gradually increased and therefore supply has also improved. But the supply of knitted clothing and stockings has been insufficient, even though in recent times supply of these has become more evenly balanced. The supply of electrical and chemical products has improved, as has that of cultural items. In recent times, for example, electric heaters, automatic washing machines, color televisions, and furniture have been available much more continually than last year. Nevertheless, many items are still unavailable. This situation was somewhat ameliorated by reorganization of production and by imports, to be sure, but we are still far from creating a normal situation.

[Question] Staying with electrical products: it is especially irritating that there are not many inexpensive goods. While store windows have a large variety of record players and stereo radios costing more than 5,000 forints, the much cheaper monaural machines are difficult to obtain. There is a similar deficiency in middle-priced cameras as well. Why?

[Answer] In these products we obtain our supply from socialist imports. The difficulties are caused by problems in delivery. Our imports of cameras have decreased greatly because we cannot obtain as many as we need even from our biggest suppliers. Because we have no way of producing these goods domestically we cannot count on a fast improvement in their supply.

[Question] How have this year's price changes affected consumer attitudes?

[Answer] Because of the effect of the changes in relative consumer prices, consumption of large cuts of meat and of meat products has decreased, while consumption of poultry, milk products, and bacon has increased. Because of price decreases, demand for knitted clothing, stockings, worsted fabrics, and jerseys, as well as for items made from these fabrics, have increased. Because of price increases, on the other hand, demand for shoes and leather goods has decreased.

The new pricing mechanism in the first 4 to 5 months of this year has placed heavy burdens on workers in trade. As is well known, the wholesale prices of industrial items have not changed during this period. It is estimated that this affects about 100,000 items. Every article had to be relabeled on the basis of the new prices, and this task tied up workers in shops to a great extent. At the same time the consumers in many cases did not understand why prices for the same goods in stores belonging to different enterprises were different. This was dependent on where and when goods were obtained at the new prices.

[Question] In what way has the area of free-priced items been expanded, and how has the level of prices changed?

[Answer] Formerly 45 percent of products belonged to the category of free prices, and other prices were controlled by the state. The area of free prices has been expanded to 55 percent by this time. The price level of consumer items this year is expected to rise by 9 percent.

[Question] Sellers repeatedly complain that they are at the mercy of the producers, because of their monopoly situation. How has the relationship between trade and industry evolved in recent times?

[Answer] For some consumer items, trade would still buy much more from domestic producers than they can offer. From time to time, however--and I hope that this will be more frequent in the future--there is occasionally a greater supply than is necessary for domestic consumption. It is true of course in our country that there is a different factory making each of the following: refrigerators, washing machines, stockings, and enamelware. But this is not to say that the producers of these items enjoy a monopoly situation in the domestic market, because in many areas we can strongly increase competition in regard to variety, quality, and prices, through imported products. For example, Romanian rustic furniture, modular furniture from the GDR, Bulgarian work clothes, Czechoslovak men's suits, and Polish raincoats are creating significant competition for our industry.

It was characteristic of deliveries from domestic industry that during the first half of this year penalties for failure to fulfill agreements made with trade increased by nearly 50 percent compared to the previous year. It is welcome news that since April-May of this year, deliveries in accordance with agreements have gradually been improving. It is worth mentioning that one fourth of the penalties were imposed because of failure to meet quality requirements. Improvement in the quality of consumer goods has nevertheless been slow. The trade enterprises and the cooperatives are often forced--for want of sufficient quantity of goods--to accept delivery of inferior-quality goods from the producers.

[Question] Many believe that more and more items are unavailable because of reorganization of the structure of industry. What can trade do and what is it doing to decrease the area of unavailable goods?

[Answer] First I would like to make a correction. In my opinion the number of unavailable items has decreased. Today it is possible to obtain many products they could not be purchased last winter and at the beginning of this year. Think about durable consumer goods, building materials, stockings, knitted clothing. Some of the deficiencies were not due to the reorganization of the structure of production, but to other problems, such as frequent failure to measure demand sufficiently, difficulties in supply of materials, poor organization of production, lack of capacity, and limited import capabilities. Some deficiencies are especially irritating because the items in short supply could be manufactured with a little better planning and organization.

Regarding the reorganization of the structure of production, I think it has been advantageous to the economy as a whole, and also for trade in particular. Beyond all doubt it has been a good thing that, for example, through the Bosch license we can sell a new refrigerator that meets world standards, a modular television has appeared, and new soap and other washing products have appeared on the domestic market.

[Question] Unfortunately, there is not enough of precisely these up-to-date products. Would it not be better to wait until there is a sufficient quantity available before selling them?

[Answer] I think not, because it is a good thing to arouse demand for good things, since that is a stimulus to domestic production. This is because market pressure encourages the enterprises to meet domestic needs.

[Question] How does our importing of consumer goods serve to improve supply?

[Answer] Nineteen percent of the supply to the population consists of consumer goods coming from abroad. Without imports we could not even talk about good supply, because half of the imported goods are things that we do not produce here at home at all. Some of these are coffee, lemons, fish fillets, passenger cars, cameras, wristwatches, etc. The other half mainly supplement domestic production, and only a small portion, 8-10 percent, serve to expand the variety of goods available. Beyond this, an important import task is to create competition, to encourage domestic industry to produce better and more modern products.

[Question] Regarding imports of consumer goods, how do you rate the relationship between enterprises in domestic and foreign trade? Do the foreign trade enterprises represent the requirements of domestic trade adequately?

[Answer] In my opinion the first task is for the domestic-trade enterprises with their knowledge of domestic needs to work with foreign-trade enterprises to increase their efforts to open up markets. We must know better then we do today what can be obtained on the socialist market, and we must make use of our knowledge in negotiations between countries and in making private agreements. Going beyond that: within the framework of CEMA cooperation we must encourage our socialist partners to produce goods not manufactured here.

To answer the second part of the question, I must say that some of the foreign-trade enterprises do not understand sufficiently their tasks under the present system of commissions, and the domestic-trade enterprises do not make enough use of their rights in this area. It is important to see that here the consigner is domestic trade and the consignee is foreign trade. Accordingly, foreign trade has to do the work. It is also true that in some cases they have mutually overlooked each other's mistakes.

[Question] Wouldn't it be appropriate to give some domestic-trade enterprises the right to import, in order to make imports more efficient?

[Answer] Yes, I think that would be useful in some areas, and negotiations for it are already underway with the foreign-trade enterprises.

[Question] It is still an everyday complaint, especially in the capital, that shopping environments are inadequate. How do you rate the Fifth Five-Year Plan's investments in trade and in development of the network?

[Answer] According to our plans, the basic area occupied by small trade will be 900,000 square meters larger in 1980 than in 1975, which represents an increase of 15 percent. About one third of the developments have been for units with a large basic area (department stores, shopping centers, self-service eating places). So here we are dealing not only with a quantitative, but also with a qualitative change. I think that shopping environments in the countryside have improved significantly. The situation is different in Budapest, where only 120,000 square meters of the planned 180,000 square-meter development was accomplished. For precisely this reason we must pay more attention in the period ahead to developing the trade network in the capital and its suburbs.

This much can be said about the results, however. Thanks to the efforts of state enterprises and retail cooperatives, the following were built during the Fifth Five-Year Plan: the Skala department store, the Florian shopping center, the Centrum department store in Kobanya, department stores in Gyor, Bekescsaba, Szekesfehervar, Debrecen, Dunakesz, and Komlo, the Domus department store in Szeged, and in addition many ABC self-service eating places and "basic kitchens." This year the nation's largest shopping center will begin operation at Ors Vezer square, and large department stores will be dedicated in Szeged and Sopron, as well as a department store in Esztergom."

[Question] This week a new regulation appeared concerning a new method of operation for small trade units. What do you expect from this measure?

[Answer] The operation and accounting system of the shops and public accommodations has not kept pace with development. In the interest of better supply for the population and more efficient accomplishment of the tasks of trade, we are planning to introduce a new method of operation for shops with a small work force that will adapt flexibly to requirements. The method, which has been approved by the Cabinet, is based on great independence and direct financial interest on the part of the shop manager. We expect self-starting initiatives, better goods supply, variety of goods and time of opening and closing adjusting to needs, and more polite and faster service through freeing management from various administrative responsibilities and giving them a greater financial interest.

[Question] Insufficient work force is still a burning question in trade. What do you plan to make sure there will be enough sales people and businessmen?

[Answer] During the current plan period the work force in retail trade is expected to rise by 5 to 6 percent. We only have to talk about shortages in the work force in Budapest and a few other large cities. There is no doubt, on the other hand, that the number of workers in small stores and public accommodations in Budapest has decreased. The food trade and the department store network are struggling with the biggest problems. In my judgment we cannot count on an increase in the work force in Budapest trade even in the future. For this reason one of the main tasks of organization of work and operations is better utilization of hidden possibilities.

We are continuing to spread and improve the system of self-service; we are paying more attention to the organization of transportation of goods (containerization, synchronized deliveries) and mechanization of heavy physical labor and warehouse work. I believe that the work force situation will also be alleviated if we can set hours of opening and closing to correspond with consumers' habits.

Seventy percent of the workers in trade are female, so we must make great efforts to solve their social problems. Here we are talking not just about the heavy physical work mentioned before, but also, among many other things, about assisting them in placing their children in kindergartens and nurseries. We want to increase employment of retired persons, part-time workers, and housewives as well. Besides this, as far as our financial strength permits, we must increase incomes, and we must insure better financial and moral recognition of those businessmen, and storeclerks who work honestly and hard.

[Question] Our final question: What can be expected in goods supply during the remainder of this year?

[Answer] In coming months we expect a continual strengthening of the improving trend that has been experienced so far this year, since the favorable influence of the state measures mentioned above will be felt in the second half of the year. Furthermore, a larger fraction of this year's imports will arrive in our country during the second half, making for a more colorful variety of goods available in the shops at the end of the year.

There will continue to be an abundant supply of basic foods. In the remainder of this year, the supply of live fish and of baby foods will increase, and we will have a quantity of oranges and bananas for sale comparable to last year's. The supply of clothing items will improve noticeably. But besides this, it is still possible that one item or another sought by consumers will be unavailable in the stores. We expect a balanced market in durable consumer goods--with a few exceptions. Trade is well prepared for the heating season: The supply of wood for fuel will be at the same level as last year.

9611
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NATIONAL SOCIOECONOMIC PLAN FOR 1981 PUBLISHED

Bucharest SCINTEIA in Romanian 18 Oct 80 pp 2,3

["Text" of "Law on the Adoption of the Single National Plan for the Socioeconomic Development of the Socialist Republic of Romania in 1981" adopted by the Grand National Assembly at its 16-17 October session]

[Text] The Grand National Assembly of the Socialist Republic of Romania adopts the present law.

Article 1--The single national plan for the socioeconomic development of Socialist Republic of Romania in 1981 is adopted.

The principle indicators of the socioeconomic development of the Socialist Republic of Romania are the following:

--in percentages, calculated on the basis of prices on January 1, 1981--

Indicator	Increase compared to 1980
1. Social product	6.1
2. National income	7.0
3. Industrial production	
--net production value	8.1
--commodity-output value	7.0
4. Average net agricultural production	9.0
5. Fixed assets volume in the national economy	9.2
6. Overall foreign trade volume	10.0
7. Labor productivity in industry, based on net production value	7.0
8. Retail sales volume in the socialist trade network	6.0
9. Public services	13.2
10. Remuneration fund for the working personnel	4.6

Article 2--In 1981 the net industrial production will total 331 billion lei.

Article 3--The following figures will be recorded for the principal industrial products:

Electrical power	mil. kw/h	72,700
Net coal	thou. tons	50,840
Extracted crude oil	thou. tons	12,570
Extracted methane gas	mil. cubic meters	29,550
Steel	thou. tons	14,665
Rolled steel prime material	thou. tons	11,000
	mil. lei	37,180
Primary aluminum and aluminum alloys	thou. tons	240
Electrical engines from 0.25 kw up	MW	11,600
Electrotechnical and electronic means of automation	mil. lei	6,820
Means of electronic computation technology	mil. lei	3,500
Fine mechanics and optical industry products	mil. lei	9,510
Metal cutting and kneading machine-tools	mil. lei	11,172
Industrial technological machinery and equipment	mil. lei	23,523
	thou. tons	714.6
Tractors	thou. units	80
Trucks, tractors, dump-trucks and chassis	thou. units	30
Town vehicles	thou. units	120
Electric, diesel electric and diesel hydraulic locomotives for trunk lines	units	305
Maritime freight vessels	thou. dwt	755.2
Chemical fertilizer	thou. tons, equivalent of 100 percent active substance	3,559
Basic macromolecular products	thou. tons, equivalent of 100 percent	681
Synthetic rubber	thou. tons	167
Car, tractor and plane tires	thou. units	6,010
Artificial and synthetic fibers and yarns	thou. tons	253.3
Cement	thou. tons, equivalent of 80 percent clinker	15,860
Fiberboards and particleboards	thou. tons	1,050
Wooden furniture	mil. lei	16,843
Pulp and semipulp	thou. tons	660

Paper, cardboard and pasteboard	mil. sq. meters	10,760
	thou. tons	890
Household electrical appliances and machines of which:	mil. lei	2,430
--refrigerators	thou. units	400
--electric washing machines	thou. units	325
Radio receivers	thou. units	1,100
Television sets	thou. units	670
Pharmaceuticals	mil. lei	4,590
Household glassware	mil. lei	1,300
Fabrics	mil. sq. meters	1,317.8
	mil. lei	31,827
Knitwear	mil. lei	14,850
Textile clothes	mil. lei	34,430
Footwear	mil. pairs	120.8
	mil. lei	12,080
Meat (including edible byproducts) of which:	thou. tons	2,126
--slaughterhouse meat	thou. tons	1,214.5
Fresh milk	thou. hectoliters	6,220
Butter	thou. tons	41.1
Cheese	thou. tons	126
Edible oil	thou. tons	345
Sugar	thou. tons	660
Canned vegetables and fruit, including tomato paste	thou. tons	499
Crude wine	thou. hectoliters	6,250
Beer	thou. hectoliters	11,200

Article 4--The Council of Ministers shall take measures so that the ministries and other central bodies, the executive committees of people's councils of the counties and of Bucharest Municipality, the working people's councils in centrals and enterprises, the State Planning Committee, the Ministry of Technical-Material Supply and Control of the Management of Fixed Assets, the Ministry of Foreign Trade and International Economic Cooperation, and the Ministry of Finance insure:

a) the complete fulfillment of the physical production plan in the structural ranges envisaged and the net production value, endeavoring to insure smooth manufacture processes in all economic units and to exceed plan provisions for products which require less energy and raw materials and for which there is a secure market, on the basis of contracts or firm domestic and foreign orders;

b) optimal utilization of the production potential of the industrial enterprises, by intensifying the degree of utilization of the machines, installations, equipment and available facilities, expanding mechanization, raising the cadres' level of skills, and strengthening labor discipline; technical assistance on all shifts, by appropriately assigning the technical cadres;

c) operation under safer conditions of installations, machines and equipment, by eliminating breakdowns in the production process and reducing the out-of-service time during repairs, and improving the quality of maintenance, check-up and capital repair work; securing the necessary spare parts by fully utilizing resources in this area, and adopting measures to recondition a larger amount of used components and subunits;

d) continuous increases in the technical and qualitative level of all products, by intensifying the assimilation, modernization, up-dating and standardization of products, designing and utilizing new and better materials and highly productive machinery and installations with lower energy consumption;

e) more efficient utilization of raw and other materials, fuel and energy, by improving production ranges and expanding technical progress and modern technology;

f) rigorous observance of delivery schedules based on provisions included in the unitary program of cooperation in production among ministries, centrals, enterprises and counties, in close correlation with production requirements and with strict observance of contract stipulations;

g) further modernization and diversification of the structural range of consumer goods production, according to quality classifications; expansion of small-scale industry production, based on extensive utilization of local resources or raw material, recyclable and recoverable materials.

Article 5--Given the conditions of a normal agricultural year, a net production of 73.8 - 82.2 billion lei is envisaged for 1981. The following yields of major agricultural products are envisaged:

	unit of measurement	total	of which: state agricultural units
Grain	thou. tons		
--total		23,740	5,522
of which:			
--wheat and rye	thou. tons	6,505	1,057
--corn	thou. tons	13,710	3,105

Sugarbeet	thou. tons	8,800	-
Sunflower and rape	thou. tons	1,100	190
Soybeans	thou. tons	765	313
Hemp and flax for fibers	thou. tons	573	12
Flax for oil	thou. tons	101	15
Fall potatoes	thou. tons	5,350	315
Field vegetables	thou. tons	5,200	1,320
Fruit	thou. tons	2,440	510
Grapes	thou. tons	2,025	448
Meat on the hoof	thou. tons	2,895	991
Cow's milk	thou. hectoliters	56,300	10,095
Wool	tons	42,500	10,330
Eggs	mil. units	7,175	2,014

Article 6--The arable land under cultivation will be at least 9.881 million hectares.

The irrigated agricultural land under cultivation will be 2.405 million hectares, including arable land of 2.241 million hectares.

Article 7--By the end of 1981, the number of livestock will be as follows:

	total	of which: state agricultural units
Cattle	6,940,000	1,070,000
of which:		
--cows and heifers	3,410,000	463,000
Pigs	13,000,000	5,800,000
of which:		
--sows	1,470,000	820,000
Sheep and goats	17,500,000	2,630,000
Egg-laying fowl	60,000,000	17,535,000

Article 8--In 1981 the material base of agriculture will develop as follows:

a) the agricultural sector will be supplied with 14,300 tractors; 6,000 self-propelled combines for harvesting corn; beet harvesting combines, potato-harvesting machines and other agricultural machinery and equipment;

b) 195,000 hectares of land will be set up for irrigation;

c) drainage work will be carried out on an area of 100,000 hectares, and work to combat soil erosion will be done on an area of 90,000 hectares;

d) the agricultural sector will be supplied with 1.7 million tons of chemical fertilizers containing nitrogen, phosphorus and potassium, and 51,000 tons of pesticides in terms of active substance.

Article 9--In order to achieve the agricultural production envisaged in the plan, the Council of Ministers shall take measures so that the Ministry of Agriculture and the Food Industry, the National Union of Agricultural Production Cooperatives, the Academy of Agricultural and Silvicultural Sciences, county agricultural bodies and joint state and cooperative agroindustrial councils will insure:

a) rational utilization of all agricultural and arable land; complete and efficient utilization of land set up for irrigation; application of judicious crop rotation systems in the area of each agroindustrial council;

b) an increase in the productive potential of agricultural land by carrying out land-improvement projects, eliminating excess humidity, combatting soil erosion and salinization, and irrigating the entire area prepared for this purpose;

c) securing high-quality seeds and seedlings for all crops adapted to the soil and climate conditions in each area; performance of agricultural operations at the optimal time, and strict observance of the methods employed for each crop;

d) further improvements in the production and utilization of vegetables, potatoes and fruit in order to better meet consumer requirements throughout the year, as well as industrial and export requirements;

e) performance of fruit-tree and vineyard maintenance work, modernization and creation of new planted areas in intensive and superintensive systems, with a view to achieving larger yields of fruit and grapes;

f) expanded mechanization of agricultural operations, efficient utilization of the entire fleet of tractors and agricultural machines by directly integrating sections of stations for the mechanization of agricultural units; performance of agricultural operations on time and on a high qualitative level, efficient administration of chemical and natural fertilizers, and of herbicides and pesticides;

g) increases in the number of livestock and in average and overall animal production, by implementing the measures established on selection, breeding and improvement of livestock species, especially of cattle and sheep, increasing the birth rate and reducing the death rate; the development and modernization of industrial-type livestock complexes, and of animal husbandry and fish breeding farms;

h) the development of fodder production by increasing average yields of fodder crops and natural grazing fields per hectare; expansion of second crops,

particularly on irrigated land, and more extensive use of bulk fodder and by-products, increasing their nutritive value;

i) the harvesting, storing and conditioning of agricultural products on schedule and without losses, with a view to insuring high quality;

j) increases in the efficiency of economic activities in all joint agroindustrial state and cooperative councils and agricultural units; reduction of material expenditures; increases in labor productivity; improved product quality, and reduction of raw and other materials, fuel and energy consumption.

Article 10--In 1981, 21 million cubic meters of wood material will be put into the economic circuit, of which 20.885 million cubic meters will be derived from principal and secondary (thinnings) forestry products; an additional volume of 1.7 million cubic meters of wood material will be made available through forest maintenance operations, thinning and intermediate cutting.

The Council of Ministers shall take measures so that the Ministry of Forestry Economy and Construction Materials and the other plan holders will insure:

a) the achievement of complete afforestation and reforestation on an area of 40,000 hectares, of which 13,900 hectares will be earmarked for special species for the production of wood for pulp; resinous species will make up 60-65 percent of the total afforestation volume in the forest stock;

b) strict application of legal provisions on speedy reforestation of available land areas, and of limitations on turning forest land to other purposes and on clearing forests to use the land for other purposes;

c) the development and diversification of hunting, and fishing in mountain waters and in specialized units; expansion of fruit bush plantings and intensified utilization of forest fruit, medicinal plants and other by-products growing wild;

d) strict observance of legal provisions on the age at which various species of trees may be cut in mature forests and on the diameter of trees to be cut, in relationship to the growing conditions and production classification of the respective forest; trees felled by the wind shall be the first to be utilized.

Article 11--Work will be carried out in 1981 to commission new multipurpose reservoirs totaling 154 million cubic meters; anti-flood dams will be built on an area of 262 km around populated centers and agricultural land; watercourse rectification and bank protection and consolidation work will be carried out on stretches totaling 396 km.

Article 12--The Council of Ministers shall take measures so that the ministries, other central bodies, working people's councils in centrals and enterprises, committees and executive bureaus of people's councils together with the National Council for Waters and the National Council for Environmental Protection will apply the measures included in the program on environmental protection, insuring:

a) the coordination of hydrotechnical work with the programs on complete utilization, complex improvement and rational utilization of waters within their respective hydrographic basins, in correlation with regional development planning;

b) judicious utilization of water resources for drinking and industrial purposes, irrigation, electric power production, navigation, fish-breeding and other purposes; increased rate of recycling of industrial waters and great reduction of losses; purification of waste waters and utilization of purification installations at full capacity.

Article 13--In 1981 the total volume of internal goods transportation will be 3.2 percent larger than in 1980.

Article 14--The material base of transportation of general use will be increased through the addition of 170 diesel and electric locomotives; 4,900 freight cars with the equivalent of 4 axles; dump-trucks and trailers with a total capacity of 40,200 tons; nonpropelled river vessels with a total capacity of 114,500 tons; 10 river tugboats and pusher tugs, and maritime vessels totaling 268,000 dwt.

Article 15--In 1981 the volume of post and telecommunication activities will be 4.1 percent larger than in 1980, as a result of intensive utilization of existing facilities and development of the telephone-telegraph sector, modernization of the technical-material base, further automation of the interurban telephone network through the connection of additional localities to it, and expansion of the radio and television network; the quality of all post and telecommunication services will increase.

Article 16--The Council of Ministers shall insure that the Ministry of Transport and Telecommunications, the Ministry of Technical-Material Supply and Control of the Management of Fixed Assets and the plan holders take measures to markedly improve supplies and transportation between suppliers and users; judiciously allocate transportation means; continuously intensify the degree of utilization of the fleet of transportation means; organize road transport of high-capacity vehicles in shifts; expand the utilization of trailers; reduce fuel and energy consumption, and intensively ucilize the material base of the post and telecommunications sector.

Article 17--In 1981 the overall volume of investments in the national economy will total 220 billion lei.

The following investment funds will be alloted to the main branches of the national economy:

Branch	billion lei
Industry	118.0
Constructions	7.5
Agriculture, silviculture, water management	31.3
Scientific research and technological development	2.3

Transport and telecommunications	23.9
Trade, public catering, tourism, technical-material supply	5.4
Education, culture, health	4.1
Housing construction (including bachelor hostels)	18.8
Communal administration	5.2

Some 750 major industrial and agricultural production facilities will be commissioned in 1981.

Some 1.8 billion lei will be invested in antipollution measures.

Article 18--The council of Ministers shall take measures so that all investment planholders, equipment producing centrals and ministries, the centrals and ministries which have design and construction assembly organizations subordinated to them, together with the council for coordinating investment activities, the Ministry of Technical Material Supply and Control of the Management of Fixed Assets, the National Council for Science and Technology, the Ministry of Finance, the Ministry of Foreign Trade and International Economic Cooperation, the Ministry of Industrial Construction, the Committee for People's Councils problems, the State General Inspectorate for Investments-Construction, the Central Institute of Research, Design and Direction of Construction and the financing banks will insure:

a) that activity be focused on commissioning the production capacities under construction on schedule; that the construction of new production capacities be started only after the execution plans have been approved and all conditions have been created to carry out these plans;

b) the strict observance of provisions in the schedule for achieving planned parameters by taking measures while the investment targets are being carried out, aimed at: the execution of construction-assembly work, insuring the delivery of equipment and materials in accordance with investment schedules; observing the periods of mechanical and technological tests envisaged and at securing the skilled manpower required to carry out those tests under optimal conditions; appropriately organizing the participation of specialists from recipient units in assemblying the equipment and carrying out tests; training the manpower to properly operate the commissioned capacities;

c) the adoption, in investment plans for current and new construction work, of the most efficient technological and construction solutions aimed at not exceeding the construction material quota; at reducing the use of materials whose processing requires a lot of energy, reducing metal and cement consumption; at insuring, when in operation, a minimum energy and fuel consumption and at increasing the efficiency of investments; at limiting the size of industrial and agrozootechnical construction strictly in keeping with the given technological processes; at expanding the use of standardized materials, construction elements and installations and of local materials and resources;

d) the smooth activity of all construction-assembly worksites; the expansion of the mechanization and industrialization of construction-assembly operations

and of modern building technologies; intensified cooperation between investment recipients, design and construction-assembly organizations and equipment suppliers;

e) limiting the supplies of transportation means, machine-tools and equipment for building and road construction and other equipment by taking measures aimed at achieving the planned volume of activity by improving the utilization index of existing transportation means and equipment.

Article 19--In 1981, 2,520 main scientific research and technological development projects are included in the plan which will contribute to making better use of raw materials, raising the technical and qualitative level of production, reducing material consumption, expanding the mechanization and automation of manufacturing processes and rapidly increasing the overall efficiency of the production process.

New products and materials will be assimilated, so that in 1981 the new and modernized products that will be produced for the first time that year will account for 12 percent of the commodity output achieved in the processing branches of national industry.

Article 20--The Council of Ministers shall take measures so that the ministries, centrals and enterprises, together with central institutions and specialized academies, units for scientific and technological research, under the unitary coordination of the National Council for Science and Technology and in cooperation with the State Planning Committee and the Ministry of Technical-Material Supply and Control of the Management of Fixed Assets, will insure that research workers focus their attention on important problems of socioeconomic development, especially on the larger use of their own research in the production process and a more rapid application of licenses acquired, and on the development of technologies and products on the basis of licenses assimilated with a view to:

a) intensifying geological prospecting and exploration in order to identify new industrial resources of useful minerals, particularly hydrocarbons and ferrous and nonferrous ores; increasing the final index of crude oil recovery from deposits; introducing deposits with poor contents with rare and dispersed metals into the economic flow to a greater extent; continuously increasing the number and recovery level of elements contained in the mineral production;

b) utilizing new energy, fuel and synthetic fuel sources and all categories of secondary energy resources derived from production and consumption processes; reducing specific consumption of energy and fuel in all fields of activity; producing equipment and materials characteristic of the programs for introducing new energy, fuel and engine fuel sources;

c) introducing and expanding modern technologies to make better use of all categories of materials under conditions of higher economic efficiency; improving existing technologies, so as to reduce consumption of production materials, to increase the efficiency of equipment and installations and to continually improve the technical and qualitative level of production;

d) producing new materials with reduced consumption of low energy, fuel and scarce raw materials, with better technical-economic characteristics, intensively replacing expensive and scarce materials, especially imported ones;

e) producing better categories and types of machines, equipment, apparatuses and installations characterized by greater efficiency, endurance and viability, by reduced energy consumption and specific weight and by a technical-economic and operational performance matching the level of the most advanced equipment on the world level and capable of insuring the implementation of investment programs, highly technical equipment for the branches and subbranches of our economy and industry to substantially contribute to diversifying and advantageously structuring exports and cutting back imports;

f) enhancing the contribution of scientific research and technical engineering to organizing and programming the production process on scientific bases and improving the maintenance and repair of equipment, machines, installations and aggregates, expanding mechanization and automation in the production process and improving labor productivity and economic efficiency in all fields of activity.

Article 21--The Ministry of Technical-Material Supply and Control of the Management of Fixed Assets, the State Planning Committee, the National Council for Science and Technology, the Ministry of Finance and the banks, together with the ministries, centrals and enterprises, the executive committees of the people's councils of the counties and of Bucharest Municipality shall take measures to rationally manage planned material resources by observing a strict savings system. Thus they are responsible for:

a) securing the material base of the plan and the planned stock of raw and other materials in keeping with the production requirements in each unit; the strict observance of the provisions of economic contracts concluded;

b) the strict observance of consumption norms and rates envisaged by the plan; the utilization in the production process of certain substitutes; cutting back losses in the handling operations, storage and transportation of products;

c) reducing energy consumption in all forms by increasing energy efficiency, modernizing energy consuming installations, improving manufacturing technologies and the structure of the production process and by expanding heat recovery; by increasing the quantity of energy obtained from new energy sources; by recovering and utilizing the energy, fuel and thermal sources envisaged in the plan;

d) reducing the product weight and the maximal saving of metals in machine-building by redesigning products with a high metal consumption, improving manufacturing technologies, by a rational centralized conversion and sawing of rolled steel and by reducing losses in processing, thus insuring a high metal utilization index.

Article 22--In order to best utilize resources resulting from production and consumption processes so as to meet the raw materials requirements of the economy, the Council of Ministers shall take the following measures to:

a) expand the activity of recovering and utilizing all iron and pig iron resources, steel alloys and iron alloys, nickel, copper, aluminum and other nonferrous metals, chemical products, mineral oils, rubber, plastics, wood, paper, fabrics, leather, glass, ore deposits, metallurgical slag, ashes from thermal power stations, agricultural products, foodstuffs and products from other branches;

b) fully utilize used products by reconditioning and reusing recovered materials, parts, components, subassemblies, equipment and aggregates;

c) substantially increase the degree of reusing tires, to insure the utilization of all existing capacities and the faster development of capacities for repairing and recapping tires;

d) to draw up technologies and to build capacities for the processing of recovered materials in keeping with the plan tasks envisaged for this field.

Article 38--In 1981, labor productivity calculated on the basis of the net production value, per capita, will increase 7 percent in industry and 8 percent in the construction-assembly activity compared with 1980.

Article 24--The average number of working personnel in the entire economy will total 7.435 million in 1981.

Some 300,000 skilled workers trained in vocational and specialized highschools and in short-term training courses will enter the production process in 1981.

Article 25--The Council of Ministers shall take measures so that the ministries, together with the Ministry of Labor, the State Planning Committee, the National Council for Science and Technology, the Ministry of Education and Instruction will insure:

a) the implementation on schedule of measures aimed at increasing labor productivity by improving the organizational framework of the production process and of labor in enterprises, sections and workshops, by increasing the mechanization and automation level of the production process, by improving labor norms in all branches on the basis of strictly correlating them with existing technical equipment and by reducing auxiliary and nonproductive personnel, by better organizing work shifts, by promoting the overall contract system in all sectors, expanding work to several machines and by strengthening order and discipline at each work place;

b) the implementation of provisions of programs aimed at providing, training, and giving advanced professional training to the labor force stipulated for ministries, centrals and units and counties.

Article 26--In 1981, the production costs will be reduced 12.8 lei per 1,000 lei commodity output in national industry; 11 lei per 1,000 lei commodity output in construction-assembly and 10.8 lei per 1,000 tons/kilometers in transportation compared with 1980.

The Council of Ministers shall take measures so that the Ministry of Finance, the State Planning Committee, the Ministry of Material-Technical Supply and Control of the Management of Fixed Assets, the National Council for Science and Technology, the State Committee for Prices and the Financial Bank Council, together with the ministries, the other central bodies, the centrals, enterprises, the executive committees of the peoples councils of the counties and of Bucharest Municipality insure--within the framework of the budget for incomes and expenditures of units--an efficient use of funds and the application of a strict savings system, the reduction of raw material, material, fuel and energy consumption, strong financial control, especially preventive control, the observance of norms regarding stocks and circulating capital and a better use of investment funds and of hard currency funds, and a strict observance of the financial and plan discipline so as to implement the programs of reducing production costs and material expenditure and so as to increase profits in close correlation with the single national plan and the state budget.

Article 27--In 1981, the overall volume of foreign trade will increase 10 percent compared with 1980 and hard currency incomes from international tourism will increase 13 percent.

The Council of Ministers shall take measures so that the ministries, together with the Ministry of Foreign Trade and International Economic Cooperation, the State Planning Committee, the Ministry of Finance, the National Council for Science and Technology and the Romanian Foreign Trade Bank will insure:

a) the goods planned for export by manufacturing products on schedule in the structural variety and quality required on the foreign markets; the efficient adaptation of the production process to the requirements of the foreign market by increasing the share of highly processed products;

b) intensified foreign market canvassing and the conclusion of contracts with foreign partners for the entire volume of exports and imports, under conditions of increased efficiency and with appropriate deadlines for the smooth development of our production activity;

c) the diversification of marketing forms and the acquisition of new markets, carrying out export-import operations, especially in the field of machines and equipment, and an increased delivery of blueprints, plans, technologies and technical assistance to foreign countries;

d) the full implementation of international economic and technological cooperation ventures; the intensification of negotiations with foreign partners and the initiation of new ventures to expand and increase the efficiency of our international economic cooperation and collaboration; and a greater profitability for joint companies.

The Ministry of Foreign Trade and International Economic Cooperation, the Ministry of Finance, the State Planning Committee, the economic ministries, centrals and enterprises and the foreign trade organizations shall act to achieve advantageous export and import prices, to increase the efficiency of foreign trade activity, improve returns and to insure a planned equilibrium of the trade balance and foreign payments.

Article 28--In 1981, the national income will increase 7 percent compared with 1980, thus insuring the necessary resources for the national socioeconomic development fund and for further improving the people's living standard.

Article 29--In 1981, the overall volume of retail sales through the socialist trade network will total 225.5 billion lei and the overall services will amount to 48.1 billion lei.

To better meet the people's requirements, the Council of Ministers shall insure that the council for coordinating consumer goods production, the council for coordinating and directing the supplying and providing of services to the people, the Ministry of Domestic Trade and the State Planning Committee, together with the plan-holders will take measures:

a) to fully and regularly deliver goods in a varied structural range and at a high qualitative level as was envisaged in the plan;

b) to improve the organizational framework and operation of the trade network and of service units by more judiciously distributing them throughout the country so as to efficiently meet the people's requirements;

c) to carry out retail commodity sales at the county level as envisaged by the plan and to insure balanced supplying throughout the country;

d) to fulfill the tasks for providing services and to improve their quality in keeping with the people's requirements and to efficiently make use of existing capacities and of local manpower.

Article 30--The working personnel's remuneration fund will total 227.6 billion lei in 1981, thus insuring an increase of 3.4 percent in real remuneration compared with 1980.

In 1981, the peasantry's real incomes derived from work in agricultural production cooperatives and individual households, calculated for each active person, will increase 3.3 percent compared with 1980.

The pension fund for all categories of pensioners will total 21.6 billion lei in 1981, that is an increase of 1.9 percent compared with 1980.

Article 31--The material base of education will continue to develop in 1981 in order to expand and improve all forms of linking education with production and research.

Some 10,359 places in kindergartens will be made available by the end of 1981. Some 1,573 classrooms, 16,236 places in boarding schools, 7,054 work places in school workshops and 63 gymnastics halls will be made available for elementary, secondary and technical-vocational education.

The higher education system will be equipped with new workshops, laboratories and other facilities totaling 37,580 square meters. Likewise, 3,528 places will be made available in student hostels.

Article 32--The material base of health care, social assistance and sports will be expanded; the following will be put into service: 3,000 places in nurseries, 38 medical units and dispensary-polyclinics and 5,975 hospital beds.

Article 33--In movie houses with normal screens 11,750 seats will become available, as well as 4,300 places in houses of culture and clubs.

Article 34--In 1981, 185,000 apartments and bachelor flats will be commissioned from state funds, of which 75,000 apartments will be sold to the people on the basis of state credits. The water distribution system and the sewage system will be expanded accordingly; the fleet of urban and communal means of transportation will expand.

Article 35--The Council of Ministers will take measures so that the ministries and central bodies, the working people's councils in enterprises and centrals, the executive committees of the people's council of the counties and of Bucharest Municipality will completely fulfill the 1981 plan tasks and increase the efficiency in all fields of activity.

Article 36--The indexes of the single national plan for the socioeconomic development of the Socialist Republic of Romania in 1981 will be distributed by State Council decree to the plan holders.

Article 37--The execution of the single national plan for the socioeconomic development of the Socialist Republic of Romania in 1979, adopted by law no 25/1978, is approved in keeping with the communique of the Supreme Council of Socioeconomic Development, the State Planning Committee and the Central Statistics Directorate on the fulfillment of the single national plan for the socioeconomic development of the Socialist Republic of Romania in 1979, published in the Buletinul Oficial part III, No 21, of 7 February 1980.

CSO: 2700

ROLE OF TRADE UNIONS IN ENSURING PLAN FULFILLMENT

Bucharest MUNCA DE PARTID in Romanian Sep 80 pp 46-49

/Article by Petru Despot, deputy chairman of the Council for Economic Problems and Occupational Training of the Central Council of the General Union of Romanian Trade Unions: "Trade Unions Support Plan Fulfillment in Last Year of Five-Year Plan"/

/Text/ The record of progress made in the 4½ years of the current five-year plan as well as the preliminary figures on fulfillment of this year's plan bear out the dedication and mobilizing power of the working class and the entire people in implementing and exceeding the tasks based on the decisions of the 12th Party Congress.

Under the management of the party organs and organizations, the trade unions used the means at their disposal to mobilize workers in socialist competition, to expand and generalize progressive methods and suggestions in production, to promote innovations and inventions, to involve the workers more regularly in mass scientific-technical creativeness, etc., making their contribution to the workers' achievements.

Emphasis Upon Fulfillment of Pledges

On the basis of the functions assigned by the party, the trade unions as professional organizations are expected to further involve the workers in managerial activity, to help unite their efforts to implement the RCP Program, and to organize consultation of the masses as well as regular discussion of the solutions to problems concerning the enterprises' and institutions' activity and the socioeconomic progress of Romania.

Under the direct supervision of the party organs, the trade union committees and collective management organs have substantiated the pledges made in competition by the economic units' collectives on the basis of the goals set by the committees of the unions of trade unions for production sectors and the respective ministries and submitted them for the approval of the workers general assemblies organized in the first quarter. They concern the primary tasks of

economic activity. The labor collectives in industry pledge a gross output of over 10 billion lei, a net output of over 2.5 billion lei, profits of 625 million lei, savings of 46,200 tons of metal and 400,000 tons of conventional fuel, etc. Major pledges have also been made to raise the use indices of machines, equipment and installations, to increase exports and reduce imports, to improve product quality, to expedite activation of new investment capacities, and to exceed the planned tasks in crop and livestock production.

The new requirements indicated by Comrade Nicolae Ceausescu, the party secretary general, for correct application of the principles of the new economic-financial mechanism made it necessary for us to assign priority in socialist competition to the indicators expressing the essence of the mechanism, namely the net output and physical production, and to adjust the criteria for naming the excellent and leading workers and collectives in socialist competition to the current requirements of the new economic-financial mechanism. The criteria have been better defined not only for every production sector but also for units, sections and work places. In enterprises visual propaganda promoting prompt checking and comparison of the competition results has been improved, with emphasis on the effectiveness indicators of the new mechanism. Bulletin boards have been installed displaying the pledges taken and the progress made in sections and shops and on the level of the enterprises. In order to disseminate the best forms of visual propaganda in support of physical production, the net output and the profits, many exchanges of experience and methodological conferences have been organized in enterprises and also on the levels of some cities, municipalities and counties.

Thanks to improved efforts to mobilize the workers for the great socialist competition to fulfill the plan tasks for 1980, the trade unions were a great help in exceeding the net industrial output for 7 months by 300 million lei.

Though good results have been obtained in plan and pledge fulfillment, it must be pointed out that there are still lags in a number of enterprises, partly because there have also been some shortcomings in the organization and conduct of the socialist competition. Some enterprises have made no serious effort to provide the technical-material and organizational conditions needed to carry out the plan and the pledges, while others have not specified the pledges and are not publicizing the results obtained, or those that led the competition, adequately or effectively. Furthermore sufficiently prompt measures are not taken everywhere to remedy the defects in the conduct of the socialist competition, especially in technical-material supply in keeping with the pleges, nor is there any resolute opposition to the negative phenomena that arise in cooperation among enterprises and in application of the principles of the new economic-financial mechanism.

Regular Effort to Promote Advanced Methods

As results of a progressive worker awareness, a new, socialist attitude toward work, and great professional competence, advanced methods and suggestions in production are lending a profound significance and greater impetus to the socialist competition in this five-year plan as a specific expression of the

masses' resolve to keep producing more faster, better and cheaper and to make fullest use of the economic units' human and technical-material resources as conclusive proof of complete understanding of the specific ways of participating in self-management.

In accordance with the measures adopted before the start of this year by the Central Council of the UGSR [General Union of Romanian Trade Unions], the trade union organs and organizations have consistently concentrated on determination, improvement and generalization of advanced methods and suggestions as a practical means of direct contribution to implementation of the plan tasks and pledges taken in socialist competition. They have made a more regular effort to retain out of the mass of suggestions and methods those that directly contribute to the attainment of essential objectives in this stage, like better use of production and transport capacities, higher indices of use of equipment, installations and assemblies, reduced consumption of raw materials, materials, fuels and electric power, greater labor productivity, better product quality, better organized labor and production, intensified occupational training, consolidation of order and discipline in production, etc. The programs prepared for this purpose by the committees of the unions of trade unions for production sectors are also intended this time to get extensive support from the respective ministries in creating the conditions required for successful application of the most efficient methods and suggestions. The effort to discover, study and generalize the best of these was extended even further this year in the activity of the county, municipal and city trade union councils, and intensive studies, exchanges of experience, conferences, documentary visits and practical demonstrations were organized. The trade union committees also made many organizational and propaganda efforts on their level to determine and apply to production the methods and suggestions that proved capable of guiding the efforts made in material production in the directions specified in the program.

In all of Romania over 2.5 million workers are now applying about 170 advanced working methods and suggestions, the most widespread being those that will meet some current economic and technical requirements, such as: "We can produce more and better with our machines," "Let us work 1 day a month or quarter with conserved materials or fuel," "the collecting account of the trade union group's savings," "internal quality control," "labor productivity at higher quotas," "the micron, gram and second serving effectiveness," "the friend of the new on the job," "Let every engineer, technician and economist solve a technical-economic problem in addition to those in the technical plan," "workers instruction," "the good service brigade," etc.

For example in Brasov, Cluj and Bacau counties 18, 21 and 12 suggestions respectively are being applied by over 380,000 workers who brought about an economic effectiveness of nearly 200 million lei in the first quarter of 1980. In Bucharest municipality values of more than 25 million lei were entered in the "personal account of technical-scientific creation" used by more than 12,700 persons, by now over 21 million lei have been entered in the "collecting account of the trade union group's savings" used in collectives numbering about 65,500 workers, and the suggestion "productivity, quality and technical

progress," applied by 42,000 workers, contributed 64 million lei.

But in this effort the trade unions did not do all that depended on them for the sake of greater efficiency throughout. Although some suggestions proved economically effective at the work places where they were made, they were not generalized even on the scale of the whole enterprise. In some economic units in Ialomita, Olt, Dimbovita and Arad counties the trade union committees and workers councils are not receptive or interested enough to improve the content of suggestions and consequently do not take the necessary measures to make their application produce the expected results.

In this connection we are trying to eliminate the instances of red tape and routine that still occur, since some mere slogans are still being declared suggestions at points, and they have no technical-organizational measure or action in back of them or the conditions are not provided that are needed to apply those with a sufficiently effective content. We are also trying to interest the trade unions in providing for prompt checking of the effects of a suggestion once it has been applied or adopted, and the necessary means are being created such as record cards, bulletin boards and graphs for recording results. If these are skillfully used, they enable the workers to compare their results promptly and to analyze what they have to do in order to expand the respective measures more successfully. Audiovisual and other propaganda means will also be used more to expand them, which are expected to publicize their content for the workers, foremen, technicians and engineers who will lead the socialist competition after they are applied.

Innovators and Inventors Movement To Meet Current Demands

In the effort to carry out the measures adopted by the party administration and Comrade Nicolae Ceausescu's directives concerning full promotion of the technical-scientific revolution in the current five-year plan, the trade unions jointly with the collective managements in units, centrals and ministries have started and are conducting various activities to encourage more and more workers to help promote technical progress.

According to law the USGR conducts the mass movement of inventors and innovators and, according to the functions with which it is invested, it exercises public control over inventive and innovative activity. The Central Council directed the trade unions to enlist an increasing number of workers with applied-technical aptitudes in the technical creative programs organized in the course of the National Cintarea Romaniei Festival. In order to direct the participants' efforts and inventive capacities toward the essential economic objectives and the economic units' urgent problems, the trade unions and their unions for sectors of activity jointly with the collective managements in ministries, industrial centrals and enterprises drafted and widely publicized the subject plans for inventions and innovations for 1980 and organized collectives to treat and resolve the subjects. They also tried to increase the number of inventors' circles (which has now reached about 2,000) and to improve their activity. Among the programs they initiated, whose diversification and effectiveness have greatly increased this year, we note the competitions among

inventors circles on the county level, subject discussions, conferences and exchanges of experience, and exhibitions of inventions and innovations with products, equipment, apparatus, new tools, labor safety devices and other results for their recognition, assimilation and application to production by as many collectives as possible. In the first half of 1980 alone over 500 inventions and innovations were applied to production in Maramures, Mures, Bacau and Dolj counties, with an economic effectiveness of nearly 100 million lei.

This year, as distinguished from the past, the trade unions made some favorable changes in their approach to the management of the innovators and inventors movement. Before the programs for mass technical creation were drafted most of the enterprises arranged consultations of the workers on the objectives and subjects to be included in these programs and named the collectives of workers, experts and engineers that would resolve the proposed subjects. They also formed collectives that centralized the proposals made by the workers at the monthly assemblies of the trade union groups or on other occasions concerning the possibilities and requirements for innovation and technical progress.

The actions taken on the sector scale were more numerous and of better quality. For example the Committee of the Union of Trade Unions in Metallurgy and Machine Building, jointly with the management of the Ministry of the Machine Building Industry and with the aid of the Brasov County Council of Trade Unions, organized a conference at the Truck Enterprise that was attended by the heads of the innovators circles in 60 enterprises and research and design institutes and 17 industrial centrals. In light industry, an exchange of experience was held at the Lugoj Textila Enterprise under the organizational auspices of the committee of the union of trade unions and the management of the respective ministry concerning generalization of the invention "Installation for Predrying Flat Textiles. It was attended by specialists from the ministry, industrial central and enterprises interested in the use of this machine and this highly economic industrial process.

In describing the actions taken, I do not mean that there are no shortcomings in the effort to encourage mass participation in technical creation. Not in all enterprises have the trade unions succeeded in organizing programs that will help introduce the new in production promptly. On the contrary and as an evidence of red tape, some of them have allowed results from previous years or products in current manufacture that are not novelties to be displayed in the exhibitions organized with their help. Not enough effort is made to promptly generalize some advanced working methods and procedures and valuable technical achievements in the production sectors. Not everywhere do the trade unions try to lend workers participation in mass technical and scientific creation a permanent character and the best of organizational and material conditions. Therefore we try in the course of guidance to help all the trade unions understand the need of optimal completion of every program, so that those undertaken will be formal occasions not only for presenting the results but also for effective stimulation of the masses' interest and more active participation in introducing the new into production and for sound organization of this participation through acceptance of subjects to be resolved. Organized from this standpoint, the stage for production sectors that ended on 1 July 1980 was not only an occasion for review of the effort to develop mass technical creation but also an important foreward step in this direction.

The Romanian trade unions' whole activity is now emphasizing unification of the workers' efforts toward rapid and all-around development of the productive forces, modernization of the economic structures, formation of a strong technical-material base, and training workers, engineers and technicians that can ensure and maintain through increasingly good results the program to enhance the living conditions and welfare of the workers.

The trade unions are trying to better exploit the collectives' mobilizing capacity in order to make the best possible use of the internal reserves at every work place for successful fulfillment of the tasks of the five-year plan of the technical-scientific revolution and in preparation for the one we shall begin next year.

5186
CSO: 2700

USE OF PROFITS IN NEW ECONOMIC MECHANISM

Bucharest MUNCA DE PARTID in Romanian Sep 80 pp 70-72

/Article by Cornel Iuga, deputy minister of finance: "Profit As a General Expression of a Profitable Economic Activity"/

/Text/ In the socialist economy the profit is a part of society's net income or of the surplus product created by the labor for society of the workers employed in the productive sector. In both state and cooperative socialist units the profit is the result of the workers' creative efforts on behalf of further development of production, its greater effectiveness, and growth of the national income.

The profit is the part of the value newly created in the economic units' productive activity that is formed after the following elements are distributed: the levy for society of a part of the value of the net output, remuneration of workers and their other benefits, outlays on research and introduction of new technology, the tax on the total wage fund, the contribution to social insurance, and other live labor outlays.

In summarizing the results of economic-financial activity and the capacity of the enterprises and workers collectives to manage public property with high efficiency, the profit expresses the effect of a multitude of factors including the volume and technical level of the output, the extent of labor productivity, the degree and way of using the the productive capacities, the amount of the production and circulation costs, organization of production and labor, etc. The size of the profit is mainly determined by the volume and structure of the commodity output and production cost. The profit can be increased by increasing commodity production, enhancing its quality and qualitative level, and reducing production costs and the cost per unit of output.

As a major economic category, the profit performs the following main functions in the socialist economy: the basic resource of the enterprises' expanded production, self-administration and self-financing; the economic units' and labor collectives' to obtain optimal results through use of the resources entrusted them by society; a general indicator for estimating the effectiveness of the

economic activity; and a means of control over the economic units' management of the material and financial resources at their disposal.

In view of the profit's vital role in securing the resources essential to development of the productive forces and improvement of the living standard, its growth must be central to economic activity and become a major, priority concern of the party organs and organizations, the collective management organs and all workers. As the party secretary general, Comrade Nicolae Ceausescu, pointed out, "Romanian enterprises must produce more cheaply, manufacture better goods, and obtain increasing profits. That is the only way we shall succeed in making the great construction effort we have already made and are continuing bear increasing fruits on behalf of society and the people's welfare."

The RCP has severely criticized the idea and practice whereby the socialist system can tolerate the existence of units operating at a loss and financed with resources obtained from other units, since this adversely affects the effectiveness of the national economy and the general development of society. As Comrade Nicolae Ceausescu rightly pointed out at the expanded plenum of the National Workers Council in June 1980, "If we wish to carry out the socialist and communist principle of distribution, we must understand that we cannot do so without an effectiveness higher than the capitalist one and a higher profitability.

To induce the economic units to increase effectiveness and to obtain higher profits and profitability according to the principles of the new economic-financial mechanism, legislation was passed whereby the productive units will procure the resources they need for self-financing their activity and as an incentive for the workers collectives on the basis of their tasks in the national plan of development and in proportion to the profits made. At present, according to Law No 29 on Formation, Planning, Allocation and Payment of Profits, the profits that accrue after covering outlays not included in the production costs out of the general financial results and after deducting part of the value of the net output for society are used by enterprises directly for restitution of the funds received to finance investment projects, formation of their own funds for development, material incentive for the workers, payments into the state budget and for other purposes.

The conditions for consistent promotion of economic-financial self-administration in practice were created by the improvements made in the use of the profit or by substantial development of its role in the enterprises' economic activities. Thus 34.5 percent of the total profits, or over 48 billion lei, was made available to the state enterprises in 1980 to form their economic development fund, circulating capital fund, fund for housing construction and other social investments, fund for social programs, fund for workers profit-sharing and to meet other internal needs.

To encourage the workers collectives to exploit the reserves for more effective use of production capacities, more intensive growth of labor productivity, better use of raw materials, materials, fuels and energy and to save on production costs, which savings will take the form of extra profits, the legal provisions specify that most of the above-plan profits will be available to units.

It is a highly important fact with profound implications for the economy that the measures to develop the role of the profit were not confined to the state economic units but equally apply to the cooperative sector. According to the directives of the RCP administration, the profit was introduced as one of the major indicators of the economic activity of the agricultural, artisan and consumer cooperatives, in order to form a uniform framework for forming the funds throughout the socialist economy. As a result the cooperative units also use the profit mainly as a resource for the economic development fund and the circulating capital fund. Moreover, in view of the distinctive features of the cooperative units, the profit is also used to meet some of their particular needs, including the reserve fund for production and remuneration of labor, the intercooperative fund for mutual aid and consolidation, the fund for cultural and sports programs, and the fund for profit-sharing for the social part formed out of the cooperative members' cash deposits.

The great importance attached to the profit during the improvement of the economic-financial mechanism as a main source for general social development, for forming the internal development funds and for implementing the measures to raise the workers' living standard requires every state or cooperative economic unit to take part both in the process of planning and preparing the budgets of incomes and outlays and especially in the current everyday effort to mobilize the entire material, technical and human potential for exemplary fulfillment of all plan tasks concerning the net output, physical production, costs and profits. To this end the economic unit will provide for determination and implementation of production in the physical structure corresponding to the domestic and foreign market demands and determined by economic contracts or firm orders; complete and intensive use of the unit's production capacity, obtaining increased production per 1,000 lei of fixed capital; regular growth of labor productivity and rationalized labor consumption; conformity to the approved work norms and personnel regulations; proper proportioning of the funds for remuneration of labor and their economic and efficient use; conformity to the norms and standards for consumption and stores of raw materials, materials, fuel and energy and reduced specific consumption; better use of material resources and a better quality of products and services; more rapid attainment of the planned parameters of investment capacities; promotion of technical progress and use of scientific research results to modernize production; limiting the general outlays and administrative-managerial outlays to what is strictly necessary; further reduction of production and circulation costs, the most efficient management of material and financial resources, a strict regime of economy in all activities, and tighter plan and financial discipline in all sectors.

The generalized application of the new economic-financial mechanism in the course of 1979 demonstrated that it stimulated efforts to enhance economic effectiveness, profit and profitability. At the same time, as it was pointed out in the expanded plenum of the National Workers Council, not everywhere was it understood or firm action taken to conduct the entire activity with maximum effectiveness, to produce at lowest possible costs and to firmly eliminate the losses. "We must make every effort so that the principles of the economic mechanism will be well understood and steadfastly applied...," Comrade

Nicolae Ceausescu said in pointing out the necessity of considering well with what material and manpower outlays we implement production, of pursuing more intensive growth of the net output and the national wealth, and of securing a correct distribution of the national income between the development fund and the consumption fund, while within the consumption fund the part allocated to remuneration of labor must be in the highest proportion in every worker's incomes.

Of course the expanded functions of the profit in economic activity and, by the same token, its enlarged role in stimulating more effective economic activity mean heavier tasks for the units' management councils. The workers councils as well as the financial-banking organs are expectly to strictly proportion, on a realistic basis, the volume of profit entered in the budget of incomes and outlays and its purposes as well, so that in the stage of preparing the plan the workers collectives' efforts will be directed and channeled toward finding ways and means of cutting production costs and especially material outlays, of accelerating the rotation of the funds, and of obtaining high economic effectiveness.

And in the course of executing the plan the collective management organs and the financial-banking organs are required to check and take prompt measures for strict fulfillment of the production tasks in the specified assortment, close conformity to the level of the total outlays and regulation inputs of raw materials, materials, fuels and energy, starting manufacture of products with an assured sale only, prevention and elimination of immobilizations of funds, etc. so that the entire planned profit will be realized.

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END

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12 November 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2061

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12 November 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2061

CONTENTS

INTERNATIONAL AFFAIRS

CEMA Activities, Cooperation in 1979 Reviewed
(Hans-Joachim Dubrowsky; DEUTSCHE AUSSENPOLITIK, Aug 80) 1

ALBANIA

Importance of Ore-Enrichment Activity Stressed
(Editorial; ZERI I POPULLIT, 16 Aug 80) 11

CZECHOSLOVAKIA

Last Quarter of 1980 Viewed--Managers Penalized for Shortfalls
(PRAVDA, 30 Sep 80) 14

Replacement of Labor by Capital Successful in Experiment
(Milos Pick; HOSPODARSKE NOVINY, 19 Sep 80) 16

Importance of Labor Allocation Under Set of Measures Reviewed
(Premysl Tomasek; HOSPODARSKE NOVINY, 26 Sep 80) 27

Use of Khozraschet in Construction Industry Discussed
(Jindrich Madry; HOSPODARSKE NOVINY, 26 Sep 80) 32

Effective Cattle Breeding Necessary
(Miroslav Dvoracek, Ladislav Biedermann; HOSPODARSKE NOVINY, 26 Sep 80) 38

GERMAN DEMOCRATIC REPUBLIC

Inner-German Trade at Half-Year Mark Analyzed
(INFORMATIONEN, Aug 80) 50

HUNGARY

New Incentive System Introduced at State Farms
(Zoltan Toszegi; PARTELET, No 10, 1980) 54

Implementation of Resolutions in Industrial Pest County Studied
(Andras Arato; PARTELET, No 10, 1980) 60

POLAND

Chadzunski Assesses Polish Export Activities in U.S.
(Henry Chadzynski; ZYCIE WARSZAWY, 15 Aug 80) 66

YUGOSLAVIA

West German Comment on Problems of Self-Management System
(DIE WELT, 18 Oct 80) 69

CEMA ACTIVITIES, COOPERATION IN 1979 REVIEWED

East Berlin DEUTSCHE AUSSENPOLITIK in German Vol 25 No 8, Aug 80 signed to press 3 Jul 80 pp 26-36

/Article by Dr Hans-Joachim Dubrowsky, Bruno Leuschner College of Economics, East Berlin: "CEMA Cooperation 1979"/

/Text/ 1979 was a year of intensive economic cooperation among the CEMA countries. The international division of labor further advanced in the CEMA region, the conceptual work for the main trends of cooperation through 1990 was largely concluded, coordination of the 1981-1985 five-year plans initiated. In 1979 CEMA again increased its international influence and adopted important international initiatives.

1979--The 30th Anniversary of CEMA

In January 1979 the Council for Economic Mutual Aid celebrated its 30th anniversary. The governments of the member countries considered this an outstanding event. The 33rd Council Meeting in the summer of 1979 produced a comprehensive collective appraisal of the work done and future CEMA tasks.[1] At the same time the CEMA countries stressed that the operations of CEMA pursued the same goals throughout these 30 years: To develop close economic links among the fraternal countries, to strengthen the power and unity of the socialist community of nations, and to promote the construction of socialism and communism.[2] At the same time they stated:

"By praising the results of the 30 years of operation of the Council for Economic Mutual Aid the heads of delegations to the 33rd Council Meeting give notice of the firm resolve of the CEMA member countries in future also to deepen all-round economic and scientific-technological cooperation, to breathe life into the principles of the Complex Program for the further deepening and perfection of cooperation and the advance of socialist economic integration among the CEMA member countries in the interest of every single member and the CEMA community as a whole, in the interest of the construction of socialism and communism and the guarantee of lasting world peace."[3]

The Preparation of Long-Range Strategies

Concluded in 1979 was the preparation of the five long-range target programs for the period 1980-1990 regarding cooperation in important areas. The summer 1979 Council Meeting enacted the last two target programs: For cooperation in the field of industrial consumer goods and for the development of transport links between the

CEMA countries. Furthermore the target program, enacted in 1978, on cooperation in machine construction was supplemented by agreements on making available machines and equipment to industries producing industrial consumer goods and to the transportation systems.

The program for cooperation in the field of industrial consumer goods orients to the improvement of quality, the renewal and expansion of assortments, the standardization of efforts to introduce new technological processes which will result in greater productivity and improved working conditions. The program for cooperation in transportation services serves the development of efficient transport links between the CEMA countries, border rail depots and ports, the improvement of cargo carrying services by inland shipping and road transport, the expansion of container services and other modern types of transportation, including the mechanization of loading and unloading operations.

Within this context and to implement this target program an agreement was concluded in 1979 on cooperation in rail transport, the comprehensive development and reconstruction of motorways, and civil aviation. They include coordinated measures for the reconstruction and technical reequipment of important international rail routes. the construction of new rail border crossings, the motorways Moscow-Warsaw-Berlin and Moscow-Bucharest-Sofia, international airports and the joint use of international airlines.

The CEMA countries must conclude some 150 agreements to carry out the five long-range target programs. Twenty-two had been concluded by the time the 33rd Council Meeting began; another 14 were signed at the meeting. In the meantime many more agreements have been enacted. On 1 March 1980 the count was 52, including 10 in the energy/raw material/fuel field, 15 relating to transportation and 7 to agriculture and the food industry. In addition to the target programs which are of a multilateral nature and therefore incorporate coordinated strategies for the entire community in the respective fields, the first two long-term bilateral agreements were concluded in 1979 between the Soviet Union as the chief partner of all the other CEMA countries and two European member countries; both involved specialization and cooperation: In September with the People's Republic of Bulgaria and in October, on the occasion of the 30th anniversary of our republic, with the GDR. In early 1980 similar programs were coordinated by the Soviet Union with the People's Republic of Poland and the CSSR, in May with the Socialist Republic of Romania. When this work is finally completed we will have an entire system of bilateral agreements which will, on the one hand, help implement the target programs and on the other begin to transcend the areas included in the five target programs.

These bilateral agreements on specialization and cooperation, suggested at the Crimean Conference of the general secretaries and first secretaries of the fraternal parties, are to be operative until 1990, just like the target programs. Together with the target programs they represent the basic coordination documents for the next two five-year plan periods. They provide the basis for ensuring that this period turns out to be a decade of intensive international specialization and cooperation in science and production, as is the aim of the CEMA countries party leaders.

The program of specialization and cooperation agreed by the GDR and the USSR sets out the basic directions for the development of economic and scientific-

technological cooperation, especially the further combination of the material resources and scientific-technological potentials of the two countries. This is of crucial importance for both partners, because the Soviet Union accounts for about 30 percent of the GDR's foreign trade turnover with the CEMA countries and for some 36 percent of the GDR's total foreign trade turnover and is therefore our major trading partner. By coordinating the main directions of the division of labor between the two countries for the next 10 years the GDR enjoys important premises for the division of labor with the other countries also as well as a reliable base for its own economic development.

In 1979, starting from the signed and sealed program of international specialization and cooperation between the GDR and the USSR, the equal government commission decided the main directions of specialization and cooperation for some industries. Examples are the chemical industry and petrochemicals, the electronic and electrical engineering industry, equipment construction, machine tool, foundry machine, textile and printing machine manufacture, farm machine construction and machine construction for the light and food industries. In June last the equal government commission enacted another 20 main directions. The resolution on the respective main directions provides for precise measures for the planned international division of labor in the sectors involved. They will be implemented by the competent ministers.

Plan Coordination 1981-1985

1979 was the year of intensive preparations for plan coordination in the period 1981-1985. We cannot value highly enough the fact that the CEMA countries are making an early start on coordinating the drafts of their five-year plans. All CEMA countries consider cooperation in planning, including the coordination of the five-year plans, the main method for the organization of their economic and scientific-technological cooperation. It is possible only in socialist countries to organize reciprocal relations in this kind of planned manner. It requires the social ownership of the means of production, total societal planning and socialist principles of international cooperation.

Consequent upon the intensive preparatory work in CEMA and at the bilateral level throughout 1979, protocols on the results of plan coordination were signed by some CEMA countries in early 1980. That represented a tremendous gain of time for the preparation of the five-year trade agreements and the completion of the five-year plans of the countries involved.

In early February 1980 the GDR was able to conclude the most important plan coordination protocol with its main integration and trading partner, the Soviet Union. In the coming five-year plan period the Soviet Union will again account for about a third of our foreign trade and roughly half of our trade with the CEMA countries.. This fact explains why the coordination of the two countries five-year plans is of the utmost importance for us.

The protocol on the results of plan coordination with the USSR takes over the measures of the long-range target programs, the program of specialization and cooperation through 1990 and other long-range documents insofar as they apply to the period 1981-1985. Coordinated at the same time was the reciprocal exchange of goods. At 1979 prices the next 5 years trade between the GDR and the USSR is to increase

to 240 billion valuta marks. That corresponds to a 30 percent rise by comparison to the current five-year plan period. Reciprocal machine deliveries will climb to about 135 percent and deliveries of chemical products to about 140 percent.

Of particular importance for the GDR is the fact that it will once again be able for 5 years to meet the major part of its raw material import needs from the Soviet Union and at the same time supply large quantities of finished products to the USSR. The Soviet Union has agreed to supply us with 95 million tons of crude oil, 32.5 billion cubic meters of natural gas, 21 million tons of hard coal, 8.5 million tons of iron ore, 16 million tons of rolled goods, 7.7 million cubic meters of lumber, 44,300 tons of cotton, 457,000 tons of wood pulp, 650,000 tons of aluminum and many other products important for us.[4] The quantities will generally be greater than in the current five-year period, though the delivery volume of some raw materials, such as crude oil, will remain at the 1980 level.

In the period 1981-1985 the GDR sill supply to the Soviet Union (among other items) 370,000 geared engines, 3,700 rotary crawler cranes, 6,000 refrigerated freight cars, 3,275 long distance passenger rail cards, 150 ships and many other products, especially of machine construction, the electrical engineering and electronics, chemical and consumer goods industries.[5] The USSR's machine deliveries to the GDR include equipment for nuclear and thermal power plants, geological prospecting, the construction and building material industry as well as metallurgy, all of which is very important for us indeed.

Rising International Trade of the CEMA Countries

The CEMA countries foreign trade turnover in 1979 amounted to R196 billion, rising by nearly 13 percent. Reciprocal trade again accounted for the lion's share, some 58 percent of the total turnover--R111 billion. In 1979 the foreign trade turnover of the individual CEMA countries increased as follows:

Bulgaria	+ 11.4 percent	Romania	+ 19.1 percent
Hungary	+ 13.4 percent	GDR	+ 12.0 percent
Cuba	+ 2.6 percent	Soviet Union	+ 14.3 percent
Mongolia	+ 12.0 percent	CSSR	+ 10.7 percent
Poland	+ 8.9 percent	Vietnam (imports)	+ 10.7 percent

Even when we consider that 1979 witnessed another price increase in international trade, it is evident that the CEMA countries have succeeded in further expanding trade.

In 1979 also the CEMA countries met the major part of their import needs from reciprocal deliveries, especially on the basis of close cooperation within the framework of socialist economic integration. The percentage of reciprocal deliveries in the CEMA countries total 1979 imports amounted to nearly 68 for machines and equipment, 93 for hard coal, about 70 for iron ore, 60 for rolled ferrous metal goods and 68 for crude oil. Percentages for some countries were actually considerably higher than that.[7] The GDR, for example, met some 90 percent of its crude oil needs from USSR deliveries.

Resulting from the further rise in the turnovers in the CEMA countries reciprocal trade we also had an increase in the settlements made in transferable rubles at the

International Bank for Economic Cooperation. The total volume of operations in transferable rubles at that bank amounted to 165.6 billion in 1979, a 9.5 percent rise. Reciprocal settlements (accounted for to 95 percent by settlements arising from the exchange of goods) amounted to 114 billion transferable rubles. The bank's volume of lending rose by 46.3 percent in 1979 and amounted to 8.3 billion transferable rubles. Short-term settlement loans accounted for about 90 percent. At the end of 1979 the CEMA countries had achieved a better balance in their reciprocal payments than in 1978, so that the loans outstanding on 31 December 1979 were 8 percent lower than at the end of 1978.

New Integration Projects Operational

Operations started in November 1979 in one of the major joint projects undertaken by the CEMA countries, the Kiyembai asbestos combine (strip mining and processing plant) in the Soviet Union. Initially the plant is producing 250 kilotons of asbestos per annum; its ultimate capacity will be 500 kilotons. Involved in the construction of the facility in addition to the USSR were Bulgaria, Poland, the GDR, Hungary, Romania and the CSSR. They contributed 106.2 million transferable rubles to the construction costs which amounted to a total of 335 million transferable rubles.[8] This involvement was represented mainly by supplies of equipment for the joint project. The GDR, for example, sent structural metal, cables, cement, two cement mills, crawler and rail cranes, pumps and electric locomotives. Excavators, freight elevators and dump trucks came from Poland. The CSSR supplied electric locomotives and dumpsters, Bulgaria small transport vehicles, among others, Romania electrical and electronic equipment, Hungary special constructions, and so on. The countries involved will receive large asbestos deliveries for initially 12 years:

Agreed Asbestos Deliveries to the Participating Countries (1,000 tons)[9]

	1980	1981	1982-1991
Bulgaria	20.0	36.0	40.0
CSSR	7.0	11.9	14.0
Poland	25.0	44.5	50.0
Hungary	1.5	2.5	3.0
GDR	20.0	36.0	40.0
Romania	15.0	25.5	30.0

Another major integration project, the Ust-Ilimsk woodpulp combine, began test runs at the end of 1979. Involved here in addition to the Soviet Union (the country of location) are Poland, Hungary, Bulgaria, Romania and the GDR. Following the tests, the first expansion stage with a capacity of 250 kilotons started full operations in April 1980, and deliveries to the countries involved began also. Here again deliveries are initially set for 12 years, 48 kilotons per annum to Bulgaria, 40 kilotons to Poland, 39 kilotons to Hungary, 50 kilotons to Romania and 28 kilotons to the GDR.

The investment volume of this common project is substantially larger than that involved in the Kiyembai asbestos combine. It amounts to some 800 million transferable rubles, and some 40 percent of this sum are being paid by the five countries which joined the Soviet Union in the construction.[10] Accordingly their share of the plant's production has also been fixed at about 40 percent (205,000 tons per annum).

For the woodpulp combine the participating countries again mainly supplied equipment, but deliveries also included consumer goods and chemical products. The GDR, for example, made available for Ust-Ilimsk metal structures, electrical devices, ventilation and refrigeration equipment. Bulgaria supplied cables, loading and unloading devices, Hungary warehouse and ventilating equipment, Poland metal structures, dyes, varnishes and pipes, Romania cables and metal structures. The future importance of this joint venture for the CEMA countries supply is demonstrated by the fact that the timber reserves of the Ust-Ilimsk region will last for more than 50 years based on the planned annual production of 500,000 tons of woodpulp.

Also largely completed in 1979 was the Adria oil pipeline, an interesting joint venture of the CEMA countries Hungary and CSSR with the Socialist Federative Republic of Yugoslavia. This runs from the new deep sea port of Omisal on the Adriatic island of Krk near Rijeka through Yugoslavia and Hungary to the CSSR and will carry Mideastern oil to those countries. Hungary and the CSSR participated with a loan and the construction of the Hungarian sector up to the pipeline's joining up with the "Friendship" oil pipeline. Yugoslavia will pay for the loan by providing transit services. The final capacity will be achieved in 1980; from them on Hungary and the CSSR will receive 5 million tons of crude per annum by way of the pipeline. The "Adria" pipeline is a splendid example of the CEMA countries excellent cooperation with Yugoslavia which, since 1964, has been linked to CEMA by a government treaty and participates in the work of nearly all CEMA organs. It is worth mentioning that, in 1979, two thirds of the CEMA countries trade with other socialist countries was accounted for by trade with Yugoslavia.

Completed in the Soviet Union shortly before the end of the year was the first expansion stage of Atommash, a major plant for the mass production of power plant equipment. This operation is of the utmost importance for the implementation of the long-range energy target program. It will supply the main equipment for the majority of the nuclear power plants planned by the CEMA countries. To be constructed here are 1,000 megawatt reactors which represent a new generation by comparison to the 440 megawatt reactors which have so far been used exclusively in the CEMA region. Also supplied by this plant will be the equipment for the two community power plants of 4,000 megawatts each, projected in the target program. They are to be constructed in the Soviet Union in the course of the next few years. "Atommash" is the chief material base for raising the proportion of nuclear energy in the USSR's energy balance from 5 percent now to 25 percent in 10 years time.

Also recorded in 1979 were many other events related to the completion of important integration projects. Among others natural gas began to flow through the Soyuz pipeline from Orenburg, and the first electricity arrived from the USSR via the initial 750 kilovolt community line. The GDR was involved in both projects. They will now yield precious energy to the GDR for a long time to come.

Again in 1979 the International Investment Bank provided an effective contribution to the further deepening of the CEMA countries' economic cooperation. It handed out 5 new loans in the total amount of 94.4 million transferable rubles. Total loans granted by the bank now number 65. (In April 1980 the bank council approved another 6, including a first loan to an international economic association.) The International Investment Bank approved a total of loans amounting to about 3.2 billion transferable rubles in the period 1972-1979, 2.5 billion of which have so far been called upon. Forty-three projects have already been completed. In 1979 these

completed projects yielded about 1 billion transferable rubles worth of additional goods for reciprocal exchange.

The loans granted by the bank in the years 1971-1979 went to the following industries:

Fuel and energy	76.1 percent
Machine construction and metal processing	11.3 percent
Metallurgy	6.0 percent
Chemicals	3.1 percent
Others	3.5 percent

Extensive International Relations and Operations

1979 also witnessed another expansion in CEMA's international relations. CEMA now maintains permanent relations with about 60 international organizations and, in 1979 alone, attended nearly 50 conferences held by UN facilities.

The 30th anniversary of the Council for Economic Mutual Aid found a widespread international echo. Attending the 33rd Council Meeting of the member countries in addition to the delegation from the Socialist Federative Republic of Yugoslavia were observer delegations from the People's Republic of Angola, the Democratic Republic of Afghanistan, the Republic of Iraq, the People's Democratic Republic of Yemen, the People's Democratic Republic of Laos, the United States of Mexico, the People's Republic of Mozambique, the Republic of Finland and Socialist Ethiopia. Also in attendance were a representative of the UN General Secretary and representatives of the UN Economic Commission for Europe (ECE) and the UN Organization for Industrial Development (UNIDO). At the request of the Government of the People's Democratic Republic of Yemen the Council Meeting adopted a resolution on Yemen's observer status with the council organs.

In 1979 the CEMA executive committee discussed coordinated economic cooperation with Ethiopia, Angola and Kampuchea. As far back as the 87th meeting (October 1978) of the executive committee, the interested CEMA countries responded to a request by Socialist Ethiopia and coordinated the trends of multilateral cooperation with that country. They also exchanged information about multilateral economic and scientific-technological aid for the People's Republic of Angola to serve the latter's agricultural development. In late March 1979 the 89th meeting approved a program for the cooperation of interested CEMA members in the development of Angolan farming. At that executive committee meeting interested member countries also dealt with issues regarding material aid to the People's Republic of Kampuchea. It is common knowledge that, subsequently, various CEMA countries concluded agreements with the Government of the People's Republic of Kampuchea concerning economic aid, including supplies free of charge. In addition to the USSR these countries include the GDR.

The "Declaration on the 30th Anniversary of the Council for Economic Mutual Aid" was able to claim that the attraction of the principles and methods of cooperation among the member countries, their outstanding socioeconomic successes, the steadily firmer democratic nature of CEMA operations and its great international authority

exert a beneficial effect on world economic relations and arouse growing interest for the experiences of this cooperation among many countries worldwide.

"Yugoslavia's involvement in the work of the CEMA organs is increasing. Cooperation is proceeding with the Korean Democratic People's Republic and the People's Democratic Republic of Laos. Multilateral economic relations are being initiated with the People's Republic of Angola and Socialist Ethiopia. CEMA cooperates on the basis of agreements with Iraq, Mexico and Finland."[11]

In 1979 the CEMA countries again emphasized their willingness to develop--on either a bilateral or multilateral base--an equal, mutually beneficial cooperation with all socialist countries, developing countries and others. In the course of 1979 the CEMA organs were frequently concerned with relations to the EEC because about 60 percent of the CEMA countries trade with the capitalist industrial countries is transacted with EEC members. They reiterated the willingness of CEMA and its member countries to conclude with the European Economic Community and its member countries an agreement based on the equality of the two communities and in the interest of total European cooperation.

"The CEMA member countries are resolved to strengthen the bonds of friendship and equal cooperation with all socialist countries. They consistently champion the development of equal and mutually beneficial cooperation with developing countries as well as other states, regardless of their systems."[12]

In 1979 the CEMA countries concluded more than 100 new long-term agreements on economic and scientific-technological cooperation with 39 developing countries. They now maintain economic relations with 86 developing countries, including 25 in Asia, 41 in Africa and 20 in Latin America. In 1962, by way of comparison, trade relations existed with a total of only 36 developing countries. By the end of 1979 some 1,500 agreements on long-term industrial cooperation, for example, had been concluded with these countries. About 300 mixed companies and banks with financial participation of socialist countries are operating on capitalist markets.

At the same time 1979 also offered the CEMA countries several occasions to issue official statements commenting on imperialist attempts to misuse economic relations for the exertion of political pressure on the socialist countries. Such attempts are doomed to failure. At the 93rd meeting of the executive committee in early 1980 the CEMA countries unanimously agreed that they intended to counteract any worsening in international relations and will struggle for an end to discrimination as well as for the achievement of full equality.

Vietnam--The Latest CEMA Member Country

In 1978 the Socialist Republic of Vietnam joined CEMA. Since then CEMA and its organs did a great deal of work in order to include Vietnam in CEMA operations and provide effective aid to that country. The representatives of Vietnam began by collaborating in the committees of the council and are gradually joining in the permanent committees. Programs for cooperation in various fields were drawn up. The 33rd Council Meeting adopted the basic resolution to extend to the Socialist Republic of Vietnam the measures of the Complex Program aimed at the speeded-up development of the Mongolian People's Republic and the Republic of Cuba. This provided an

important and fundamental decision by which Vietnam, just as the other two extra-European member countries, will enjoy the extensive backing of the other CEMA member countries for its own socialist construction.

In 1979 the CEMA members were compelled to consider the Chinese aggression against their fellow member country. A declaration by the executive committee in late March 1979 summarily condemned Chinese aggression on behalf of the member countries Bulgaria, Hungary, Vietnam, GDR, Poland, Mongolia, Cuba, USSR and CSSR.

"Faithful to the principles of socialist internationalism the People's Republic of Bulgaria, the Hungarian People's Republic, the GDR, the Republic of Cuba, the Mongolian People's Republic, the People's Republic of Poland, the USSR and the CSSR declare their full solidarity with heroic Vietnam."[13] At the same time these countries adopted measures for prompt aid to the Vietnamese fraternal people and stated their firm resolve to continue backing the just cause of the Vietnamese people. The GDR's party and government leaders, for example, decided to grant urgent additional aid to the Socialist Republic of Vietnam and to supply goods to a total value of M265 million free of charge.

It was also of the utmost importance for the Socialist Republic of Vietnam in 1979 that the International Investment Bank of the CEMA countries granted it a first loan. The money was earmarked for the construction of a nitrogen fertilizer plant which will be built in Vietnam with Soviet aid and is to have an annual capacity of 200 kilotons. This plant will help largely to raise rise yields in the Socialist Republic of Vietnam. After completion the proportion of domestic production in meeting nitrogen fertilizer needs will rise from the present 4 percent to 25 percent.

Further pursued in 1979 was the CEMA countries contribution to the construction of projects in Vietnam, especially important because the People's Republic of China had ceased technical aid for these projects in 1978. The CEMA countries 1979 exports to the Socialist Republic of Vietnam expanded substantially, those of the Soviet Union, for example, from R305.5 million in 1978 to R446.2 million in 1979. Toward the end of the year the Socialist Republic of Vietnam was accepted as a member of "Intersputnik," the organization of socialist countries for space communications.

For the CEMA countries 1979 was a year of intensive cooperation and important strategic decisions for the future. It will now be necessary to translate these decisions into practice so as to achieve an effective contribution to the greatest possible efficiency, a substantial rise in capacity and, consequently, the further stable and successful progress of the economies of all the countries involved.

FOOTNOTES

1. See W. Ullmann, "Successful Cooperation in CEMA," DEUTSCHE AUSSENPOLITIK, Berlin 1979, No 9, pp 10 ff.

2. See "Declaration on the 30th Anniversary of the Council for Economic Mutual Aid," NEUES DEUTSCHLAND, Berlin, 30 June/1 July 1979.

3. Ibid.

4. See NEUES DEUTSCHLAND, Berlin, 6 February 1980.

5. Ibid.

6. Source: INFORMATIONSBULLETIN of the International Bank for Economic Cooperation, Moscow 1980, No 8.

7. EKONOMICHESKAYA GAZETA, Moscow 1980, No 16, p 21.

8. See GDR-AUSSENWIRTSCHAFT, Berlin 1979, No 48, p 1.

9. Source: I. Vince, "CEMA's International Monetary System," Budapest 1978, p 89.

10. See DDR-AUSSENWIRTSCHAFT, Berlin 1980, No 15, p 1.

11. NEUES DEUTSCHLAND, Berlin, 30 June/1 July 1979.

12. Ibid.

13. See "11. Tagung des ZK der SED. Bericht des Politburos an das ZK der SED" /Eleventh SED Central Committee Plenum. Politburo Report to the SED Central Committee Plenum/, Berlin 1980, p 21.

11698
CSO: 2300

IMPORTANCE OF ORE-ENRICHMENT ACTIVITY STRESSED

Tirana ZERI I POPULLIT in Albanian 16 Aug 80 p 1

[Editorial: "Ore-Enrichment—A Great Reserve and a First-Rate Duty"]

[Text] In his speech "The Progress of the Country Is Inseparable from the Development of Science and Technology," delivered at the Eighth Plenum of the Party Central Committee, Comrade Enver defines the broad and extensive development of the enrichment and processing of mineral ores for the Seventh Five-Year plan and for the future as "one of the main links and fields of the scientific-research work and of technical progress."

Plants for the enrichment of copper, chrome, coal, iron-nickel, and quartz ores and so forth have been built and put into operation in our country, in addition to the various workshops for selection built near every mining enterprise. This made it possible, for example, to proceed this year to the enrichment of 70 percent of the copper ore, 20 percent of the chrome ore and 40 percent of the coal and so forth. These facts constitute a success for our economy and a base from which we must start in making more rapid steps forward toward implementing the directives of the Seventh Party Congress so that we will enrich all our mineral ores and increase their value before they go for processing and exportation.

The implementation of this directive is closely linked with the party guideline to make our socialist economy even more powerful and more independent. The rapid achievement of the objectives in this field demands that our workers and scientists, who work for the enrichment of the known ores and of the new ones which are continually penetrating into our economic circulation must form a more complete and far seeing understanding and conception of the importance, role and proportions of the development of this branch of the mining industry. This industry no longer extracts only a few mineral ores; on the contrary, it extracts dozens of kinds of mineral ores, many of which exceed the million of tons produced. Therefore, progress in the field of mining is determined by the evaluation given to the studies, planning and training of cadres, to the introduction of advanced technological indicators and the improvement of the economic effectiveness of this vital branch of our economy. Mineral ores are the bread of industry.

The party has been concerned with discovering and increasing reserves of mineral ores. Our country is very rich in mineral ores. They have been increased and are being increased in quantity; and many of them are being utilized. However, there still are minerals that wait for the enrichment specialists to say their word

so that they will be included in the economic circulation. Such are the phosphorites, bauxites, titanium-magnetites, polymetals, coastal sands and many others. The discovery and rapid clarification of the reserves contained in every kind of ore and the complete knowledge of their components constitutes the first objectives of the study, design and construction of enrichment plants for the mineral ores which still are not utilized.

If today the level of the enrichment of mineral ores, compared to those which are extracted, has reached the level which we referred to above, in the future, as a matter of fact from 1981 on, this relationship will deteriorate if the increased quantities of the mineral ores extracted from the subsoil is not accompanied by an increase of the capacities of the existing enrichment plants and by the construction of new plants.

The rapid commissioning, with full capacity, of the new plants, especially the speeding up of those plants which are in the state of being designed and constructed, constitutes an urgent task. Those are the projects linked with the extraction and enrichment of phosphorites. They are being greatly expanded, at a time when the country is facing great expenditures in buying phosphorites through imports. The studies and their implementation are also urgent in order to provide our ferrous metallurgy plants with coking coal, iron ores without nickel and so forth, without neglecting the other projects for bauxites, asbestos and so forth, for which the economy has increasing demands. The work of some study-groups, established at the departmental level, is progressing slowly. The possibilities exist for providing many mineral raw materials in the country, but their transformation into products requires more efforts both on the part of scientific institutions and on the part of geological and building enterprises. Many work groups are working for the enrichment of phosphorite ores. The experimental results are good, especially those of floatation, of treatment with nitric acid, of molasses, and of SO_2 gas and so forth. The specialists and designers involved in their enrichment process have overcome many difficulties. It is important to stress that in many cases the results that have been achieved have great scientific value. The design work for the construction of floatation enrichment plants has begun. However, as is shown by experience, the construction of projects is not progressing at the desired pace, so that they will be built not only in accordance with planned deadlines, but also more quickly. The study and technological blueprints for the bauxite enrichment plants and for the production of good quality aluminum oxide have been concluded for more than a year but, the work has been left in the middle of the road. This, because, the group entrusted with the design of machines and equipment has not been fully staffed. This was caused by bureaucratic obstructions in regard to the selection and determining of the cadres who will deal concretely with these matters. The aluminum industry of our country is facing new perspectives. It is in our power to bring these perspectives nearer to us; but, the apparatus of the Ministry of Industry and Mines and the Executive Committee of the Tirana District Party Committee must overcome some delays. In regard to this, too, it is impermissible to delay the staffing of the study and design group with the needed specialists who can deal with these studies successfully.

There also are unsolved problems in regard to the enrichment of coastal loose soils in regard to which there is a special decision of the Council of Ministers.

The study and designing of enrichment plants and the production of machines and equipment with our own forces have brought up two problems which must be solved:

first, it is essential that we pass rapidly to the planning of new technological machines (going beyond the phase of the reproduction of those which we know), such as self-grinding mills, floatation machines with high yields and high recovery, tables with many levels for the concentration of chrome ores, portable enrichment machines and so forth. In regard to this, the workers of the Institute of Technological Studies and Designs for mineral ores are working with outmoded methods without high yields in study and planning work. Secondly, it is necessary to study the possibility of placing the production of machines and equipment on healthier bases by having specialized production in plants and by strengthening cooperative relations between them. The solving of these problems cannot tolerate delays. If, for example, the capacity of a plant, such as the "Dinamo" plant in Tirana, is not sufficient to produce machines for 5 enrichment plants and workshops per year, this situation must be thoroughly studied, not in order to justify delays and to justify the quality of their production, but in order to achieve the objectives by all means, through good cooperation. In this field, there is a great reserve which is not being fully mobilized.

Coal extraction has been increased; however, the situation of its enrichment process is not satisfactory. About 60 percent of the coal yield is sent to consumers uncleaned. This reduces the heating power 20-40 percent. In other words, this means that the same quantity of coal is lost only because it is not enriched. This very acute problem requires solution, by increasing the capacity of existing plants and by means of new plants with great capacity. The Institute of Technological Studies and Design of the Mining Sector must feel more responsible for this; the institute is asked to organize much better the management of the study and scientific work for the enrichment plants.

The enrichment of mineral ores enriches the country. Mineral resources are a great treasure for our people. Along with the mines and mineral ores that we extract today, our geologists are continually opening new prospects. It is our duty to use this irreplaceable wealth thoroughly and sparingly. The role of enrichment processes in this field is great and profitable. A broader scientific work and a better cooperation of all the forces of our industry are needed in order to rapidly achieve the objectives that are assigned by the party.

9150
CSO: 2100

LAST QUARTER OF 1980 VIEWED--MANAGERS PENALIZED FOR SHORTFALLS

Bratislava PRAVDA in Slovak 30 Sep 80 p 1

[Article: "Last Quarter of 1980"]

[Excerpt] The fourth quarter of 1980, which begins on 1 October, is not only the last quarter of this year, but also the quarter in which the Sixth Five-Year Plan will be completed. It is hard to believe that this period went by so rapidly. After all, with the work and worries connected with it, time often passes incredibly fast.

Following the 14th plenary session of the CPCZ Central Committee, the CPSL Central Commi-tee in December 1979 stated with reference to 1980: "... The ministries, national committees, and enterprises must, much more consistently and with greater foresight, create the conditions for an even fulfillment of the plan and thus cope with harmful fluctuations in its implementation..."

What is the reality of the first 8 months of 1980? From the beginning of this year, 47 industrial enterprises failed to fulfill the production plans by a total of Kcs 568 million, and 47 construction enterprises missed the plan target of basic construction work by a total exceeding Kcs 238 million. Only 35.5 percent of the annual plan was completed in all forms of housing construction. As for exports, all industrial sectors fulfilled their shipments to the socialist states. The plan of deliveries to the nonsocialist states, however, fell short of the goal by Kcs 9 million (at wholesale prices). This means that on the average every fourth enterprise fell behind. The largest number of enterprises which did not fulfill their obligations was in the woodworking, chemical and engineering industries (seven enterprises in each), building materials, glass and food industries (four enterprises in each), and as to the volume--the East Slovak Iron Works Kosice. In other words, the total shortfall in the obligatory contracted shipments to the nonsocialist states caused by 39 industrial enterprises exceeded Kcs 240 million (at wholesale prices). And what is the situation in the deliveries for domestic manufacturing consumption and operations? This plan fell short of the goal by Kcs 924 million, and the number of enterprises which lagged behind increased from 75 in July to 82 in August 1980. In other words, every third enterprise failed to fulfill the economic plan in this area of production. The largest number of enterprises which lagged behind was in the engineering (24), chemical (17), consumer(16) and food (9) industries.

With the exception of Pozemne Stavby Bratislava, all enterprises of Pozemne Stavitelstvo VHJ [economic production unit] failed to meet their production schedule in housing construction both in August and from the beginning of the year. The failure to fulfill the plan was particularly severe in the enterprises of Central Slovakia and East Slovakia krajs. The following enterprises lagged behind most: Pozemne Stavby Kosice (with a shortfall amounting to 796 apartments), Priemstav Prievidza (554 apartments), Pozemne Stavby Michalovce (464 apartments), Poprad (554 apartments) and Zilina (250 apartments). These enterprises are primarily responsible for the increase in shortfalls both in August and during the first 8 months of this year.

It is only logical and nobody can wonder, if--because of the longtime failures--the SSR Minister of Construction makes personnel changes in the positions of several enterprise managers and orders reductions of basic salaries for the managerial personnel of Pozemne Stavitelstvo VHJ and enterprises because of the nonimplementation of adopted measures.

Much, if not everything, can be made up for in the last quarter. Neither crash work nor overtime work nor work on Saturdays and Sundays, however, can compensate for the fluctuations in and inadequate material supply to production, nor for the effects of underestimating work discipline. Yet, a lot can still be done to make up for inadequate preparation for the implementation of the "Set of Measures for Improving the Planned Management System" in practice of VHJ, enterprises and plants. The biggest damage so far has been caused by the following fact: while the political and economic importance of the "Set of Measures" has already entered the consciousness of people, specific and different conditions in individual production workshops still remain--with a few exceptions--predominantly a "big unknown quantity." Although various briefings and instructions have been organized, nobody has as yet adequately and clearly explained to the large body of production workers how they will be affected by these measures in their place of work. What most frequently happens instead is that sections of the "Set of Measures" are read to them repeatedly and mechanically. Detrimental to the cause also is lack of graphic propaganda: These literally vital questions of our present and future are inadequately elucidated also in the party instruction courses, and do not figure as the main topic at many production conferences. And yet the resolutions are really outstanding, they deal with everything. But, how are they implemented? What is our responsibility for what has been entrusted to us? Neither rank-and-file workers nor higher- and highest-echelon officials can fail to realize their duty and responsibility to the socialist society. At the present stage, it is imperative to really enforce discipline at all levels, in all work. After all, it is precisely these significant and important economic and social tasks of ours that we face which necessitate not only increasing the degree of everybody's responsibility, but also intensifying checks on the implementation of planned tasks and of adopted measures and resolutions. The worker begins to respect the adopted resolution and to realize his responsibility for its implementation, when he knows that his performance will be checked, that his contribution to the implementation of the measures will be justly evaluated and that he will be called to account for nonfulfillment. Every communist regardless of in what field he works--production, management or elsewhere--must always set an example in concentration, discipline, and responsible and creative attitude toward work.

10501
CSO: 2400

REPLACEMENT OF LABOR BY CAPITAL SUCCESSFUL IN EXPERIMENT

Prague HOSPODARSKE NOVINY in Czech 19 Sep 80 pp 8 - 9

[Article by Milos Pick, Federal Ministry of Labor and Social Affairs: "The Experiment Achieved Its Goals"]

> In accordance with CSSR Government resolution No. 146/1977, we have conducted experimental verification of job positions which are to be gradually introduced during the Seventh Five-Year Plan within the framework of the "Set of Measures for Improving the Planned Management System" The aim of the experiment was primarily to verify with more precision and detail the facts regarding the utilization of existing work shops and their usefulness in the planning and decisionmaking process with respect to replacement and allocation of capital assets and labor.

The underutilization of capital assets in Czechoslovak industry is too high. Aside from considerable losses due to under utilization of capital assets and labor in the regular shifts (estimated, according to sectional research, at a minimum of 15 to 20 percent), the underutilization of capital assets is also high in the day as well as during the night shifts. The workers "shift coefficient" dropped from 1.4 in 1962 to 1.3 in 1979; whereas with full double-shift operations it should be 1.5 to 1.6, according to macroeconomic analyses as well as the poll of verified opinions of enterprise directors. Last but not least, international comparison also confirms the possibilities of a higher shift ratios. The underutilized capacity of capital assets represent altogether almost 25 percent of the double-shift system.

This represents a considerable reduction in the cost-effectiveness of the replacement system. For the same volume of production we need more capital assets; each 1 percent of underutilization in the industry represents about [Kcs] 8 billion in capital assets. With existing investment capital, replacement of these capital assets is being delayed; the useful life (turnover time) of capital machine equipment in the industry was extended between 1975 and 1978 by almost 4 years (from 22 to 25.7 years) and caused a slowdown in the growth of their technological standards. According to rough calculations, a slowdown in the replacement period of engineering capital assets by 1 year reduces the annual growth of labor productivity by about 0.5 percent.

Replacement Imbalances

The principal cause is imbalance in the capital asset and labor replacement process--excess of job opportunities over labor supply. This imbalance is a result of inadequate use of intensive growth factors. The inertia of the extensive [as opposed to intensive use] orientation is still evident especially in:

--one-sided orientation of structural changes in expanding production facilities which bodes well for the future, without a corresponding muting of that which does not;

--imbalance between the allocation of production and labor assets for industrial progress in less developed regions without moving production capacities from over-industrialized population centers;

--orientation of the capital asset replacement process predominantly toward expansion of production capacities with only a small share of investments which [would otherwise] lead to absolute saving in labor; addition of new capacities instead of modernization of existing ones, in new investment even in cases where existing assets are not fully utilized, and this with low technological level of the capacities being added, with insufficient liquidation of obsolete capital assets (which is approximately 3 to 4 times lower than desirable), and especially in the low rate of liquidation of obsolete machine shops and concentration of the existing production base (about 10 times lower than the estimated desirable extent);

--low quality of management, production and work organization, which fractionalizes job opportunities.

The cited extensive development orientation is caused by a complicated set of reasons related not only to low quality, lack of conceptual approach, and inconsistency of managers and the management process, but also to the substantive concept of development, and especially to the insufficient effectiveness of the present system of planned management in our national economy. The planning of structural changes by means of developmental programs does not form a unified system comparable to world standards, it does not have a perspective stability, nor are the changes conditioned on cushioning programs. Planned replacement of capital assets is not consistently meshed with planning and replacement of labor. Economic conditions and instruments fail to create a sufficiently demanding environment for the activity of units of the enterprise economic sphere nor do they exert sufficient pressure on their effective management, especially management of capital assets. The social barriers of shift work are not being overcome through effective wage incentives.

Also missing are objective, sufficiently generalized, yet specific [enough] data which, in making decisions on replacement and concentration of capital assets and availability of labor for their operation, would make it possible to consider taking advantage of existing facilities. There is a lack of data which would enable the individual levels of management to decide, first of all, on replacement and concentration of entire operational complexes, or facilities (possibly in relation to more detailed basic data such as, for example, on planning of capacity which serves, first of all, the intraenterprise management to regulate the utilization and development of the capacities of individual types of machinery).

For this reason, we examined the possibility of making the inventory of job positions such an instrument. The verification was conducted in the second half on 1978 and the first half of 1979 in plant shops (production units in separate locations - MOVJ) of the centrally-managed industry on the territory of the city of Brno (78 plants, 36 enterprises with a labor force of 64,000).

The experiment was not aimed at broader goals with respect to overcoming the entire, already-mentioned, set of reasons for the imbalance in the replacement of both production elements. Therefore, it could monitor even the inventory of job positions only on the premise of all other conditions being equal.

Main Results of the Experiment

We verified the possibility of gaining certain important data for eliminating the disproportion between the replacement and allocation of both production factors.

Based on information on the number of job positions, social shift standards and social standards of capacity and inventory of the product mix, we calculated the number of the so-called job opportunities. The societal shift standard is based on the principle of full double-shift operations; this principle -- aside from uninterrupted and triple-shift operations -- presupposes a full double-shift operation of basic machinist job positions in the basic production. The unused capacity under these conditions was assumed to be a maximum of 10 percent. We also took into consideration, within the framework of the same (principal) shift, the possible difference between the system of actual use, i.e., the annual employment period of machine and worker. For example, in continuous or assembly line production where workers require alternates, 1 job position in one shift creates 1.1 job opportunities, and in 7-day uninterrupted operation as much as 1.54 job opportunities.

Let us use a computation example 10 work locations and machines on the line with a 5-day operation (Graph 1). If the shift standard is 2.0 unused capacity 10 percent, and the ratio of machine and labor utilization in the principal shift is 1.1, then the number of job opportunities comes to 20=10 x (2.0 x 0.9 x 1.1).

In other work locations (except basic machinery), the principle of full double-shift operations was based only on such shift standards which ensure full two-shift operations of basic machinery. Under this principle, the average 'normative' shift ratio at workers' place of work was calculated at 1.6.

The number of job opportunities represents the social standard of the job position utility according to the principles of full two-shift operations. The time dimension of this standard offers a more objective measure of the extent of unused capacity than the current general comparison with the overall or two-shift chronological job position listing. In contrast to mining branches, primary production, or certain specialized production spheres where production capacity can usually be expressed in physical units, job opportunity in processing industry represents a common unit of extensive capacity volume for the entire enterprise (subdivision), even in production of multiple product mix. Therefore it is a unit corresponding to data on capacity utilization by labor. It can characterize not only the measure of shift utilization or nonutilization of capacities, but it can also serve as an

active instrument for the solution of this problem, an instrument for overcoming the imbalance between the number of job opportunities and labor supply, i.e., the imbalance in the replacement of both production elements.

Thus in Brno -- same as nationwide -- about 25 percent of available job positions is not being manned.

A very important contribution to information on plant shops was their designation (classification) according to certain important characteristics, especially according to their contribution to developmental production programs, according to their technological and economic levels (up-to-date or obsolete condition) and according to interchangeability of their production programs. This enables us to classify plant shops according to appropriate characteristics and to seek actively ways of modernization, concentration, and higher utilization of the production base in accordance with the structural changes in production.

The experiment in Brno showed that the production base of the local industry is quite obsolete. The share of machining works which is 42 percent nation-wide (and is less than in other socialist countries), is only 35 percent in Brno with a low level of their automation there; the share of modern plant shops in machinery capital assets is only 32 percent. This confirms the urgency for modernization of the production base in the Brno industry. If, however, the surplus of job positions were limited only by modernization of the production base in all its present breadth, it would be more demanding solution in terms of investments; its fragmentation and unsuitable structure would remain and the development programs would be needlessly slowed down. If, on the other hand, this surplus were limited only by the concentration of the production base, their obsolescence would persist, retarding improvements in labor productivity. Modernization of the production base should, therefore, be accompanied by a concentration process.

It was further demonstrated that 70 percent of unutilized job positions in Brno are in enterprises with developmental production programs. In these it is useful to raise the utilization of capacities not only based on saving in job positions through modernization, by also by appropriate relocation of additional workers from other plants. At the same time, the experiment showed that about 4 percent of the job positions are in plant shops scheduled for future liquidation. Its gradual implementation would at least partially help the purposeful concentration of the production base.

Table 1

Utilization of Job Positions in Brno Industry According to Groups of Plantshops (Percentage of Overall Count)

Plant Workshops	Job Positions	Filled	Vacant
Overall	100	75	25
Of which: Machining	78	59	19
Of which: Predominantly with Developmental Programs	67	50	17
Others	11	9	2
In Other Branches	22	16	6
Of which Planned for Liquidation	4	3	1

Even considering the relatively limited extent of the experiment, it becomes clear that in this group of plants there are (overall 5 foursomes, threesomes, and two-doubles) of so-called interchangeable plants, i.e., these capable of running similar production programs. As one of these examples shows, the extent of underutilization exceeds the capacity of others among them (Table 2)

Table 2

Utilization of Job Positions of a Group of Plants with Interchangeable Production Runs (Percentage of the Number in Plant A)

Plant	Number of Job Positions	Filled	Vacant
A	100	80	20
B	78	54	24
C	26	23	3
D	13	8	5

We should, therefore, seek opportunities of either further development of appropriate production without expanding capacities or, possibly, examine the feasibility of concentrating production in fewer plants.

The above examples do not exhaust the range of information gained, they merely illustrate some of the principal findings. They do not suggest future concepts for the Brno industrial production base -- that is the task of responsible agencies. They do show, however, the usefulness of supplementing reporting procedures with this type of data. That is why, from the experiment emanated a proposal for adjusting nation-wide reporting on assets, which requires only minor supplementing of the present statistical report on job psoitions (especially addition of the above-mentioned classification indicators in plantshops and norms of job position utilization in the main shift), and a more precise delineation of indicators and terminology, including the setting up appropriate classifications and requirements for the primary review. These adjustments are being prepared by the Federal Bureau of Statistics beginning with 1980. In order to save reporting units additional administrative burden, the enumeration of job positions and their utilization by plantshops, will be undertaken by the Federal Bureau of Statistics (i.e., the computer center) centrally, based on reports from individual facilities.

Similarly, data on projection, i.e., capacities under construction, will be prepared in the background data for construction beginning with 1981, within the framework of amendments to appropriate Federal Ministry of Investment and Technological Development and the State Planning Commission directives (Decree No. 163/1973 of the Collection of Laws and related instructions which set forth the methods and content of reporting on projected investment construction, and similar principles of evaluating investment effectiveness). Also, this information is entered into the so-called construction registration (i.e., into the computer data bank of construction information).

We have confirmed the possibility of enhancing the reliability of information on job positions and their utilization. It was demonstrated that a more precise delineation of basic terminology, and especially the introduction of a primary survey of job positions, can improve the precision and reliability of data under review, especially in connection with the continuing implementation of labor consumption standards (including morning) and ([machine] attendance standards). This approach can significantly improve the present shortcomings in data availability and, possibly, avoid underestimation of the number of job positions which, according to local surveys in the experimenting enterprises, is one of the causes for the relatively high current national figures on the utilization of labor job positions in the 1st shift (in nation-wide statistics for 1978 this was 96 percent, whereas in experimental installations only 88 percent). Despite the cited details, the overall reliability of this information is still relatively limited. Although these are adequate for decisions regarding individual plant shops, i.e., individual investment acts, they are not adequate for decisions dealing with individual job positions, a binding determination of their numbers, or for the application of wage incentives. This would only increase the risk of speculative distortion of the data. Here too, it is an established fact (as will be seen further on) that the basic prerequisite is a meaningful economic motivation of enterprises toward efficient management of the production factors (especially capital and labor), rather than toward merely reporting on their utilization. Reliability then, requires that enterprises actually put this information to use in their effective management and not only for the sake of reporting on it.

Enterprises (in additional alternatives also economic production units and regional agencies) also used this information in perspective planning of the replacement of production factors up to the year 1985.

Although the information was used only partially and largely in adjusting the proposal for further capital investment and development of employment, and their interaction with the anticipated structural changes in production. First of all, we foresaw a significant concentration of the further increase in labor for the benefit of existing plant shops which are to ensure mainly the development programs (81 percent of the overall increase in number of workers in the experimenting enterprises). The proposal for further capital investment and the ensuing expansion of capacities and the number of job positions was linked to this concentration of labor increases.

A more significant concentration of existing capacities has not been considered. By 1985 we have considered liquidation of only 3 facilities, which is only about 4 percent of job positions of all plantshops intended for future liquidation. At such rate, the closing of all facilities designated for liquidation would take about 125 years. The possibility of concentrating interchangeable plantshops was hardly implemented, only 2 cases, i.e., also only 4 percent of 52 theoretically feasible cases, were considered. The only partial exploitation of this information in planning is reflected in only partially considered results. While by 1985, further deterioration in job utilization would stop, we would not achieve a significant improvement of capacity utilization of labor.

Even this certainly represents progress compared with developments to date, where utilization of job opportunities in Brno deteriorated annually by 0.4 percent. Why were the results not greater but only partial?

There certainly are many causes but let us deal with at least the two principal ones. First of all, concentration of the existing production base is a highly more demanding task than the orientation of new investments toward intensive replacement of capital assets. This creates requirements not only in organizational, technological and economic solutions but, above all, in overcoming social barriers. This task can be achieved only on a long-term basis by creating much broader social and economic pre-conditions for overcoming the imbalance between the replacement of capital assets and labor. The inventory of job positions and ensuing information can become only one, even if essential, prerequisite for effective operation of these processes.

The other reason is that the experiment had only limited aims, not only in its orientation (as already stated) but in its time and territorial constraints. Therefore, the results could also be only partial.

Possibilities of Actual Implementation

The experiment had achieved its goals. It showed that job position inventories (i.e., job opportunities) can, provide objective and specific information on improved exploitation of the existing production base by the labor enabling, when decisions are being made on capital replacement, to consider the possibilities of

higher utilization of existing plantshops. This instrument is needed for dealing especially with the technological and economic aspects of the replacement balance of both cited production factors (capital and labor); however, by itself, this instrument cannot ensure this balance.

Overcoming the current extensive development of the production base, especially its concentration, is a demanding long-term process requiring a whole complex of measures to overcome societal, economic, and social barriers in the resolution of this problem. This information can be come an effective instrument only in the hands of someone who is interested and has the ability to use it properly.

1 - Graph 1; 2 - Calculation of the number of job positions; 3 - relief workers; 4 - Capacity reserve; 5 - Number of job positions; 6 - Job opportunities; 7 - Time ratio of machine and worker in operation; 8 - Shift ratio.

Experiences gained in the experiment show the possibilities of use of job position inventories (i.e., job opportunities) in the national economy. Their general application and utilization in the planning and management process could lead to the process of familiarization of work with them at the individual levels of management.

At the same time, these assumptions can be used for planned allocation of capital and labor; especially, in judging whether the proposed individual goal oriented programs and individual actions in the capital construction of new or expanded capacities in the processing industry can be substituted by a higher load on existing plants of a similar type, and whether it might not worsen the utilization of existing facilities freeing labor for them. These assumptions can similarly be used in assessing individual actions of concentration of the production base (i.e., concentration of labor from liquidated plants in more modern facilities with a higher shift ratio). These data can thus be used in two ways:

1. In aggregate form for analysis and verification of overall relationships between the production plan, capital assets, and the size of the labor force in the formulation of the five-year plan toward systematic allocation of capital and labor.

2. In individualized form (for individual plants) for verification of specific operations and programs, especially of the investment type.

In this connection, it should also be noted that the purpose of this information system is definitely not more centralization of decision-making. It is to serve to raise the quality and objectivity of decision-making on those levels of management competent in the respective processes of decisionmaking (e.g., in investment), without changing the areas of jurisdiction. Even if for other reasons, we adopt a certain decentralization of some of these decision-making processes (as is partially assumed for the Seventh Five-Year Plan by the above-mentioned "Set of Measures"), this will not alter the usefulness of this data even in a changed division of jurisdictions. The agencies making the decisions, will have higher quality information available to make them. Even lower levels of management will have at their disposal a broader, nation-wide information on the utilization of interchangeable capacities.

We found an economical way of collecting this information (in statistical reports and construction project data which is administratively not unduly demanding. In order to maintain low administrative load even in the use of these data in decision-making processes, which should as much as possible always consider a wider number of alternatives, it is desirable and feasible to achieve gradual computerization of these data. Briefly stated, this system should, in the future, operate fully -- e.g., in assessing investments, on the basis of linking the following 3 data banks into higher computer technology: the anticipated Federal Bureau of Statistics/FSU/ data bank on existing plants, the FSU data bank on capacities which are projected or registered under-construction, and the State Planning Commission data bank on investment plans which are still unassigned for project.

Overall Set of Measures

Applying the inventories of job positions (i.e., job opportunities) can be effective only within the framework of a broader complex of measures to raise the effectiveness of the system of planned management, according to the CSSR government resolution No. 42/1980.

It is a matter of an overall set of measures for raising the effectiveness of planned management, i.e., especially to improve planning and intensify economic motivation of units in the enterprise sphere toward higher efficiency.

It is further a matter of creating and expanding certain specific measures and instruments ensuring the balance in capital replacement and the replacement of labor with capital, without additional increase in investment intensity of economic development and with a purposeful concentration of the production base. Among the principal measures are the following:

- certain goal-oriented programs are to be directed primarily toward absolute savings in labor; toward expanding capacities for goal oriented programs of a predominantly developmental character by tasking a higher utilization of selected facilities through the [higher] shift ratio on the basis of rellocating labor from liquidated plants and further to ensure this expansion through modernization and replacement of existing plants;

1 - Graph 2; 2 - Estimate of the Average Branch Societal Norm of Shift Ratio; 3 - Leather and footwear industry; 4 - Mettalurgy of non-ferrous metals; 5 - Fuels; 6 - Lumber processing; 7 - Textile; 8 - Paper and cellulose; 9 - Printing industry; 10 - Glass and ceramics; 11 - Iron Metallurgy; 12 - Construction materials; 13 - Chemical and rubber industry; 14 - Engineering; 15 - Foodstuffs; 16 - Clothing industry; 17 - Heat and electricity production.

- prepare, in the basic management links (VHJ - economic production units) -- in conjunction with technological and economic concepts, ten-year and five-year programs of modernization and concentration of the production base and increase in the shift ratio as an instrument of purposeful creation of a condition for a more effective utilization of capital in the industry;

- in management and planning of replacement and concentration of capital assets (including preparation for capital construction) in industry, consistently respect the societal norm of full two-shift operation and the corresponding number of job opportunities as societal norm of utilization of a given plantshop by labor. For a broad macroeconomic illustration, Graph 2 shows the estimate of similar branch average standards of the shift ratio derived analogically from the overall reporting for 1975;

- for the support of higher shift ratio, prepare and gradually implement a set of economic and socio-political measures in consonance with the CSSR government resolution No. 146/1977, because precisely in this (as in purposeful relocation of labor from liquidated sites or freeing labor as a result of modernization or other rationalization measures) rests the most demanding aspect of the task, not only in economic but also in societal terms;

- in investment decisions prevent, as a matter of principle, further increase in job positions and, on the contrary, strive for their gradual reduction throughout Czechoslovak industry. For this purpose direct especially priority investment toward modernization of existing installations with a more marked replacement of labor with technology. Investment in progressive modernization (first to be placed in the plan, first to be initiated and made financially attractive) must be oriented, in addition to other pluses, especially toward absolute saving in labor (i.e., reducing the number of job positions). Aside from the raw material branches, allow only exceptionally construction of new plants, and compensate for this by discontinuing operations in other types of production and areas;

- create conditions for a more effective enterprise incentive in the economic enterprise units toward replacement of labor by technology. Review the future possibility of more objective assessment of the production factors, and overcome present disadvantages in replacing labor with technology in economic assumptions. In conditions of the current evaluation of production factors, give priority to incentive in the return on production factors over incentive in the return of operating assets, whereever this will not distort the results.

The results of the experiment confirmed the usefulness and principal direction of job position inventories as anticipated in the above-mentioned "Set of Measures". The specific method of application will have to be determined within the framework of implementation of the "Set of Measures."

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IMPORTANCE OF LABOR ALLOCATION UNDER SET OF MEASURES REVIEWED

Prague HOSPODARSKE NOVINY in Czech 26 Sep 80 p 3

[Article by Eng Premysl Tomasek, CSSR first deputy minister of labor and social welfare: "Labor Force Replacement"]

[Text] Of the complicated social and economic problems and relationships the human factor, the worker, is the weightiest. This is also reflected in the Set of Measures for the Improvement of the Planned Management System of the National Economy after 1980. The issue is the efficient utilization and allocation of labor and mobilization of organizations and individuals for the fulfillment of key economic development projects.

Measured by the proportion of the population which works, we are among the countries with the highest employment in the world; of more than 15 million inhabitants, every second individual is gainfully employed. High employment exists not only among people of productive age, but also among older people. Of citizens above the retirement age almost one quarter continue to work. There is no unemployment or semiemployment in our country. In a number of production and service sectors there is a real shortage of skilled labor.

But high economic activity also has its problems. In many places, especially in industrial centers and population centers, the gap between labor supply and demand leads to undesirable phenomena and consequences such as competitive bidding, unhealthy attempts at stealing or overpaying workers. At the same time some individuals exploit this situation recklessly, frequently flouting basic principles of socialist morality and ethics. This attitude is expressed by their low efficiency and productivity. In conflict with public interest some management workers go so far as to tolerate such a situation; they fail to meet the requirement for upholding socialist discipline and delivering an honest day's work.

The labor shortage, often used as an excuse for shortcomings in fulfilling planned tasks, is not a true reflection of the real situation. Overall, there is a labor shortage in our country, but the real issue is the correct allocation of labor and adherence to productivity standards expected of labor in advanced industrial countries of the world.

In recent years the employment structure has been developing unsatisfactorily and the problem has become more acute from one year to the next. Some socially important sectors and branches suffer from constant loss of labor. Also, the trend in the ratio between workers employed in manual and white collar jobs is adverse: the number of production workers exhibits a decreasing tendency, while the number of workers employed in auxiliary jobs, services and in the technical and economic apparatus is rapidly increasing. This trend cannot be explained or justified even by the worldwide development due to rapid scientific progress and the resulting change in the nature of work.

That the resources available for the years of the Seventh Five-Year Plan are rapidly shrinking is generally known. While in former years approximately 500,000 new workers were integrated into the work process in the course of each five-year plan, this resource has shrunk almost to half in this five-year plan. From 1981 to 1985 employment will increase by 140,000 workers; moreover, the territorial distribution of the new workers is uneven.

Even though we are constantly and justifiably being reminded that labor is the main asset of our economy, our labor management is poor. This concerns not only the individual worker, but also of the length of working time he spends on fulfilling the planned tasks. A uniform number of working days was chosen for the Sixth Five-Year Plan--260 per year. After deducting paid vacation days, the annual working time is approximately 245 days; but of this number more than 20 days are lost due to nonwork and work-connected accidents various legitimate causes, unauthorized absence from work, undesirable fluctuation of the labor force and other reasons. The reality in some work places that only 70 to 80 percent of each shift is used productively is no exception, especially where the pace of work is not set by a mechanical production device, but by the worker himself; 20 to 30 percent of the time is spent in loafing and in unnecessary loss of working time.

The true causes of poor utilization of working time are breakdowns in the continuity of production, poor supplier-customer relations, poor management, disregard for the exact start and end of working time, prolonging of the legitimate time allowed for breaks, but also low efficiency and productivity of some individuals and collectives. It is important to remember that the loss of a single minute of working time in industry represents a loss of products worth almost Kcs 5 million, the cost of the loss of one day exceeds Kcs 2 billion. We cannot afford such losses and must not tolerate them.

One way of solving the problem in practice is more effective control of the movement of workers to ensure the implementation of national priorities, harmonizing to the greatest possible extent the replacement of means of production with the replacement of labor, controlling the size and structure of the work force needed by means of norms, and mainly raising labor productivity, production and work discipline, the natural authority of management workers and high quality management -- measures which are so urgently and categorically needed. All these requirements are directly related to efficient economic development, which is the order of the day.

The Set of Measures is designed to solve these problems. It strengthens the concept of work replacement; the work plan for the entire five-year period is determined by normative relationships and mandatory production quotas with the provision that it will be specified in detail annually. In order to determine objectively the numbers and the structure of the work force, factors which are affected by scientific and technical progress and the progress of capital construction plans which usually exceed a single five-year period, the work force balance sheet is prepared to encompass two five-year plans.

Limiting the number of workers was extensively discussed. But to abolish planned allocation of labor in existing conditions is unrealistic. Therefore, in the future central authorities will continue to strictly control the movement of labor by means of mandatory limits which will be assigned to organizations in absolute numbers instead of in the form of work force increases, as was done in the past, because the objective is to achieve efficient utilization of the entire work force, not only of the increment. Work force limits will be set for entire branches, usually for economic production units within the framework of individual okreses. Where indicated these figures can be set for an entire kraj.

Effective conservation of human labor, i.e. achieving absolute reduction in the number of workers stipulated by the plan, is economically important. Material incentives can be used as an inducement to this end. The issue is whether the average nominal wage or the overall sum of wages should be determinant in the setting of wage policy with the latter consisting of two components, the number of workers and the average nominal wage level. The majority of our economists think that the overall volume of wages allocated for the fulfillment of planned tasks should be mandatory, and must not be exceeded. An organization achieving an absolute saving in human labor by well-thought out rationalization should be allowed to use all or part of the money saved for raising the average wage level of individuals or collectives meriting a raise without restrictions. This is standard procedure in industrial countries.

Other problems connected with wage replacement are also being resolved in principle. One of these problems is the joint system of social economic priorities which should be strictly limited and replaced by the planned movement of labor including wage and other incentives. Beginning next year labor plans will stipulate mandatory ratios of technical and economic workers; this temporary measure is expected to be replaced later by more exact labor requirement estimates expressed specifically by norms governing numbers of operators needed. The development of a normative base, with norms of all kinds, is of special importance. The issue is to eliminate unjustified differences in the quality of standards, update them systematically in step with technical and organizational improvements achieved in production and prevent the application of outdated norms which reflect obsolete methods, technology and poor organization of labor. The preparation of ten-year plans of personnel, personal and social development has been proposed based on modern labor selection methods and allocation, realistic standards of social amenities in individual installations, and improved planning of qualified cadres to ensure that they reflect the objective needs of economic development.

In the Set of Measures the payment of material incentives to individuals and organizations for work accomplished and economic results is of key importance. This is a radical departure from current management approaches and positions involving mainly changes in wage policy.

The principle of merit must be immediately incorporated into the determination of remuneration for work to ensure that the situation of every organization and individual depends directly on the results of their work.

Of course, this calls for more marked differentiation of remuneration based on the actual social contribution rendered, the establishment of the closest possible relationship between wage development and the formation of the national product, strengthening the stimulatory role of the wage in order to orient it toward the desired aspects of economic efficiency and ensuring at the same time correct determination of the work performed and remuneration paid.

These are the reasons for the basic changes in controlling wage development both in the method of wage formation and in the districution of wages. The conceptual and planning aspects of remuneration are also being strengthened; long-term wage development and wage differentiation forecasts have been prepared; the highest political and state organs have already discussed and approved the principal thrust of the wage policy to be pursued in the Seventh Five-Year Plan which will serve as the basis for detailed specification. Wage development, guaranteed for 5 years, will govern the relationship between central authorities and the khozraschot sphere. This is especially important because the current practice of concluding annual plans has frequently obscured above-average results achieved by some organizations, protecting thereby other organizations achieving poor results.

Also the system of material incentives still strongly reflects the quantitative aspects of the assessment of economic and social development. Therefore, beginning next year -- in the spirit of the Set of Measures -- the method of creating the means for wages is being changed. The lion's share of wages -- approximately four-fifths -- will depend on the indicator type of net production, specifically on adjusted output. This is essentially a "new added value" which, from the macrostructural viewpoint, establishes a closer correlation between wage development and the national product, and from the microstructural aspect with human labor productivity. The remaining approximately one-fifth of wages will depend on comprehensive indicators of economic efficiency, mostly on the profitability of production funds or production factors. This means that the amount of profit will be measured in its relation to the value of capital assets plus inventory or potentially to the value placed on human labor.

Therefore, a real possibility exists for well managed organizations to increase funds available for payout in wages and vice-versa. In addition to standard allocations to material incentive funds, they can acquire additional resources in excess of the plan, especially by accelerating the innovative process, introducing technically advanced products, first-quality products, etc. Organizations lagging behind, producing outmoded products or third-quality products,

will end up holding the short end of the stick with respect to wages, the same applies to penalties for low quality production whereby the damage and losses will be fully deducted from the economic result. In the course of the third quarter of 1980 the decree of the Federal Ministry of Labor and Social Welfare on the management of wages and remuneration for work performed, which translates these principles into practical guidelines applicable to the khozraschot sphere, will be updated.

Basic changes are also in preparation in the wage mechanism proper. In the first stage (1981 to 1982) emphasis will be placed on the correct and effective orientation of forms of remuneration (bonuses and all types of premiums). All types of premiums and bonuses will be reexamined and tied without exception to the fulfillment of key tasks of scientific and technical progress and to savings achieved in human labor and mechanical work. The basis of standards will be broadened and improved with the objective of eliminating unjustified differences which are at the root of the philosophy of well and poorly paid work. Adjustments in the system of tariffs, i.e. in putting a value on and classifying different types of work, of qualifying catalogues of tariffs and justified changes in wage tariffs and tariff scales are not expected to be introduced until in the next stage (1983). Here, too, the main thrust is to strengthen productive, woman-like and responsible work, reward individuals promoting social progress and performing physically hard and exhaustive work, intensified work in synchronized production processes, and in multi-shift operations; and strengthening the factors stabilizing wages expressing the individual's attitude to work, his job and enterprise likewise must not be neglected.

Every individual and work collective must be responsible for the tasks which are immediately affected by his work. Hence, the urgency to specify the system of personal material incentives down to the level of individual factories where the efficiency and contribution made by every individual to the economic results can be reliably assessed.

The basic objective is to reward properly those fulfilling their tasks conscientiously, both morally and materially. And conversely, laggards must expect consequences which will also include a reduction in wages. The issue now is for state, trade union and economic organs and organizations to create an atmosphere favoring a policy of discrimination, including wage differentiation, which will properly reflect true merit and the contribution of labor to society. This, too, is part of the basis of effective and balanced economic development.

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USE OF KHOZRASCHET IN CONSTRUCTION INDUSTRY DISCUSSED

Prague HOSPODARSKE NOVINY in Czech 26 Sep 80 p 7

[Article by Jindrich Madry, Engineering and Industrial Construction Projects national enterprise, Plant 13, Prague-Chodov: "Effectiveness of Khozraschet in Construction Enterprise--All the Way Down to Blue-Collar Worker"]

[Text] Peculiarities of work in the construction industry, particularly the method of handling materials and use of transportation and machinery, provide ample space for affecting of economic results by people's initiative and khozraschet organization of management. While the efficiently working teams achieve as much as a 3 percent reduction in standard costs in their area of activity, the teams showing lack of interest in their own economic results and working without initiative exceed the specified production costs by as much as 10 percent. The contribution of khozraschet management therefore ranges from a potential loss to real savings, and is much bigger than the actual savings computed on the basis of standard costs.

Our Experiences

Practice has shown that in the organization of kozraschet the easiest task is convincing and winning over the blue-collar workers. The most difficult problem is the mastering of organization, that is finding an appropriate application of general principles of khozraschet management to the concrete, specific conditions of individual places of work.

After 3 years of verification and constant revision of ineffective forms and methods, we have laid in our sector the foundations of the properly functioning system which has produced a demonstrable improvement of the economic result. This system has been formed by the comprehensive application of norms of all variable production costs, by combination of khozraschet with the basic elements of flow production organization, and by training of workers in self-control. We have verified that the effectiveness of our management increases not by the increasing number of orders and interference in the teams' activity, but in direct proportion to the development of teams' capability to react, with initiative and without delay, to the changes in the situation in the place of work.

Even if the plan is successfully fulfilled, we must systematically ask the question: what is the principal obstacle to achieving still greater economy? As to our sector, the answer to this question is unequivocal: the nonfulfillment

of planned volumes and the failure to meet the deadlines set for construction preparedness. For this reason, production is not continuous and the flowthrough construction method is applied inconsistently and incompletely. The khozraschet management has not been implemented at the adequate rate so far.

I am of the opinion that it is so because the set of norms is not processed at the proper rate, the style of managerial personnel's work has not yet fully adjusted to the needs of the khzoraschet organization, and the organization of khozraschet in its present form and checks on it results in the considerable increase in the scope of administrative work.

Although khozraschet is organized forst in the selected operations and individual areas of activity, it is necessary to realize that it begins to produce conclusive results only if it involves the entire work collective and all work performed by it. Only on this assumption can the distortion of results be eliminated, just remuneration for savings be accomplished, and, on the other hand, pecuniary responsibility for losses be enforced. (We have applied this responsibility by cancelling the premium for the teams which have surpassed the specified costs.)

Incentives First and Foremost

One can generally say that the extent of efforts of blue-collar workers and technicians in observing economy depends upon the effectiveness of incentives. We have tested in practice the linkage of 30 percent premiums to the overall results of operations and of 20 percent premiums to the savings achieved by individual teams. Nevertheless, the intensity of interest of more than 90 percent of workers concentrated on the activity and results of their own teams. For the workers, the easiest thing to understand is the feeling of responsibility for what they create by their own hands as well as they can. The interest in the results of the operation which an individual team affects to a limited extent only predominantly grew out of the need to be informed, a feeling of solidarity, and personal connections, but it did not have such a solid basis as to govern the activity of every individual. To eliminate formalism from khozraschet, we therefore deemed it necessary to apply khozraschet to the smallest groups for which the sum of variable production costs can be recorded and evaluated. To organize khozraschet all the way down to the teams is more demanding than in individual operations and, in addition, will not be practically feasible in some instances. It would, however, be a mistake to make a decision in this matter on the basis of general considerations instead of practical verification and a search for the most effective norms.

The fastest and most efficient method of development of khozraschet is its simultaneous organization from both the top and the bottom. In those instances where too much reliance is placed in the initiative of teams and workers in operations without developing corresponding activity from the top, khozraschet develops sluggishly and with difficulty. The interest of those workers who strive for savings frequently meets with lack of interest or even opposing interests of workers in the supply and transportation departments or other groups.

Often it is difficult to get the respective individuals to fulfill at least their duties, particularly if they are to perform jobs which they had not been asked to do systematically before. However, without establishing elementary order in

handling of materials, means of transportation and machinery, it does not make sense to speak of khozraschet. Here the beginning must be made. It is not enough to establish "order" according to the paper documentation of "in the whole. "It is absolutely imperative to keep accurate records of the quality and quantity of all materials issued and to pay in accordance to the norms only for what has actually been done or transported. In practice this means that the foremen and construction project supervisors must have the courage to engage in numerous conflicts which arise in this connection. It is, however, the duty of the supervisory organs to free them from endless unnecessary conflicts which arise because in organizing khozraschet in the plant and enterprise the rules of activity and the duties of every individual are not precisely defined.

Style of Managerial Personnel's Work

Some members of management are of the opinion that khozraschet should be organized by the production sectors, while others turn over its organization to the economists or khozraschet commissions. Others think that they have done their duty when they entrust one worker with the organization of khozraschet, or content themselves with the general support of the initiative from below. The organization of khozraschet is not the activity of a special department, but part of the system of management. If the managerial personnel do not make it part of their system of management, they condemn it to vegetation, limited partial results and mere ornamental status. Only the plant and enterprise management can define or apply the rules of intraenterprise organization of khozraschet in such a way as to achieve the maximum possible cooperation of all departments--from the preparatory activity to production. Only the plant and enterprise management can prudently insure harmony between the interests of all subordinated departments with the interests of the whole. For this reason, it is imperative that the managerial personnel adjust their style of work to the needs of khozraschet.

Role of Norms

According to the "Set of Measures for Improving the Planned Management System," the khozraschet management within the enterprise should focus attention on the systematic improvement of norm-setting activity. If the introduction of khozraschet is not to be delayed, it is necessary to considerably speed up the processing of norms. In our sector, we have succeeded in coping with this task within the shortest time by securing, together with the specialized workers of the technical group, a very active participation of technical-economic workers of operations in the direct processing of norms. It is true that the more precise the norm is the better. Yet, a promptly processed norm with an admissible measure of inaccuracy which is applied in practice without delay produces a much bigger economic effect than exactly processed norms put into effect with a considerable delay.

In order to gain certainty that the new norms will work progressively, we recalculated--prior to their introduction--their effect on wage and total production costs in 37 plants. The economic results which are after all decisive confirmed the rationality of our procedure. The share of wages in the outputs produced by the same kind of labor declined in our sector from 12.45 percent in 1977 to 11.07 percent in 1979. The new norms made it possible to consistently control the wages of teams according to the work billed. We thus succeeded in reducing the share of time wages from 45.3 percent in 1976 to 15.3 percent in 1979 in

favor of jobwork and piecework wages. The establishment of order in wages changed the differentiation of earnings, while the average earnings generally increased. At the same time, the center ended the year 1977 with a loss, but registered profits in 1978 and 1979.

The comprehensive application of norms of output and productive consumption made it possible to expand khozraschet of teams in an informal manner. We tried to find out the people's attitude toward khozraschet in an anonymous inquiry last year. In only one instance the opinion was expressed that khozraschet in operations produced results on paper only, while all other respondents described it as useful for the society and individuals.

In practice so far, discrepancies appeared not infrequently between the plan and norms in effect, between the plan and khozraschet. The rule should obligatorily apply that in those areas where the norms exist their application, as the basis for processing and detailing of the plan, must not be ignored. Although the plan can be more demanding in determining the indicators than their actual calculations in accordance with the existing norms, and may involve the actual raising of norms, it should never arbitrarily deviate from the existing norms. In the opposite instance, an unrealistic plan is pushed through and the motivation of workers is seriously undermined. We thus find ourselves in the situation that the construction projects supervisors and foremen, who with great effort adhere to the specified level of production costs and really contribute to savings, are not entitled to bonuses for their effort. On the contrary, they face penalties through the partial cancellation of promised premiums because of the noncompliance with the planned indicators. The supervisory organs being aware of the inaccuracy of the plan can take this or that into consideration, but such practice creates the feeling of uncertainty and thus adversely affects the work effort.

Specific Tasks and Individual Responsibility

It is well-known what emphasis V. I. Lenin used to place on specific responsibility for specific tasks. One of the reasons for the violation of this principle in practice is the fact that the assignments and terms of remuneration are frequently detailed from the top to the bottom mechanically without specification for the individual levels of management. The indicator of the share of wages in the output, for example, is applied equally to the enterprise, plant, operation, construction project supervisors and all the way down to the accountants. One-fifth of the premiums even for those workers who practically do not affect the withdrawals from the wage fund depends upon the compliance with this indicator. Although the construction project supervisors and foremen exercise substantial influence on the trend in wages, they can grant to the teams wages not in accordance with their relative contributions to the output, but only in accordance with the effective norms. However, even if the construction project supervisors and foremen consistently grant to the teams only wages for the work performed and billed according to the existing norms, and thus really establish order in the wages in the area under their authority--a very demanding and difficult task, they will nevertheless cease to be eligible for 20 percent of the premiums, if--because of the inaccurate detailed breakdown of the plan--the planned share of wages in the output cannot be adhered to.

Although theoretically the dialectics of the relationship between the general and the special, between the part and the whole, is sufficiently known, its

application in the area of management is, for incomprehensible reasons, often very slow. We frequently suffer by preferring to assign sizable tasks to lower echelons from above with considerable responsibility instead of precisely defining the necessary quantity of quite concrete and specific activities and the real responsibility of individuals in order to accomplish a great and important task.

Nobody doubts the extraordinary importance of the fulfillment of tasks of comprehensive housing construction. On the level of construction project supervisors and foremen it would be perhaps most reasonable if the supervisory organs would secure for them a cleared construction site, set a deadline for completion of a specific project of comprehensive housing construction with reference to the labor force and machinery allocated to it, and specify premiums for early completion, or reduction of premiums if the task is not fulfilled on time. Instead, the heads of operation, together with the construction project supervisors, receive (as do the managers) an annual assignment, amounting to x million Kcs and involving several projects of comprehensive housing construction which a part of the premiums is linked. They are thus actually made responsible for having design documentation available on time, for having economic contracts signed, for ensuring construction preparedness, for ordering material ahead of time, and so on, in the full amount of x million Kcs of work of comprehensive housing construction. The organizations' managers can to a certain extent press, through their technical departments, the fulfillment of these tasks on which the construction project depends, but the foremen and construction project supervisors are virtually helpless in this respect.

Naturally, it is impossible to accept excuses blaming the objective causes, so long as everybody does not exhaust all possibilities in his area for the fulfillment of the assignment. This, however, does not mean to deny specific limits of responsibility for each function. We should--and not only in this context--remember Lenin's warning that every truth, if we exaggerate it, if we try to assert it beyond the scope of its actual validity, can be pushed to absurdity. If we exaggerate the responsibility of construction project supervisors to such an extent that the fulfillment of their tasks depends more on the "constellation of stars" than on their own efforts, we negate their feeling of responsibility which is necessary for the development of conscious activity. Then it is of no use to threaten that they will not be paid any premiums for nonfulfillment of tasks of comprehensive housing construction. If everything somehow turns out all right and the task is fulfilled after all, then--because of the vaguely and generally formulated responsibility--everybody gets a premium, including those who could not have affected the fulfillment of the task in any way.

The planned changes in the system of management are designed to eliminate the elements of "fatality" regardless of whether or not the planned task is fulfilled. The greater weight the Khozraschet results are given in the evaluation and remuneration of people (they are largely of informative significance today), ultimately the more reliable will be the compliance with the indicators of the optimum plan.

Too Much Administrative Work

We ask the construction project supervisors and foremen also to perform the key role in the informal introduction of khozraschet all the way down to the blue-collar workers themselves. If they are to fulfill this task, the khozraschet

organizations must not demand that these workers take care of an excessive quantity of administrative work. They should receive information on the economic results achieved in the sectors assigned to them in a computer-processed form which would allow them to use it promptly in the production organization. The recording of productive consumption in physical units will not be adequate even on the level of economic centers. We must also use financial indicators to figure out savings or losses. If the prices of supplied material are not fixed for a certain period, if the records of transportation operations include various inaccuracies and so on, the construction project supervisors or other workers must carry out a large number of calculations and corrections in order to convert the actual productive consumption into the data comparable with the standard costs.

The development of khozraschet under these conditions will result in an increase in administrative work. There is, however, a real solution to these problems. For example: it could be to stabilize the intraenterprise prices of material for a period of one year or to shorten the processing periods of those data which are used to directly control the production process. Since the records are frequently used for justification of what happened, their principal function--to use them for progressive changes in practice--is not often apparent enough. This mistake would increase further if we would not make adjustments, on a larger scale than we have till now, for the needs of the people who directly organize production.

If we were to state generally what the most important factor is now in developing the khozraschet management on the desirable scale and making it more effective, then we could say that it is a careful study of practical experience in its application in individual places of work, and the implementation without delay of those conclusions whose correctness has already been confirmed by practice.

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EFFECTIVE CATTLE BREEDING NECESSARY

Prague HOSPODARSKE NOVINY in Czech 26 Sep 80 pp 8-9

[Article by Docent Dr Engr Miroslav Dvoracek, CSc, and Engr Ladislav Biedermann, CSc, Research Institute of Livestock Production in Uhrineves: "Sound and Effective Cattle Production"]

[Text] Cattle breeding is the most material- and labor-intensive branch of primary farm production. From the viewpoint of the national economy, it is simultaneously the most effective branch, because it produces the largest volume of animal protein for human consumption, and also because it produces this protein predominantly on feed that cannot be used directly for food production. Only with sufficiently large cattle herds is it feasible to fully utilize every hectare of land and what grows on it. Cattle are also a very significant factor in improving soil fertility, because they return a large proportion of the energy intake to the soil, in the form of stable manure. Cattle breeding's contribution to the efforts to attain maximum yields per hectare is invaluable from this point of view. At the same time there can be no doubt that the importance of cattle breeding in each country's agriculture will increase year by year. The entire development to date and the future outlook, the outlines of which are becoming evident, indicate that the soil will become the most important resource in the world, and that mankind will include the improvement of soil fertility among its most important, primary tasks.

Various World Trends

It is gratifying that science and research as well as farming practice have focused their attention on the further development of cattle breeding, and that new information indicating the directions of possible progress is being published almost daily. Unfortunately, progress is not always tending in the right direction. Enjoying the wealth they accumulated by controlling the world's material resources and foreign markets, many capitalist countries have set, and to some extent are still setting, as their objective the breeding of cattle with record yields, at an unlimited consumption of feed grain. Many of these countries have achieved noteworthy results in this respect. The most advanced methods of breeding, in combination with generous feed rations and maximum production efficiency, and with the optimization of the other environmental conditions, have made it

possible to increase, for example, the annual milk yield per cow to 10,000 kilograms or more. A favorable phenomenon in keeping cattle bred to attain such high annual milk yields is that even very large capital inputs are profitable, for the complete mechanization and automation of the barns at very high indicators of labor productivity. A negative feature of keeping cattle bred for high milk yields is that such cattle require generous rations with a high proportion of feed grain, and also that the body build of such cattle does not provide the prerequisites for good beef production, particularly in terms of carcass quality. High milk prices, which in most cases are guaranteed by the state, nevertheless provide an incentive for the farms to specialize in breeding cattle noted for their high annual milk yields, and to attain the highest possible intensity of milk production. It should be emphasized, however, that one of the decisive factors is specifically the regular and substantial income from milk sales, which enables the agricultural enterprises to rationalize their cattle breeding at a suitable return on the invested capital.

What Type of Cattle for Czechoslovakia?

Also in Czechoslovakia there were proposals to maximally accelerate the process of breeding cattle for high milk yields, through extensive crossbreeding with prize bulls, particularly Holstein-Fresians imported from America or Canada, since this breed is noted for its high milk yield. These recommendations could not be accepted, however, for a number of reasons. First of all because the proposed extensive reconstruction of the nation's cattle herd on a scale such that the national herd would consist predominantly of very particular cows of this type, producing 5000 to 6000 kilograms of milk a year, would significantly increase the consumption of concentrated feed. This applies not only to feed grain but also to such biologically effective feeds as sunflower cake, soyabean meal, etc. In this way Czechoslovakia's dependence on the importation of these biologically and nutritionally valuable feeds would increase, parallel with the greater danger of manifestations of the unfavorable supply-and-demand situations and speculation characteristic of the foreign feed markets.

Another serious reason why the cattle-breeding program cannot be directed exclusively toward increasing the annual milk yield is that the body-building capabilities of cattle must not be weakened, particularly the development of muscles that produce the most valuable cuts. The problems associated with meeting the requirement of a constant rise in beef output are even more demanding and complex than in the case of increasing the annual milk yield.

Furthermore it must be noted that the long-range objectives of developing cattle breeding in Czechoslovakia are determined to a considerable extent by the prevailing soil and climatic conditions. Czechoslovakia is noted for its agriculture and attains good yields in grains and industrial crops. The principal crops yield considerable quantities of by-products that account for a significant proportion of the feed base for cattle. So far as the natural feed base for cattle is concerned, the situation in Czechoslovakia is less favorable. The rich meadows and pastures that, under

favorable climatic conditions, offer good grazing and high yields of good-quality hay are lacking almost entirely. Although grasslands occupy a large area in Czechoslovakia, particularly on hills and plateaus, they have too much or too little precipitation. The cultivation of the frequently steep meadows and pastures is likewise lagging, due usually to a shortage of manpower and suitable machinery.

Thus the relatively meager feed base for cattle must be supplemented with the production of mixed feed on a fairly large scale. The progress in investigating the nutritional requirements of cattle, which is reflected in the output and composition of highly effective mixed feeds, is regarded as one of the greatest scientific achievements in livestock production. It is recognized that the feeding of complete feed mixes very effectively transforms scientific knowledge into breeding practice. However, the rapid expansion of the production of mixed feeds has resulted in ever-greater shortages of the specific substances and additives that intensify the effectiveness of the mixed feeds, and in the rising prices of these substances and additives. Therefore deficient mixed feeds are produced that contain a high proportion of feed grains and often also less-valuable dry matter. Under these conditions it appears economically the most expedient to breed in Czechoslovakia cattle whose annual milk yield is between 3000 and 5000 kilograms, depending on the objectives of specialization, but with good to excellent weight gain in every case. It must be admitted that this is a very challenging breeding program, and it is also rather difficult to realize.

In this article, devoted primarily to the questions of suitable technological methods in keeping cattle, we cannot analyze in detail the questions of cattle breeding. But it should be emphasized that their solution will require close attention of all scientific workers in the fields of livestock genetics and livestock breeding, and also of all practical workers in cattle breeding and production.

Advanced Technology

Now let us turn to the actual questions of employing an efficient system and advanced technology. The basic purpose of solving these questions is to replace the very labor-intensive earlier practices in cattle production, and to obtain the output in the unfavorable working environment by means of new and significantly more-productive technologies that eliminate heavy physical labor and permit a significant increase in the number of head entrusted to one person's care.

Great progress in this direction was achieved with the introduction of milking machines, and also with an efficient barn layout that permitted hauling the feed to the feed bunks, and also the installation of manure scrapers. Later, as the agricultural enterprises grew in size, it also became necessary to increase the concentration of cattle per farmstead. Demands for the construction of new barns likewise rose, because both the JZDs [unified agricultural cooperatives] and the state farms increased their cattle herds when private farmers ceased to keep cattle. The barns of small capacity

were no longer able to meet the requirements of increasing the number of head entrusted to one person's care, and a period arrived that lasts to this day and can be characterized by frantic search for the most expedient systems of barn construction and keep. Barns have been and are being built for stanchioned or unstanchioned keep, with or without litter, barns with stalls and various modifications, barns with mobile or stationary feeding lines, and also barns with different types of milking rooms.

What Practice Showed

Some of the barns characterized by their layout and technological equipment proved more suitable in practice than the others. However, one thing is typical of all large-capacity cattle barns. They require a high level of organization and strict observation of the prescribed zootechnical regimen.

We should realize that a technician entrusted with the management of a dairy farm whose capacity is, say, 1000 cows is responsible for fixed assets worth roughly 50 million korunas (35,000 korunas per stall, and 15,000 korunas per dairy cow). To this we must add 20 to 25 million korunas a year as the price of the feed, and the value of the produced milk and other products. These figures convincingly prove that the work of the managing cadres at large cattle-production centers is highly responsible and very demanding, and is comparable with managing the most capital-intensive sectors of industry.

The observations to date unambiguously indicate that sufficiently skilled and conscientious workers in cattle production are able to achieve good results even under less-favorable conditions stemming from the barns' less-suitable layouts and technological equipment.

It must be admitted that so far there are no known technological procedures for large-scale cattle production that would fully meet the requirements of practice. The primary purpose of these procedures is to attain a large number of head entrusted to the care of one person, and they must be based on consistent application of the principles of keeping cattle in herds. But it is a known fact that many dairy cows--particularly the ones of slighter build and with weaker nervous systems, but often giving very good annual milk yields--do not tolerate well the higrarchical relationships within the groups of cattle, and this is reflected unfavorably in their physical condition and output. Occasionally some of the aggressive cows threaten the others, especially during feeding.

Harmony in a group of dairy cows is disrupted also by frequent changes in the composition of the groups, as cows are assigned from group to group in accordance with the stages of their pregnancy and their milk yields. It is understandable that cows which cannot be machine-milked, because of deformed udders or other reasons, are unsuitable for large-scale forms of keep in a mechanizdd environment. Dairy cows of less robust constitution, particularly the ones with weak legs and soft hoofs that develop sores and limping on hard-surface floors, do not tolerate well the environment of

large-capacity barns. An unfavorable phenomenon is also the considerable noise in the barn, causing restlessness in the groups of cows.

On the one hand, then, the procedures are known for building large-capacity cattle barns and for supplying them with technological equipment that fully mechanizes or automates the individual production lines, permitting cattle production with minimal inputs of human labor. On the other hand, however, we must take into consideration the unfavorable fact that the construction of such barns is very demanding, and that the fully mechanized technological prodcedures for cattle production known to date do not meet the biological requirements of the animals and limit to a considerable extent their health and output. For this reason the highly productive dairy cows wear out fairly fast under this technology of keep, and they usually must be culled before attaining their peak output. It is almost the rule that from 30 to 40 percent of the dairy cows are culled each year, which considerably increases the costs of reproducing the herd and worsens the economic indicators.

In warm climates, where it is unnecessary to build substantial winterized barns, it is understandably easier to pursue the path of maximum progress that leads practically to the complete and highly productive industrialization of cattle production. For this reason the industrialization of cattle production has advanced the most under favorable climatic conditions and has achieved very high indicators of labor productivity. Examples of the successes achieved in this direction are cited the most often from certain very warm regions in the United States.

For most European countries, and hence also for Czechoslovakia, the conditions for rapid progress in the industrialization of cattle production are significantly less favorable, and in many instances they create obstacles that are difficult to overcome. At large-capacity centers for cattle production that permit the application of industrial elements in the work procedures, for example, the demands for transportation increase considerably, especially during the seasonal work peaks, when large quantities of rough fodder must be hauled in to create reserves for the winter.

The problems arising from the difficulty of storing bulk fodder, and of preserving it without loss, are much greater. For example, the annual rough-fodder demand of a dairy farm for 1000 cows is 4500 tons of dry fodder. This converts to at least 18,000 tons of fodder originally that has to be hauled, and about one-half of this has to be stored and conserved.

Other problems also arise. For example, how to prevent environmental pollution in the vicinity of large cattle farms. Ever-stricter regulations require the construction of costly installations to prevent any penetration of the pollutants into the soil or air.

Aspect of Effectiveness

These circumstances and other experiences to date with the construction of large-capacity cattle-housing projects--in many instances their operation

did not produce the anticipated effect, due usually to the not entirely complete solution of the encountered shortcomings--led the central managing organs to decide not to tolerate any randomness in the construction of large-capacity housing for cattle where industrialized forms of work are to be employed.

According to the adopted resolutions, construction will proceed in accordance with the principles of a comprehensive efficient system of keep applicable to the entire territory of Czechoslovakia. The scientific-research base for livestock production, in cooperation with a number of other work stations within and outside agriculture, was commissioned to elaborate the plan of an efficient system of keep for cattle on the territory of Czechoslovakia.

This unquestionably is the most important and most challenging task now being solved within the scientific-research base. Work on the plan of an efficient system of keep for cattle is being coordinated by the Research Institute of Livestock Production in Uhrineves. It covers particularly such questions as how to employ expedient specialization in cattle production, primarily from the viewpoint of the feasibility of producing the necessary feed and fodder, and where to locate the future capital construction for the proposed directions of production specialization. Furthermore, an entire set of biological problems is being solved that are related to the requirements for the health and productivity of cattle under industrialized forms of keep. Work of this type is based on utilizing the most advanced breeding methods to obtain a sufficiently large cattle population with characteristics suitable for industrialized forms of keep. In this respect the requirements are uncompromising. The cattle must have outstandingly high milk yields and a robust constitution, and they must be able to tolerate the conditions of keep in groups, and also the other conditions characteristic of the mechanized environment. Likewise the subject of study is the etiology of cattle diseases, the manifestations of which may be atypical under industrialized forms of keep.

One of the main objectives of solving an efficient system of keep for cattle on the territory of Czechoslovakia is to demonstrate the effectiveness of utilizing the progressive results of scientific and technological development, and to attain high labor productivity in cattle production by employing the elements of the technological procedures in industry. In this respect the target parameters are very high: an annual output of 300 tons of milk per dairy cow in milk production, or 300 tons of weight gain per feeder in beef production. This level of labor productivity in milk and beef production, similarly as in hog and poultry production, is already several times higher than the productivty per worker in industry.

Therefore the workers in scientific research and in research and development are concentrating their attention on new solutions for perfecting the basic technological elements of large-capacity housing for cattle. The greatest problems in this respect arise in designing systems for the handling, storage and efficient utilization of the manure that is a very significant by-product of cattle production.

What Has to Be Solved

High indicators of labor productivity in cattle production, and also a certain improvement of the working conditions can be achieved only with a system of litterless keep, under which the produced liquid manure is stored in special pits. A considerable quantity of such liquid manure is produced (in a large-capacity barn for 1000 dairy cows, between 20,000 and 30,000 tons a year), and sometimes the farms do not have suitable acreages for treating with this liquid manure when the storage pits are full. Therefore it is necessary to build the pits with a capacity that will enable the farms to haul away the liquid manure when the fields have to be fertilized, and not when the pits overflow.

No more than 30 tons of liquid manure should be spread on one hectare, and the manure should be plowed under within 24 hours. However, it is very difficult to comply with these regulations in practice, and the danger might arise of the liquid manure's leakage into the ground water or streams, especially when the soil is impermeable or frozen. Hygienists, water conservationsists and other specialists concerned with the living environment do not exclude the possibility that the persistence of infectious bacteria and the occurrence of harmful foreign substances in the liquid manure could create a hazard. It is obvious that in this area there should be closer cooperation between the workers who design the technological systems for keeping cattle, and the workers concerned with the problems of protecting the living environment.

An unfavorable factor in the case of litterless keep is the fact that cattle bred in Czechoslovakia are not sufficiently uniform morphologically, that they differ particularly in their length and overall weight. The dairy cows longer than their stalls lie as far as the grating-covered gutter, develop pressure sores on their udders and soil them, and may also suffer from the cold penetrating from the gutters under the grating. These shortcomings in housing manifest themselves in a higher incidence and less-effective treatment of mastitides. Only suitably selected barriers can eliminate these shortcomings, but such barriers complicate work in the stalls.

Equipment and Technology

The feeding lines now in use must be perfected systematically. Both the stationary and the mobile technological lines have significant shortcomings, particularly from the viewpoint of the specific conditions under which cattle must be fed in Czechoslovakia. In our country we will have to reckon also in the future with differences in feeding during summer and winter, and with the fact that the basic ration will have to consist in most cases of two or three types of feed. Therefore it is necessary to supplement the feeding lines with a mixing installation that will permit feeding the cattle in one operation, with mixes for different production objectives, which will also mean efficient feeding in accordance with the actual livestock yields. The use of automation elements will be a great contribution toward perfecting the functioning of the feeding lines.

Besides the technological problems associated with formulating and giving the cattle their feed rations, an enitre range of urgent problems is being solved to ensure a suitable feed base for barn complexes in which there is a high concentration of cattle. The large-capacity operations specialized to attain a high intensity of production must have a continuous supply of feed, and adequate storage capacity to stock feed for winter. Organization of the necessary feed base is a very difficult problem because it requires frequent revisions of the entire crop-rotation system.

A very responsible task of research and development is to design the technology and equipment for storing and preserving rough fodder. Huge quantities are involved because, for example, a large-capacity barn complex for 1000 dairy cows requires 8,000 to 10,000 tons of silage. At the same time the stricter regulations on protecting the living environment require that the silage areas be protected to prevent penetration of the corrosive juices into the soil. The construction of leakproof silage troughs that are equipped with drainage is very costly: an estimated 500 korunas per cubic meter.

The milking line is solved fairly well already now. At a high concentration of dairy cows (for example, over 1000 head), however, it is necessary to change to circular milking rooms of the highest capacity, although they are more demanding from the viewpoint of maintenance and servicing. We must likewise take into consideration that such milking rooms cost substantially more, and also consume more energy, than the most frequently used herringbone milking rooms. An emergency generator should be available in case power service is disrupted. However, the production of such generators in Czechoslovakia is not fully ensured at this time. Milking is the most labor-intensive operation in dairy farming, and therefore the milking lines are being perfected systematically. However, this also means that their procurement cost is rising. Thus the milking rooms of best design and highest capacity are economical only if the annual milk yield per cow is exceptionally high.

Organization and Management

Finally, overall planning of an efficient system of keep for cattle includes also the solution of an entire set of organizational and economic tasks. This involves elaboration of the principles of suitable procedures preceding the startup of a large complex with a high concentration of cattle, and also of principles for the organization, management and evaluation of operation after startup until full capacity is reached. Furthermore, a model zootechnical regimen must be elaborated, including the securing of data for the basic zootechnical records, and methods for monitoring and cutting costs. Such questions as, for example, perfection of cooperational and supplier-customer relations also must be solved.

The knowledge gained by solving the 14 partial tasks contained in the plan of scientific and technological development is being applied flexibly to the extensive standard construction of large-capacity demonstration barn complexes for all categories of cattle. This construction is an inseparable part of solving the overall problem of gradually employing an

efficient system of keep for cattle on the territory of Czechoslovakia. The shortcomings are that construction is considerably behind schedule, some of the originally contemplated parts of the technological equipment are unobtainable, the training of workers for the very demanding operations already built is lagging, etc.

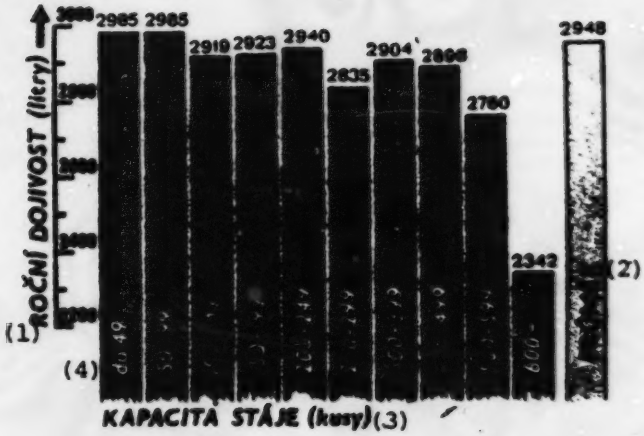
Raising Calves and Heifers

The problems associated with employing industrialized methods are fairly well solved in raising calves and young cattle. If the work rules and zootechnical regimen are strictly observed, very favorable indicators of labor productivity are being achieved, and to a considerable extent this is also true of the indicators of economic effectiveness. With the growing difficulties in the supply of energy, however, new problems arise that disrupt the original objectives, specifically in the case of raising calves. The long-range outlooks held that for a suitable division of labor it would be expedient to free the farms of the trouble of raising their own calves, by establishing central large-capacity barns for calves. During the period when the calves' only nourishment is milk, the raising of calves in such barns is based on dry milk substitutes, which is fairly energy-intensive. The milk for making the milk substitutes for calves must be dried, and the substitutes must again be diluted before feeding. Therefore the raising of calves at the large-capacity dairy barns is based at present on the surplus beestings and raw milk, until weaning. The calves are then transferred to calf barns or prefeeding barns where their feeding is already ensured with starter feeds and good-quality rough fodder, particularly fine hay.

The large-capacity feedlots for heifers report favorable results if the appropriate zootechnical regimen is observed, specifically if the feeding of the heifers is ensured. But here the handling of the manure remains a problem to some extent. The feedlots for heifers, understandably, are located in regions with a higher proportion of meadows and pastures, and consequently less straw is available for litter. Therefore the feedlots choose either flat stalls with meager litter, or litterless keep. In the latter case, however, a concentration of heifers creates difficulties in safely storing and efficiently utilizing the large quantities of liquid manure. For the time being it is not recommended to build feedlots for heifers with grating-covered catchpits, because as yet there is no effective way to make the catchpits leakproof.

Utilization of Feed

On large feedlots for cattle there is added to these shortcomings also the serious problem of how to ensure efficient feed consumption, since the feed accounts for a major proportion of the cost per unit of output. Considerable obstacles to efficient feed utilization are encountered particularly on the large-capacity feedlots of joint agricultural enterprises where it is impossible to avoid the acceptance of feeder cattle of very diverse origin, and hence often differing considerably in their ability to



Average annual milk yield per cow (liters) by categories of barn capacity.

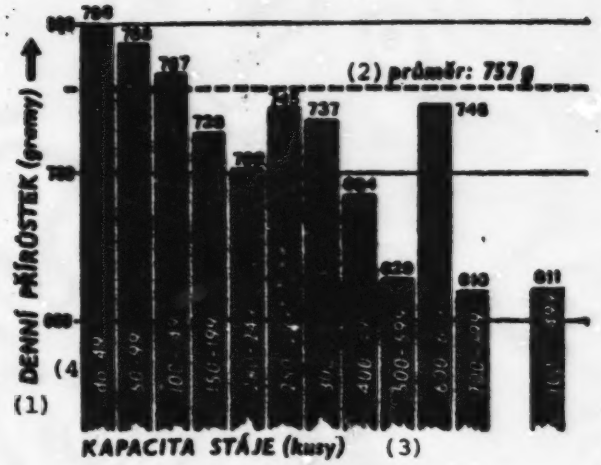
Key: 1. Annual milk yield (liters) 3. Barn capacity (head)
2. Average 4. Up to 49 head

Sources: "Jednorazove Setreni v JZD Viceuceloveho Vyberoveho Souboru, CSSR, 1977" (One-Time Survey of a Multipurpose Sample of Unified Agricultural Cooperatives, Czechoslovak Socialist Republic, 1977);

"Statisticka Rocenka CSSR 1979" (1979 Statistical Yearbook of the Czechoslovak Socialist Republic).

gain weight and grow. Wide variations in the ability to gain weight result in that the weaker individuals are suppressed, their feed intake is limited, as a result of which their growth is even slower. The strong and aggressive steers, on the other hand, consumer more feed than what is required for their growth and development. In fattening cattle to a high slaughter weight, therefore, the customary practice is to separate the less-suitable cattle whose weight gain is not commensurate with the supplied feed ration, and to assign them to less-intensive forms of fattening. After slaughter the cattle that did not fatten well are sold for cold cuts.

The large-capacity feedlots usually are not equipped to classify their feeder cattle and to give them different feed rations. Therefore the supplied carcasses, fattened over the same period of time, show considerable differences in weight and carcass quality. Regrettably, the construction of large-capacity model feedlots for cattle is proceeding slowly, and therefore we cannot yet tell how the newly employed elements for the better utilization of feedlot capacity, for perfecting the supply and intake of



Average daily weight gain of fattened cattle (grams) by categories of barn capacity.

Key: 1. Daily weight gain (grams) 3. Barn capacity (head)
2. Average 4. Up to 49 head

Sources: "Jedrnorazove Setreni v JZD Viceuceloveho Vyberoveho Souboru, CSSR, 1977";

"Statisticka Rocenka CSSR 1979".

feed, for faciliting the handling of the animals, etc., have turned out in practice.

Dairy Farms

The situation is the most complex in the large-scale barns for dairy cattle where the introduction of industrial technological procedures encounters the greatest obstacles, and where the costs of construction, mechanical equipment and of ensuring sanitary conditions of operation are almost intolerably high from the viewpoint of the feasible production volume. Also here the construction of large-capacity demonstration barns is behind schedule, and thus the first results of their operation will be available only in 1983 at the earliest.

In building these large-scale demonstration dairy farms, and in setting the principles of their operation, attention was focused on selecting the methods of keep and the technological procedures, so that the environmental

conditions for the cows approximate the optimum as closely as possible. For it is generally found that at present the not very satisfactory results of the large-capacity dairy barns built to attain a high number of dairy cows per dairy hand can be attributed in large extent to the fact that cows must expend a certain proportion of ingested feed's energy on overcoming the unfavorable effects of the barn environment. Particularly harmful are the excessive noise, the lack of space for undisturbed feeding and rest, the hard and rough flooring, and the disturbances caused by aggressive individuals. A great problem is the frequent occurrence of dairy cows that suck the milk of other cows. Very important is also the supply of fresh, clean air, without sharp drafts.

In the large-capacity dairy barns it is possible to keep only highly productive dairy cows that are very particular regarding the quality of their feed. Therefore also the questions of ensuring absolutely perfect feed must be fully solved, for example, prevention of the freezing of the juicy fodders in winter, of moldy straw, etc. Solution of the entire range of very difficult problems in conjunction with the large-scale keep of dairy cows is a long-term task. All the new knowledge gained in the course of solution must be fully tested in practice, and therefore we cannot expect that the construction of large and technically perfectly equipped complexes for cattle will spread rapidly. This is due also to the fact that the investment limits will be sharply curtailed for the Seventh Five-Year Plan, and therefore increased attention will have to be devoted to the reconstruction and expansion of existing buildings.

Within the framework of the solved efficient system for the keep of cattle, the new large-capacity complexes will be established in accordance with the objectives of specialization in cattle production, and their mission will be to point the way of further progress in developing the most advanced forms of milk and beef production in Czechoslovakia's socialist agriculture. The fact that this will be a lengthy process must be particularly emphasized. The construction in question will be very costly, and it will be able to produce the desired effect only if all the problems are solved that up to now have been an obstacle to attaining high intensity of production and favorable rates of return in the large-capacity cattle operations.

In conclusion we cannot omit mention of a very important finding. Successful development of cattle production will always depend primarily on mature cadres. Everyday practical examples convince us that a professionally cappable collective of technicians and keepers who work together well is far more important for achieving good results in cattle production than are the most sophisticated technical advances. Therefore the highest recognition and appreciation are due to the workers in cattle production, including the high proportion of women among them, who provide for us an abundant supply of increasingly popular basic foods.

1014
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INNER-GERMAN TRADE AT HALF-YEAR MARK ANALYZED

Bonn INFORMATIONEN in German No 15, Aug 80 pp 16-17

[Report dated 20 Aug 80 published in 26 Aug 80 BULLETIN of FRG Press and Information Office, reprinted as "Documentation" feature by FRG Ministry for Inner-German Relations: "The Development of Inner-German Trade: Results of First Half of 1980"]

[Text] The FRG Ministry for Economics released the following information: Compared to the same period last year, inner-German trade during the first half of 1980 developed as follows:

	1978	1979	1979	1980	
			First half year		
	in million accounting units		in million accounting units		in percentages
Shipments	4,754.4	5,092.8	2,086.3	2,714.3	+ 30.1
Purchases	4,066.3	4,791.8	2,158.1	2,987.0	+ 38.4
	8,820.7	9,884.6	4,244.4	5,701.3	+ 34.3

The 34-percent rate of increase which has been achieved is a continuation of the accelerating growth that became evident during the second half of 1979. Even when the fact is taken into consideration that particularly with respect to those kinds of goods that have a high turnover rate (petroleum, petroleum products, chemical products and nonferrous metals) prices have had a considerable effect on the development, in general the expansion of inner-German trade has been gratifying on a broad basis. In either category, shipments as well as purchases, there are only a few individual positions that show a decline when compared to the same period last year--and the decreases are very small.

A factor which contributed significantly to the good results was the long-term agreement on shipments and purchases in the energy field that was concluded with the GDR in 1979. It remains to be seen to what extent this expansive development will continue during the second half of the year. At any rate, the basic statistical effect caused by the high rate of increase during the second half of 1979 should lead to a slowdown in the rate of growth, which had reached a high level during the first half of 1980.

As was the case already during the preceding year, GDR sales rose faster (+38.4 percent) when compared to our shipments (+ 30.1 percent), which led to a surplus in the

balance of trade for the GDR amounting to 273 million accounting units (first half of 1979: + 72 million accounting units). Without considering the service sector, which traditionally shows a negative balance for the GDR--as a consequence of higher interest payments resulting from long-term financial credits granted to the GDR for shipments of large installations it rose to more than 160 million accounting units--the exchange of goods alone produced even a surplus of 434 million accounting units.

The total balance of mutual liabilities, including the use of swing (so-called accumulated assets) sank from DM 3.91 billion at the end of 1979 to approximately DM 3.65 billion. It is about the same as it was at the end of 1978. As a consequence, the tendency should have increased for the GDR to enjoy greater freedom of movement when it comes to purchases in the FRG.

With regard to shipments, a total increase of 628 million accounting units could be recorded; changes for the most important kinds of goods were as follows:

Shipments	First half year (in million accounting units)		Changes compared to last year	
	1979	1980	in million accounting units	in percentages
Chemical products	399.6	445.5	+ 45.8	+ 11.5
Machinery, electrotechnical products	318.9	429.0	+ 110.1	+ 34.5
Petroleum, crude	128.7	356.1	+ 227.4	+ 176.7
Agriculture and forestry	160.5	227.1	+ 66.6	+ 41.5
Iron and steel	182.2	147.4	- 34.8	- 19.1
Mining products	166.1	146.2	- 19.9	- 12.0
Textiles, clothing	115.1	130.2	+ 15.1	+ 13.1
Nonferrous metals	89.5	116.6	+ 27.1	+ 30.3
Services	287.7	442.7	+ 155.0	+ 53.9

Only two kinds of goods (iron and steel, mining products) are indicating a decline. For mining products (- 20 million accounting units) the reason is of a "technical" nature, since weather conditions during the first half of 1979 and the accompanying energy shortage in the GDR at the beginning of 1979 led--for a short period of time--to very large hard-coal shipments. All the other important areas partially show considerable rates of increase. In this respect, the increase in our shipments of machinery/electrotechnical products (+ 110 million accounting units) is particularly gratifying; over the last 2 years they had declined considerably because of

the expiration of business agreements concluded in 1975 covering large installations. Apparently, the effect can be felt of new large-scale orders by the GDR for installation projects from FRG firms, which began in 1979.

Unusually high rates of growth were also achieved for sales to the GDR of agricultural products (+ 66 million accounting units) and especially of crude oil (+ 227 million accounting units). Crude oil shipments have to be considered in conjunction with trade policies covering our purchases of petroleum products. The high rate of growth in this area, which, after all, amounts to more than one-third of the total increase in shipments, is affected by prices as well as by quantities.

Increases in purchases from the GDR totaled 829 million accounting units; a positive trend is evident in all of the most important categories of goods:

Purchases	First half year (in million accounting units)		Changes compared to last year	
	1979	1980	in million accounting units	in percentages
Petroleum products	398.8	816.7	+ 417.9	+ 105.0
Agriculture and Forestry	320.3	370.3	+ 50.0	+ 15.6
Textiles/clothing	331.4	345.5	+ 14.1	+ 4.3
Chemical products	172.7	331.7	+ 159.0	+ 92.1
Machinery, electro-chemical products	139.3	157.8	+ 18.5	+ 13.3
Iron, sheetmetal and metalware	60.5	74.8	+ 14.3	+ 23.6
Pulp, paper	44.2	66.8	+ 22.6	+ 51.1
Stones, soil	25.6	44.3	+ 18.7	+ 73.1
Services	243.9	281.1	+ 37.2	+ 15.3

The growth on the side of purchases is even more widespread than it is on the side of shipments. A subdivision into 22 statistical areas of goods shows that only two kinds of goods, "precision mechanics/optics" as well as "miscellaneous" declined. Nevertheless, half of the entire increase in sales by the GDR was in the category of petroleum products. In this area--although the quantity of shipments was increased only slightly--the GDR could increase its revenues significantly by adjusting prices to world market levels, which had risen considerably. Higher prices most likely played also an essential role in the unusually large increase in purchases

from the GDR of chemical products (+ 159 million accounting units). On the other hand, it also reflects an increased supply capability on the part of the GDR, based on expanded capacities in this sector. With regard to textiles and clothing, an area in which purchases had declined last year, the GDR was able to improve its position only slightly--in real terms purchases from the GDR probably stagnated.

To be sure, fortunately GDR sales of machinery and electrotechnical products continued its upward trend during the reported period (+ 13 percent). In proportion to the total of purchases, however, they declined because of the strong expansion of purchases in the area of raw materials and production goods. As a consequence, the desired improvement in the structure of purchases from the GDR could not be achieved; both sides had hoped for a larger share of technological finished products or capital goods.

8991
CSO: 2300

NEW INCENTIVE SYSTEM INTRODUCED AT STATE FARMS

Budapest PARTELET in Hungarian No. 10, 1980 pp 50-54

[Article by Zoltan Toszegi, a deputy main department chief in the National Center of State Farms: "New Interest System in State Farms"]

[Text] The change in the regulator system has also had a strong effect on the management of the state farms. The new regulators introduced at the beginning of the year direct the attention of the leaders of the farms toward those activities which are most important from the viewpoint of the national economy. They encourage developing and changing the product structure, and stimulate a better utilization of existing capacity, the modernization of technology, improvement of the quality of the products and better organization of production and trade.

We do not yet have sufficient experience with the newly introduced regulator system. But in surveying its effects we can rely on the consultations conducted at the time of its introduction, the 1980 operational plans, the enterprise wage policy conceptions outlined in the collective contracts, sample economic calculations and information obtained in the course of talks with the leaders and workers of the farms. On the basis of this information we can state that the new regulator system has encouraged the economic, political and representative forums of the state farms to think things over in a basic way and to make decisions based on careful calculations.

The political organizations also have undertaken an active role in preparing and passing the decisions. It is for this reason that it is important that the party organizations, trade unions and KISZ organizations of the farms know in detail the regulator system, its goals and methods, and adapt to the relationships of the economy together with the economic leadership. In this they should be of help to the economic leadership by bringing the workers into the preparation of the decisions, primarily via the forum system of enterprise democratism, informing them and mobilizing them to carry out the tasks which have developed.

Increasing Efficiency in the Foreground

The regulator system measures efficiency not only by the absolute value of profit, but also by the profit per capita and the profit related to the combined sum of assets and wages. Material interest also is attached to the development of these indexes. The way to increase efficiency is correctly indicated by those farms

assets and wages. Material interest also is attached to the development of these indexes. The way to increase efficiency is correctly indicated by those farms where they decrease the specific energy and material expenditures of production, improve the utilization of existing fixed and circulating assets, increase the productivity of work at a rate exceeding production and increase profit as a result of all this.

It has been noted in some farms--and this is shown in their operational plans for this year also--that improving these indexes is made difficult by the increase in the cost of expenditures--as a result of the price increases--which was not followed simultaneously by a similar increase in producers prices. In most places, however, they did not get hung up on complaining about the more difficult circumstances. The quick reaction and accommodation to the new situation by those of our farms best prepared to accept the new regulator system is shown by the fact that they prescribed higher profit for this year as compared to the levels already achieved by them. They plan to increase efficiency in a worthy manner with a better organization of their activities, developing their product structure and a stricter consideration of thrift and quality requirements. Thus the Dalmad State Farm planned a profit of 123 million forints, as opposed to 108 million forints in the preceding year, and planned to increase its efficiency index (the quotient of profit and assets plus wages), already very high among state farms, from 12.2 to 13.9. It is also worthy of note that the Bikal State Farm planned for this year a profit of 48 million forints, as opposed to 40 million forints last year, with an increase of the 3.24 efficiency index to 5.22. The prescriptions of the state farms in Alsotengelic, Cegled, Enying, Hosszuhegy, Mezofalu and Pankota, those along the Szamos and elsewhere show similar aspirations.

Under present conditions the development of production will require much better thought out work from all farms than ever before. Independence will demand of the leaders a better market awareness and swift adaptation to changing circumstances.

The producing land is the greatest reserve for management. So the chief goal on all farms should be economical use of the area. The tasks put forward in the party program statement in connection with producing land, classified as a national treasure, are:

--stressed cultivation of better than average soils, realizing the conditions for intensive production here;

--preserving the productivity of the soil in areas classified as average;

--in areas which can be improved making the soil suitable for production by means of melioration investments; and

--on farms with lower production and profitability levels broadening the structure of production with activities which are independent of the natural and soil conditions.

Encouraging regional production can bring considerable results by making use of the reserves of crop production. This does not apply only to farms in unfavorable circumstances which can make use of special supports.

Significant differences have developed among our farms in regard to the efficiency of management. Some of the differences are justified by different natural conditions and equipment levels. We cannot realisitically post as a goal an elimination of differences in the development of production. It would be absurd to expect that the farms with unfavorable conditions could develop such modern producing operations and vertical structures as those with definitely good conditions for agricultural production.

The party organizations could be of great help to the economic leadership in judging this because they could help the economic leadership, by means of their correct stands, suitable arguments and encouragement, to make correct decisions in recognizing that the largest supplementary expenditures and developments are not the best solution everywhere. The state farms in the Bolyi Agricultural Combine, Mezohegyes or Hajduszoboszlo have other possibilities for intensive development, and different requirements could be posted for the development of grape production in Sopron, Szekszard and the Balaton Highlands than could be borne by the farms in the Kiskunsag, Hortobagy or Bihar areas, or by the mountain farms.

The party organizations could post as a goal aid to small scale production. This should be developed in such a way as to completely exploit the existing large scale capacity while aiding and organizing small scale production with material supply, transportation, taking over the produce and the products and giving advice. For example, the Herceghalom State Farm is turning over to the surrounding small producers 5,000 sow piglets per year, the Hosszuhegy State Farm is organizing the production and marketing of vegetables by small producers, and the Kornye Agricultural Combine and Bikal State Farm are producing rabbit meat and marketing it for export in cooperation with small producers.

Regulating Personal Income

The uniform regulation of personal income in the regulator system encourages the development of rational producing activity; it gives more independence to the farms in income management in a form which is more flexible than before. It does this primarily by abolishing the rigid link between wages and production value and by giving broad allowances in the case of activities which are most problematic from the viewpoint of manpower management (the production of vegetables and berries, fruit and grape planting, harvesting of apples, pears and peaches, etc.). In the new interest system those farms which are able to make a higher profit per worker will be in a more favorable situation.

Increasing profit and rational personnel management are in the center and this requires a new way of thinking from the leaders of the farms. The party organizations should help the economic leadership in this also. This is especially necessary when changing the structure of production, or when some organizational measure forces the workers to change jobs on the farm or possibly to leave the farm. In these cases the party organization should help them to understand the necessity of the changes, and should see to it that the changes are carried out

without hurting the workers affected, with farreaching care for them. And the party organization should see to it that those who do "suffer" from the changes should be primarily the disorderly, undisciplined people who lag in work.

We originally supposed that there would not be any considerable reduction in force on the state farms in the wake of the new wage and income regulation. Our information from the sites confirms our supposition. In any case this would have been no different if the wage fund management system had continued because reductions in force virtually ended in 1977 on the state farms and there has been no change in this respect since. This was also confirmed by the 1980 operational plans. The reason for this is that the strongly developing auxilliary and subsidiary activities absorb the personnel being freed from basic activity.

So the chief aim is not a reduction in force at any price but rather the employment of the personnel with well organized, worth while work. In come cases--especially on farms with weak natural conditions--a useful solution is to do this even at a lower level of labor productivity because this is more economical than creating the conditions for mechanization.

Despite its many favorable effects the new regulator system is not free of problems. For example, there are various differentiations in the wage regulation system but essentially what is involved is simple average wage regulation. The disadvantageous effects of this (weakening personnel management, lax control of the flow of purchasing power, etc.) are well known. Despite all this both the planned magnitude of the increase in the wage level and the best use of the possibilities for generating the shares fund direct the attention of the farms to increasing efficiency and increasing the economicalness of expenditures. It is fairly clear to our farms that less expenditure in agricultural production need not result in a decrease in production. The leaders of our farms correctly interpret the economic significance of increasing yields and the necessity of rationalizing expenditures and we need not fear that the profit-centered nature of the new regulator system will lead to a neglect of production levels.

We must also reckon with the fact that the wage management system has become more complex because the taxation, allowances, personnel accounting and other factors require from the leadership the recording and processing of very many data and a knowledge of all the interdependencies and effects--in order to permit an overview of the whole system. There are still differences among the leaders of the several farms in regard to complete mastery of the system and a recognition of the interdependencies.

Differentiation or Leveling?

The question of differentiation or leveling is the dilemma of the wage management system. The present system of wage regulation strongly favors the leveling tendencies. (There are fewer possibilities for increasing the wage level on farms with higher average wages and more possibilities on farms with lower average wages.) But shares regulation has an effect in the direction of differentiation. This, however, because of the size of the shares, can affect only about 10 percent of the earnings. Thus the leveling effect is the stronger. The question is whether the leveling orientation of the entire system can be accepted over the longer run.

We feel that it cannot, and we must start trying now to mute this effect by correcting various elements. This might be done by making it possible even for the farms with higher average wages to increase average wages more quickly in some way. In addition it might be useful to build into the system a preference which would encourage reductions in force.

In addition to the question of differentiation and leveling between enterprises, the farms are greatly concerned with the differentiation of wages within the farm. We do not find among the leaders of our farms any objection to this in principle. They consider it justified for a worker to earn more if he takes a larger part in social production with his work. But they are only slowly beginning to change the earnings ratios which have developed. There are very many reasons for this. One should mention, for example, the opinion that the magnitude of wage development--by the utilization of which one might begin a greater differentiation--is so small that it does not make possible any real progress. One can hear opinions according to which the leadership cannot undertake to achieve differentiation by reducing the wages of some workers or working groups. There is a unanimous opinion that this would not be acceptable today either socially or politically. The problem is increased by the fact that the leveling of wages came about by a swifter increase in wages for those earning less; there were not only standard of living policy reasons for this, which is to say that a number of central measures forced the enterprises to do it, but also it was an important factor that the socially developed wage requirement for part-time work or hard and mass work (requiring a large labor force for a short time) increased more quickly than that for other work.

Interdependent with such circumstances is the fact that branch earnings deviate from the average wages for the economy in general by 15 percent in both directions. A greater deviation is found only in the earnings of the drivers of combines and large tractors and in those of workers doing the hardest work in animal husbandry. In general they are trying to realize differentiation within individual branches and work areas by paying performance wages. This is being realized most of all in tractor-combine work and in animal husbandry.

In the case of machine work the differentiation is achieved by paying piece-wages for quantitative performance. The problem with this is that in some cases the increase in output is achieved to the detriment of the quality of the work, and so it is not certain that the tractor driver who earns the most is the best tractor driver on the farm. The contradiction appearing here can be resolved only if the quality indexes set in the technological prescriptions are made a condition for wage payment.

In animal husbandry quantitative, qualitative and rentability conditions constitute the basis for calculating wages. Actually this wage system can be called the best developed, the one which best realizes a harmony between earnings and the effectiveness of work.

When dealing with the wage system the party organizations should examine two questions. The first is what interdependence has developed between the technological prescriptions and the earnings of the workers. On most farms the technologies have now been prepared in writing. These set forth in detail the methods of production and the parameters of work (for example, the depth of planting, row

distance, the number of vinestocks, the depth of cultivation, etc.). Today, however, the workers have less interest in fulfilling these indexes. So we must strive to make a more significant portion of the earnings of the workers dependent on fulfilling these indexes.

The other chief question is to improve the system of accepting work. We cannot tolerate a formal system of accepting work, of "documenting" work, which adjusts the performance to a level of earnings which was developed by the needs of the workers. Only a consistent and principled stand can bring better results than at present in this question.

Modernizing the activity of the farms and their functioning in the economic environment which has developed places numerous tasks before the economic leadership. It is our conviction that the effective cooperation of the party, trade union and KISZ organizations is indispensable in the solution of these tasks, and it is especially vital that they take a correct stand in questions of political and social import and in this way aid in laying the foundations for economic decisions.

8984
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IMPLEMENTATION OF RESOLUTIONS IN INDUSTRIAL PEST COUNTY STUDIED

Budapest PARTELET in Hungarian No 10, 1980 pp 62-66

[Article by Dr. Andras Arato, secretary of the Pest Megye Party Committee: "Execution of the Resolutions in the Center of Work"]

[Text] A circumspect passage of party resolutions and organizing the execution of resolutions stand in the center of the guidance work of the Pest Megye party committee also. It also encourages the city and jaras party committees in this direction. We have worked out and begun to implement, in the spirit of the party's policy and the resolutions of the leading organs, long range conceptions in the areas of economic policy and ideological work and party life.

The dynamic development of the megye demands that the party committee examine the changes which have taken place in social life and define the political tasks in connection with them. Thus we have analyzed the development of the social role of the workers, their activity and their working and living conditions. We have dealt with the living conditions of commuting workers and the Gypsy population and the social, cultural and public life activity of the intellectuals. In the near future we plan to define the tasks of political work to be done among women and youth.

We try to realize a unity of ideological-political and practical organizing activity in guidance work. As a result of this the members of the party committee are participating in ever larger numbers in exchanges of experiences on the spot, aiding and supervising the execution of the resolutions. Their experiences are used in a far-reaching way in political leadership. The lower level party organs, including reports by the communist leaders of state, economic and social organs in their sphere of authority, provide much experience and information.

We turn appropriate attention to the areas of state, scientific and cultural life in addition to economic work. Before all else the megye party committee is guided by the aspiration to aid more effective execution with a trustworthy survey of the given situation, discovering the causes of achievements and problems, and with political guidance.

We use other methods also to supervise the execution of the resolutions. The members of the megye party committee regularly participate in the corporate sessions and membership meetings of various party organizations. A significant number of them actively participate in the brigade examinations. We feel that these methods

of aiding and supervising execution are in harmony with the resolution of the 12th congress and jointly strengthen the collective character of work and personal responsibility.

To a significant extent the fate of the execution of the resolutions depends on the level of the work taking place in the primary organizations. Knowing this, the megye party committee regularly deals with preparing the secretaries and leadership members of the primary organizations. Each year we care for the further training of about 500-600 primary organization secretaries in such a way as to place the emphasis on an appropriate adaptation of the basic central and megye resolutions. We deal continually with the so-called "scope of activity" training of leadership members in the interest of strengthening their independence and responsibility in execution of the resolutions. It is our experience that the continual training contributes significantly to the development of adaptive preparedness. In this way also we help them to see that crucial link in connection with each resolution which is the key to realization of the whole resolution.

The Results of More Modern and More Efficient Economic Work

In connection with the Central Committee resolutions of October 1978 and 6 December 1979 passed for the development of the economy we took the position that before all else we had to get the leaders and technical experts working in the guidance of economic life to understand them. We encouraged them to try to create the technical conditions for further development and to work on a transformation of the product structure. As a result 75 percent of the products of the Csepel Auto Factory, which had been struggling with problems earlier, are now new goods which can be sold well. The Mechanical Works achieved noteworthy results in abolishing obsolete products and in a more efficient employment of manpower; they now produce about 90 percent new, modern products. In the Diosdi Bearing Factory, as a result of the reconstruction and good work organization, productivity and the ratio of exportable products have increased significantly.

Naturally such a large scale change of products required good preparation of decisions and proper political work from the guiding party committees and the factory party organizations. The switchover affected several tens of thousands of people in the factories of the megye. The party organizations discussed the political and human effects of the planned decisions. They weighed politically whether the planned decisions were in harmony with the resolution of the Central Committee. In many places lively debates preceded each decision. The party organizations were informed about the movement of manpower, the necessary regroupings, the development of work discipline and the wage situation on the basis of reports from leaders and exchanges with workers. They not only performed situation analysis but also examined concretely the local tasks.

In the Csepel Auto Factory, for example, the primary organizations did concrete and persuasive political work for the practical realization of the party's economic policy. Several thousand skilled and semiskilled workers had to be convinced that in the future they would have to do a different sort of work in the new shop hall. Several hundred people were convinced that instead of the engine assembly work they had been doing they would have to do welding or metal work and would have to get the necessary training. In the Mechanical Works the workers had to be switched over from special and assembly work on oil stoves to the manufacture of paint sprayers, which demands highly skilled training.

The collective of the Danube Petroleum Industry Enterprise in Szazhalombatta is producing, as a result of the local adaptation of the execution of party resolutions, chemical products thanks to which they increased their dollar export four times in 3 years.

In the wake of executing the resolution in the majority of the factories of the megye they had to carry out a planned regrouping and retraining of manpower. The party organizations and individual communists did responsible work in this also. We came to this conclusion when, on the basis of a resolution of the megye party committee, all the factory party organizations of the megye asked for reports in the first half of this year from the economic leaders about the status of manpower management. The megye party committee was represented at 40 places and the megye economic and cooperative policy committee and then the megye party committee debated the experiences gathered together with the guiding party committees.

The reports and examinations well serve the execution of the resolutions. They are helping the economic leaders and the factory party organs to adapt to the changing conditions better and more quickly. At the same time we also found that attitudes and behavior do not always change easily. Some leaders feel that planned management is impossible under the new circumstances and feel that they cannot follow the constantly changing prices for raw and primary materials. They feel that the problems existing in the areas of manpower management and work discipline can be solved only by central measures. They do not see the possibilities of differentiated wage payment. These experiences set further tasks for us in political work, argument and persuasion.

On The Road to Realizing Our Agricultural Policy

The existence of well prepared cadres is a very important condition for adapting resolutions and fitting them to local conditions. This is testified to by the experiences in the megye in execution of the 15 March 1978 resolution concerning the development of agriculture.

Each year work talks are held, organized by the state and economic guidance organs of the megye at the time of preparing the five-year plans of the producer cooperatives, at which they agree on which cooperative plans to increase to what degree its production of milk, vegetables and bread grain. Here we try to create harmony between needs and possibilities. The standard is very high also in regard to the production costs with which the products will be produced.

It is evidence of the successful execution of the Central Committee's agricultural resolution that today the cooperative leaders are proud not only of the fact that average milk production has increased by several hundred liters in the past 3 years, and that thus production per cow in the megye exceeds 4,000 liters per year, but also of the fact that in a number of producer cooperatives one liter of milk is produced from 32-35 grams of fodder. But while this was happening there were many debates and exchanges between the party organizations and the cooperative leaders. The results now prove that it was worthwhile to be consistent and demanding. The fact that not one of the 80 agricultural cooperatives in the megye had to undergo financial reorganization in the past 3 years is also part of the work done in the spirit of the resolution. This required that every party member

working in agriculture knew his own concrete task which had to be performed to achieve the overall result. We created the conditions for this by holding membership meetings in every primary organization working in an agricultural operation at which the local tasks deriving from the resolution were debated. A session of the megye party committee summed up the experiences and tasks of the debate--since a representative of the megye party committee participated in every membership meeting--and an agricultural development conception extending to 1990 was adopted taking into consideration the local recommendations.

We have achieved outstanding wheat production in our megye. This cannot be attributed only to the favorable weather. The deliberate work of the experts and producer cooperative members had a very great role in the results.

We have found that the great majority of the party organizations of the industrial and agricultural operations correctly designated those concrete economic policy tasks which serve the attainment of national and local economic goals. But knowing the results of the first half year we can also say that the initial uncertainty connected with the new price and regulator system has ended only partly and the enterprises continue to carry out their economic activity with increased caution. Despite the problems and difficulties the socialist industry of the megye has produced less than this time last year by only 2.8 percent and production has developed in a more differentiated way than in recent years by branch of production and by product.

The work plans of the party organizations reflect the requirements of the Central Committee resolution. These plans place in the foreground quality, efficiency, export, modern product development and thrift. It is thanks to this also that nonruble accounting export was higher than 1 year ago by 38 percent and ruble accounting export by 11 percent. There can be no doubt that a role was played in these achievements by the active work of the communists and party organizations, their persuasive, organizing activity in prompting action.

Naturally we should not be silent about all those problems the solution of which requires further efforts on the basis of party resolutions. Investment activity has moderated further, but the rate of fulfillment of investments under way has decreased. The output of the contracting construction industry lags behind the prescriptions of the annual enterprise plans and the actual performance of the preceding year. The 2 to 3 week delay in the maturation of agricultural products has moderated the growth in the production of the foodstuffs industry.

Developing Organizing and Persuasive Work

The guiding party committees in the megye have not yet succeeded in executing the implementation of the resolutions with suitable consistency in every case. There are several reasons for this.

We find in a few cases in regard to the jaras and city party committees that there is not a suitable link between the passage and execution of resolutions. They turn great care to preparing a given resolution, they perform a careful analysis and pass a good resolution but then they feel the matter has been taken care of. In many cases these resolutions still do not set down the points of execution and

supervision or those responsible. What we need is fewer new resolutions and more effort turned to executing, aiding and supervising the existing ones. The level of execution and of supervisory work must be raised to the level of the work done in preparing resolutions. Thus--as the 12th congress said--organizing and supervising the execution of resolutions must be placed in the center of work in all areas of party life.

The megye party committee and the party organizations have done much to make the party members of the megye better acquainted with the resolutions of the congress. We are trying to see that the party membership, having a knowledge of this, will stand up for the policy of the party and support local decisions in harmony with the positions taken by the congress. In the first place they should report on the resolutions of the higher level party organs at the membership meetings. This is the forum where the communists first debate the concrete local tasks and develop their uniform positions. Here are formulated those ideas which give an answer to the questions of "why," "what" and "how," and which represent for the communists the material for agitation arguments.

At the forums of place of work democracy the activists of the party, KISZ and trade unions try to acquaint the entire working collective with the local tasks. And the leadership should use in its work the opinions and creative recommendations voiced here. We do not say that there are no problems in regard to the substantive functioning of this forum system. There are leaders who underestimate the significance of this and there are party organizations which recognize to only a small extent the possibilities hiding in it. Still we find that the great majority of political and economic leaders think together and work with the working collective and have recognized that the forums of place of work democracy are among the most effective arenas for agitation connected with production and management.

The tasks can be discussed and announced in many other ways in addition to the forums mentioned. There are local newspapers and factory news services in more than 70 places among the industrial and agricultural operations of the megye. The publications of these are popular, they well serve to inform the workers and they direct attention to daily and long-range tasks and the problems to be solved.

We consider it our task to further increase the role of the membership meetings in the execution of the resolutions. This is why we should decrease the number of obligatory membership meeting agenda points in order to make it possible for them to deal with the resolutions in the way which best suits local conditions.

We consider it necessary for the party membership to participate more fundamentally in passing local resolutions. We should provide more opportunity for individual party members to become acquainted with draft resolutions in the party groups. The leaders of the primary organization should consult with them about proposals coming before the membership meeting. Only in this way can we place more definite requirements in execution before the party groups and individual party members. At the membership meetings concrete assignments should be given to all those communists who are able to play a worthy part in the execution of a given party resolution.

We are convinced that as a whole the execution of party resolutions is favorable in the megye. But in addition many problems still make swifter progress difficult.

Our party organizations perform their political guidance work under varying conditions. The changing economic circumstances and cadre conditions influence the success of execution. Because of the narrow nature of these conditions a few primary organizations find it difficult to deal with the increased requirements. So we consider it our task, all the more, to help their work and make them suitable for the perfect execution of political decisions.

8984
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CHADZYNSKI ASSESSES POLISH EXPORT ACTIVITIES IN U.S.

Warsaw ZYCIE WARSZAWY in Polish 15 Aug 80 p 5

[Article by Henry Chadzynski, special correspondent: "The Fundamental Sales Principle"]

> [Text] "PROMINEX." the Polish enterprise in New York that sells our glass, porcelain and other products in the United States, cannot complain about an excess of offers from domestic suppliers. If there was an increase in receipts last year, and this year's sales should also show an increase, this is due less to larger shipments than to better prices. But the enterprise is not alone in this respect; this is the trend in this sector. What is important is that the better prices should be taken advantage of immediately.

Jozef Partyka, manager of "PROMINEX," shows invoices which reveal 15 percent higher prices this year for glass and crystal and 12 percent for porcelain. The figures refer only to the first half-year, for the situation for the following months is not known. Inflation, higher labor costs, and above all, higher fuel costs in this energy-intensive sector--all mean that the purchasers of these products will accept the need for price adjustments with understanding, but not with joy.

"PROMINEX" is a young enterprise, not quite five years old. During this time the value of sales has multiplied and this year sales will approach 30 million foreign-exchange zlotys. Last year for the first time, our thickwalled, undecorated hotel porcelain was introduced into this market on a large scale. It comprised about 40 percent of the total ceramics exported to the United States and was sold to a large Los Angeles firm. The beginnings were not easy because the "Lubiana" Works was not prepared for such a large expansion of exports and it took a great deal of work to meet the quality requirements, particularly as to packing, of the purchasers. After a year of cooperation, certain conclusions were drawn which promise considerable increases in sales. In the future, "PROMINEX" wants to sell decorated hotel porcelain to other buyers.

In the sector of ceramic materials and glass, the opinions on our suppliers were generally favorable--they promptly react to customers' needs and requirements. The efforts and endeavors of the glass works in Krosno, which has a good reputation in this market, were particularly noted. Unfortunately, the same cannot be said for suppliers from other industries. The manager of our furniture company, "AMPAG," Wojciech Janaszewski, told me of certain furniture manufacturers who think that everything they make is absolutely perfect. All observations that sometimes it is better to make something simple that is saleable, instead of something that is more complex but for which there is no market, go unheeded. In any case, there is a totally different situation in the furniture sector as concerns retail prices, which, of course, are increasing, but not as fast as production costs. For some time now, according to Mr. Janaszewski, prices in specific furniture categories have stabilized. A higher price can be obtained only if the boundary of the category is crossed and furniture of another class is delivered. "AMPAG" is the only one of our firms that has furled its sails and moved from New York to the heart of the furniture industry. I spoke with the boss of the enterprise just before the move to High Point, North Caroline, the large furniture center where the largest furniture marts in the United States take place twice each year. The new location costs incomparably less, notwithstanding the better working conditions not provided by the close quarters in Manhattan. But it is obvious that it is not necessary to be in expensive Manhattan. To be successful in the market, one must be in the center of the sector. Due to tremendous distances and transport costs, the furniture will be ordered in elements and assembled locally. Operation in such a large center provides opportunities for entering into co-production agreements with the local large commercial firms, for which a single piece of furniture comprising an element of a set sold in large quantities, can be produced. But for this, close cooperation with the domestic industry is required. Unfortunately, models for furniture were shown to me for which a a long production time was required. This made it impossible to come out with a bid at the time the demand was there.

It is difficult to understand why the reaction of our exporters is so delayed. If in the case of furniture, production of a new model took time, another example, given me by our trade consul in Chicago, Ireneusz Kubiczek, was more difficult to explain. For a year and a half there was no reply to an inquiry on dehydrated soups. On the whole, the food sector, apart from "ANIMEX" which has proven operating methods and its own sales organization, has not been taking advantage of opportunities. This is not hard to believe since the exporters exhibit a peculiar indifference. They know best. They are the smartest ones on the lot. When they were told that in six containers sent to the United States half the bottles of mineral water were broken, they sent back a letter, my informant tells me, that they know more about this than the complainant and that they know how to load into the container. No matter that one third of the container was empty--they know more. The same as one of our managers, of higher than average rank, who in visiting the boss of a large concern lectured him during the entire visit on how the business should be organized. Only during the leave-taking was there an

unexpected retort. The host thanked him for all the advice and simply expressed amazement that with all that knowledge, the manager's actual results were so modest.

Unfortunately, often because of just such a know-it-all attitude, we lose a great deal. In this market a case of mineral water brings more than a case of beer. That fact is, export of mineral water and beer both could expanded on a large scale, to say nothing of the completely mysterious events with somehow strangely slowed down the export of our vodka. Only now has the situation in the food sector improved. It may be, for example, that a change in the agent for Polish vodka will bring the desired results, although it is about time that independent operations in the sector are achieved. Experience has shown that a Polish enterprise, or one financed by our capital, can operate successfully. A foreign agent's monopoly often can be a hidden obstacle in trying to find a market.

Our exports to this market amount to almost 500 million dollars. Our purchases, particularly in view of grain and fodder imports, are much greater. These proportions must be reversed. True, our export continues to encompass new fields; products of the electrical machinery industry now occupy an important place. But we are still not selling items from many traditional sectors. Certainly it would be more profitable for us to export candy to the United States than to sell sugar to someone else. We could increase sales of many food products, such as those previously mentioned--dehydrated soups, to say nothing of mineral water and other beverages. Many factors enter into this. In many cases, regardless of the obstacles, which we normally call objective ones, the reason is simple. We have forgotten the fundamental sales principle--that the customer is always right.

9295
CSO: 2600

WEST GERMAN COMMENT ON PROBLEMS OF SELF-MANAGEMENT SYSTEM

Bonn DIE WELT in German 18 Oct 80 p 25

[Excerpt from article, "A Cold Winter Threatens Yugoslavia" by Carl G. Stroehm]

[Excerpt] A few days ago Branko Horvat, the prominent Yugoslav economist, sharply criticized attempts by the Yugoslav republics to form themselves into enclosed economic units. He further criticized the practical implementation of the 1965 economic reform. "At the time of the reform we warned that the concept of it was false. The desire was to develop self-management, democratization. But the conception was bound to lead to a recession and to unemployment." Horvat said the only alternative was the one "which we economists endorsed: the further working out of the planned economy and market system, which was suitable for self-management. This alternative consisted of the fact that the self-management units would have full freedom of action and at the same time a coordinating mechanism would exist which would ensure that individual actions did not come into disharmony with common goals."

But instead of real freedom of action, a para-state, ...alternative evolved. A veiled interventionism developed which crippled the economy. The active factors in the economy thus today have almost no room for movement.

Basically, the Yugoslav economic experts blamed the political leaders who, they say, hampered functioning of the market economy through political intervention. The manner in which the government devalued the dinar was, they said, "a blow to the economy."

The head of a Yugoslav self-management enterprise said: "When the workers strike here, the party places itself on their side and declares that the director and managers are to blame. We directors are on the bottom in this system. I cannot even fire a single lazy employee because I would immediately have everyone on my neck, the workers council, the trade union, the party, even the court. But if one of my workers or employees wants to leave, he can do so immediately. And when anything goes wrong, I am to blame..."

CSO: 2800 END

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14 November 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2062

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14 November 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

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CONTENTS

INTERNATIONAL AFFAIRS

Hungarian-Soviet Petrochemical Cooperation Reviewed
(Katalin Bossanyi; NEPSZABADSAG, 14 Sep 80) 1

BULGARIA

Construction of Fifth Reactor at Atomic Power Station
(Iliya Borisov; RUDNICHAR, 2 Oct 80) 5

Cult for Foreign-Made Consumer Goods Decried
(Nikifor Kurdov; ANTENI, 8 Oct 80) 6

Slow Progress in Discovering Nonferrous Metals Sources
(M. Tsvetkov; RUDNICHAR, 2 Oct 80) 9

Complaints on Mining Equipment Shortage Voiced
(Editorial; RUDNICHAR, 2 Oct 80) 11

CZECHOSLOVAKIA

Importance of Return on Investment Under Set of Measures Stressed
(Josef Fogl, Arnost Culik; HOSPODARSKE NOVINY,
3 Oct 80) 12

Need for Enforcing Quality Indicators Stressed
(Ladislav Benes; SVET HOSPODARSTVI, 23 Sep 80) 17

GERMAN DEMOCRATIC REPUBLIC

Crop, Weather Report Published for August 1980
(D. Krumbiegel; FELDWIRTSCHAFT, Oct 80) 20

[III - EE - 64]

HUNGARY

Party Secretary Interviewed on Role of Quadrangles
(Gyorgy Kovacs Interview; NEPSZABADSAG, 19 Sep 80) 23

Consciousness, Automatism in Economic Management Discussed
(Adam Juhasz; TARSADALMI SZEMLE, Oct 80) 27

Official Notes Conditions in Machine Industry
(Bela Rabi Interview; MAGYAR HIRLAP, 5 Oct 80) 38

Role of Associations in Agriculture Weighed
(Ference Biro; NEPSZABADSAG, 12 Sep 80) 42

POLAND

Strikes Force Cuts in Coal Deliveries to Finland
(HUFVUDSBLADET, 24 Oct 80) 46

ROMANIA

Importance of Profitability in Economic Sphere
(Gheorghe Sica; ERA SOCIALISTA, 5 Oct 80) 47

Growth of Standard of Living Traced Over 30-Year Period
(Dumitru Ciucur, Constantin Popescu; REVISTA
ECONOMICA, 26 Sep, 3 Oct 80) 53

Worker Self-Management in Action in Medias
(Teodor Moldovan; ERA SOCIALISTA, 5 Oct 80) 64

Factors To Be Considered in Preparing 1981 Budget
(Gheorghe Boulescu; REVISTA ECONOMICA, 26 Sep 80) 71

Economic Cooperation Efforts With African Countries
(Marcel Moldoveanu; REVISTA ECONOMICA, 26 Sep 80) 76

Measures To Improve Land Use, Territorial Development
(Ion Bold; REVISTA ECONOMICA, 26 Sep 80) 82

Profitability of Agricultural Stations in Poorer Areas
(Mihai Bogorodita; REVISTA ECONOMICA, 5 Sep 80) 94

Director Discusses Development of Tractor Export Market
(Vasile Sechel Interview; REVISTA ECONOMICA,
5 Sep 80) 99

Briefs
First Xerox Machine 103
First Ro-Ro Installation 103

YUGOSLAVIA

Allocation of Foreign Exchange for 1980
(SLUZBENI LIST SFRJ, 3 Oct 80) 104

Port of Koper Development Plans to 1985
(Vladimir Kobar; TRANSPORT, Aug-Sep 80)..... 123

HUNGARIAN-SOVIET PETROCHEMICAL COOPERATION REVIEWED

Budapest NEPSZABADSAG in Hungarian 14 Sep 80 p 9

[Article by Katalin Bossanyi: "Petrochemical Twins"]

[Text] Ten years ago, on 15 September 1970, the Hungarian-Soviet olefin agreement was signed. Under this agreement, Hungary built a plant producing 250,000 tons of ethylene annually, of which 80,000 tons of propylene and 80,000 tons of primary materials for making synthetic rubber were shipped to the Soviet Union every year in exchange for various products manufactured by their plastics and organic-chemical industries. Parallel with the development in this country, a PVC plant having an annual capacity of 250,000 tons was set up in the Soviet Union in Kalush. What increased the novelty of the cooperation in development was that the Tisza Chemical Combine in Leninvaros and the large works in the Carpathian Ukraine were joined by a 330-kilometer pipeline. Thus a highly promising stage in the economic cooperation among the countries of CEMA has been reached. The direct technical connection makes possible the coordinated operation of the two plants. When the anniversary was celebrated in Leninvaros and in Kalush, the Hungarian and Soviet managers and workers who had done outstanding work in arranging in the agreement and in carrying out the improvements were honored.

The ethylene plant of the Tisza Chemical Combine was finished in record time, less than 3 years, and Hungarian technicians were able to start the first ethylene through the pipeline on 3 February 1975. Much anxiety and many problems, and even more interest, attended the development. In the memories of those at Leninvaros most of the stories are associated with putting the "umbilical cord" for delivering ethylene into operation. Imre Csorvasi and Eng Zsuzsa Kocsi describe how the 130 kilometers of the Hungarian section of the pipeline cross under the Tisza at two points as well as under several other small rivers. It once happened that all the cross-country vehicles stalled, one after another, in the swampy terrain. And if our comparatively easy conditions tested the knowledge of the builders and technicians, then what did the Soviet technicians have to contend with, since their 200-kilometer section of the pipeline led through the much rougher forested and hilly regions of the Carpathians. Later, what gave rise to the greatest number of anecdotes about putting the plant into operation was the "pig," that clever device for cleaning the pipeline. One time the pig left Leninvaros propelled by nitrogen gas; they waited and waited for it at the Vasarosnameny sectionalizing station, but it did not come because the pressure was too low. Another time they could not catch the speeding pig even with an automobile.

Just now both the Tisza Chemical Combine and the Kalush plant are shut down, in fact the Borsodi Chemical Combine is also idle because of a coordinated, week-long general overhaul. The PVC operation there likewise receives its ethylene from Leninvaros via the pipeline. More than 300 preventative maintenance specialists are now working at the plant along with olefin specialists.

"The maintenance men play a major role in insuring that the plant is regularly able to produce more ethylene than its nominal capacity," says Gyula Varga, head of the pyrolysis department. "We have also come up with some minor technical innovations, some new organizational solutions that the FRG firm supplying the technology has adopted with expressions of appreciation. The maintenance men are very sensitive about not having many "reserves" discovered in the manufacturing process.

In the brain of the ethylene plant, the dispatching center, they are conducting measurement tests. Tivadar Gal, the engineer in charge of production, steps over to the main control console, pushes a button, and immediately the voice of the Soviet colleague in Kalus is heard. They check the technical data, then exchange a few sentences about the weather and their families.

"So you know each other?"

"At both places there are four of us alternating every day, so by this time we can tell by the sound of the voice who is working. I've thought that we should exchange photos."

While we were talking, Albert Szoke, engineer in charge of the operation, came in. He was one of those Hungarian workers who had received the Soviet award for Outstanding Worker in the Chemical Industry at the anniversary celebration. He tells about difficult moments during his training and about how much responsibility and disciplined work is required to work in such a plant. He made no secret of still being impressed, after 6 years, by the technological miracle accomplished here.

"The workers at the olefin operation have a right to talk in superlatives," says Tibor Szenasi, deputy managing director. "This operation is 10 times as productive as the other Tisza Chemical Combine plants. Seventy million dollars' worth of exports were planned for the past 5 years, but the books this year already show 175 million. Besides good foreign trade work, this also contributed to making it possible to organize the delivery of ethylene among Kalush, the Borsodi Chemical Combine and our own polyethylene plant, and to our being able to produce uninterruptedly, even without having our own storage tanks. So far we have not had to "torch," that is, burn up, a single ton of ethylene."

The successful investment of the olefin plant has also served as a stimulous to the other Tisza Chemical Combine plants as well; in the last few years the polyethylene production plant has been expanded, and in 1978 a new 40,000-ton capacity polypropylene plant was built. Even so, the greatest jump occurred in plastics where production doubled in 5 years. Plant manager Janos Kucsma pointed out all the things that are manufactured from olefins here. For instance, 15,000 tons of agricultural plastic sheeting, 40 million padded bags, 20 million self-sealing, block-bottom bags are made every year for packing chemical-industry and food-industry products. But this is only a fraction of what could be manufactured from polyethylene. Polypropylene, considered by experts to be the plastic of the

future, can be used for toys, machine parts, furniture frames, tubing, and fibers. These developments give rise to making it possible to substitute for a significant amount of imports from capitalist countries, while modern packaging materials will contribute to making our food products more competitive on world markets. This development is far from being over: this fall the first machines are arriving that will be used to manufacture a new family of products, polypropylene sheeting stretched in two directions. This specially designed material will replace expensive cellophane and will also be suitable for packaging the most varied kinds of foods.

Dynamic domestic developments, however, are only one aspect of the agreement. A. B. Kondratenko, the managing director of the Chlorvinyl Production Cooperative in Kalush, says:

"We completed our investment in our PVC plant at the same time as the Hungarian expansion. I will not gloss over the many problems we had at first that were due to this being the first example of this kind of technical and organizational cooperative arrangement. I feel that we were able to overcome the resulting tensions rapidly."

"How profitable is the investment?"

"Year after year we overfulfill the plan. But quantity by itself would not mean much. Previously the return on the production at Kalush was only symbolic, but this year we are already counting on 30 million rubles' worth and we are also exporting more and more to socialist and capitalist countries. And let me boast a bit about one thing: for the first time in the Soviet Union our product has received the mark of quality."

The olefin agreement guarantees advantages for both countries. The deputy minister of the Soviet Ministry of the Chemical Industry summed up their experience as follows:

"I consider it to be one of the great successes of this specialization and product-exchange arrangement that it made it unnecessary to build duplicate capacities, and that we were able to resolve problems more rapidly and more economically. This was why the two governments extended the agreement to the end of the century this past spring."

Istvan Zsengeller, deputy minister of heavy industry, added:

"Without the olefin agreement, we would also not have been able to start on the rational and economic expansion of the Hungarian petrochemical industry. The great expansion of the Tisza Chemical Combine and the Borsodi Chemical Combine laid the basis for this; recent investments in some of our larger enterprises, for instance the Hungarian Viscose Production and the Danube Coal-Oil Industry Enterprise, were involved in this through product exchanges and developments. Five CEMA agreements now back up the petrochemical program. In fact, after 1986 the various products delivered from the Soviet Union are also to be added to the agrochemical agreement."

Andor Huszar, general manager of the Tisza Chemical Combine, summed up the tasks arising from the extension of the olefin agreement:

"According to the plans, an ethylene plant of the same capacity as ours is to be built in Kalush by 1986. At that time, deliveries will start going the other way: we shall be receiving 60,000 tons of ethylene a year through the "umbilical cord." In exchange, we shall deliver 25,000 tons of fiber-quality polypropylene. This means that we will have to expand our production of polypropylene in step with Soviet increases. We have already announced that we are accepting bids for this. Ethylene is to be sure a good export item as is, but in processed form we can command an even better price for it on the world market."

In conclusion, it is interesting to note that the results of the first 10 years of the olefin agreement testify that we must seek additional, more modern forms of technological and commercial collaboration with the CEMA countries.

8805
CSO: 2500

CONSTRUCTION OF FIFTH REACTOR AT ATOMIC POWER STATION

Sofia RUDNICHAR in Bulgarian 2 Oct 80 p 2

[Article by Iliya Borisov: "Fifth Atomic Reactor under Construction"]

[Text] Not many years will pass before a veritable constellation of atomic reactors will shoot up on the banks of the Danube near Kozloduy. Before the end of the year the third 440-megawatt reactor is to come into operation, and in 1981 the fourth. In addition to these, the fifth unit of the qualitatively new "1000 percenter" reactor, which will have a capacity of 1000 megawatts, has been under construction for several months.

Ground was first broken only a few months ago for a great start on the third major expansion and now the Construction Mechanization team in Pleven is excavating the foundations of future production buildings. It will not be long until the individual rooms and centers where the new reactor will be set up begins to rise above the loessial cement.

6474
CSO: 2200

CULT FOR FOREIGN-MADE CONSUMER GOODS DECRIED

Sofia ANTENI in Bulgarian 8 Oct 80 p 5

[Article by Nikifor Kurdov: "Second-Hand Tales--Who Can Pass Judgment on Alice?"]

[Text] What are our second-hand stores? A place for huckstering? A Vanity Fair? A branch of "Korekom" with Bulgarian currency? Or centers for speculation? Everything that is sold here is imported and, above all, expensive. The high, and sometimes even fantastic, prices are a basic feature of these stores. You ask: Who does the buying then? And what do they count on in order to market their merchandise? On Alice and her friends? Or above all on the snobbish folly of people ready at any price to possess anything foreign. How else would we explain a reasonable person giving 35 leva for steel-rimmed (albeit stylish) glasses, or paying 240 leva for ski pants, or 24 leva for a cream which, no matter in what currency or at what rate of exchange you calculate it, is worth no more than 6 leva. And similar examples can be cited for almost all the merchandise. Here is one more question: Who permits such a price anomaly?

I pass on in summary form several conversations with the employees in the second-hand stores: "The prices are determined by our clients. They offer us something and we usually agree to whatever they ask. Most of them are well informed about how much a thing is worth. Everybody knows that a pair of dunki [broad-seated, tight-legged Turkish-type trousers], for example, fetch as much as 85 leva. We realize that everything we sell is very expensive, but what can you do? We have norms to make, too. And there are purchasers. . . What is most important for us is fulfillment of the plan because that determines our wages, too."

Once more plans appear on the scene. But more about them later. For now let us cast a glance at the "principal working capital" of the second-hand stores.

From observations, conversations and inquiries I have found out the following. Such a store would hardly last long and its employees would hardly get good wages if it did not sell cosmetics, dunki, certain kinds of

cassette recorders and leather jackets from the "Orient." A few kinds of merchandise are the basis of the entire business. And mind you, every last item is imported from abroad or bought from "Korekom." Where does it come from and, in particular, in quantities to maintain the stores' turnover? There aren't that many Bulgarian citizens (and only Bulgarian citizens have the right to sell to these stores) returning from abroad wearing dunki for sale, are there? Nor are there that many people dissatisfied with their new cassette recorder and in a hurry to get rid of it?

Every citizen who sells through the agency of the second-hand stores must sign a declaration stating, among other things, "I, the pledger of merchandise, declare that the same is imported." Regarding this, the woman in charge of the store and the saleswoman explained to me the provisions of clause 38 and subsequent clauses of the "Regulations governing the Import and Export of Articles by Physical Persons Crossing the Border," namely, that imported items for personal use cannot be sold, bought, exchanged, given or accepted as a pledge or gift, and cannot be offered for sale to second-hand stores before the expiration of a 5-year period (3 years under the new regulations--Editor's Note) from the date of their import.

". . . I have carefully read this declaration and declare by my signature that I will answer to the judicial authorities for false data if I have deceived the salespersons and the second-hand shop."

But the declaration is of a formal character, so it seems, and is no dependable barrier to speculation. Stoil Gaydarski, MVR [Ministry of Internal Affairs] operative, told me, "Last year we found that certain individual citizens each sold articles worth several thousand leva through the second-hand stores. One person with the help of members of his family realized nearly 30,000 leva during the year! Bogomil L. on 6 October 1979 pledged merchandise worth 460 leva, and on 18 December merchandise worth 710 leva. Lidiya K. in July 1980 sold items worth 830 leva, and in December items worth 895 leva. I have many more such examples. Something else. In front of the second-hand store on Georgi Kirov Street a black market has been set up. . ."

Most likely many people are wondering how it is possible on the very same day for the very same person to pledge merchandise worth hundreds of leva. I must say that not only is it possible, it is also quite realistic, even somewhat commonplace. The employees of the second-hand shops most frequently shut their eyes to such violations. Why? Because these violations, large and small, bring in the store's principal income. A specified percentage of turnover determines wages! And not just of salespeople. There are, besides, administrators and directors; there are bonuses. Who, then, is going to fight against violations?

"We are on our feet all day for these wages; we have to deal with all sorts of patrons--some fussy, others insolent; yet others try to snatch something

and disappear. But afterwards we pay up. To cap it all, we have to keep watch on who sells what and why. Everybody signs a declaration; let them do the watching out. . ." This is how the employees figure it. Is it very likely the management of the enterprise figures it differently?

Last year the plan for the 5 second-hand shops in the capital amounted to 140,000 leva. To collect this percentage, the 5 shops had to sell merchandise worth 1.5 million leva. It doesn't take all that much imagination to figure out how 5 crowded and dreary stores, packed with huckster merchandise, will realize a turnover of a million and a half. It is clear why the store employees shut their eyes. And it's not just them! Is the management of Comprehensive Services PU [Political Administration], perhaps, of a different opinion?

I can hardly recall when I first heard the words "foreign country," when I first saw a foreigner, or when I first held a foreign object in my hands. It must have been long ago. But one thing I do recall--there was in these words something remote, mysterious, inviting and alien. Years have passed. We have all got used to foreign countries and foreigners. The only thing we have not been able to get used to is their goods! We have begun to copy them, make adjustments in them and adapt them to our conditions. "French" furniture and "Swedish" kitchens have appeared. We have produced whisky and gin. Plum brandy has disappeared. New shoe models with the label, "Imported soles," have appeared in the market. You buy new Bulgarian-made trousers and on them is a tag, "Super Sport," or something similar. I see that the buttons on my jacket are "Super Reif" [German: "ripe," "ready," "bangle" etc.], "Mustang."

With the passage of time many people have elevated things foreign into a cult. Everything imported began to be identified as high-quality, beautiful and fashionable. For some people, things foreign were transformed into style. And style was transformed into a trade-mark. In certain circles the brand of rice, the brand of tennis racket, the brand of whisky, the trade-mark of the blouse, the make of the car have become a measure of social position, prestige, recognition and authority.

Who then can pass judgment on Alice? "Wonderland" is not for her alone. . .

6474
CSO: 2200

SLOW PROGRESS IN DISCOVERING NONFERROUS METALS SOURCES

Sofia RUDNICHAR in Bulgarian 2 Oct 80 p 2

[Article by Engineer M. Tsvetkov: "Concern over Raw Materials Sources of G. Dimitrov Mining and Metallurgical Combine--Scientific and Practical-Applications Conference on Geological Prospects of the Vratsa-Iskur Ore Region"]

[Text] From 24 to 26 September a scientific and practical-applications conference, dedicated to the 1300th anniversary of the Bulgarian state and to the centenary of the Bulgarian Geological Service, was held in Vratsa at the Palace of Technology on "The Prospects and Trends in Geological Exploration Work in the Vratsa-Iskur Ore Region."

Participants in the proceedings of the conference were geologists, geophysicists, scientists and other specialists from the Ministry of Mineral Resources, the Geology Committee and units thereof, the governing body of the NTS [Scientific and Technical Union] and the Rare Metals State Economic Trust, as well as from scientific research institutes and from combines for the extraction and processing of nonferrous metals.

The papers that were presented reported great progress by geological explorers and their contribution to the implementation of the BCP's strategic policy of building our own raw materials base for the production of ferrous, nonferrous and precious metals.

Knowledge of the geological structure of the earth's interior in our country as well as the patterns in the distribution of our mineral and fossil resources give reason to believe that there are many more possibilities of proving new reserves and discovering new deposits and new promising areas. Although the Vratsa-Iskur ore region has been highly studied, the conference noted that all the possibilities of proving new reserves of copper and lead-and-zinc ores have not been exhausted. The fact that there is a great amount of information on the stratigraphy, lithology, structure, mineral composition and distribution patterns of the minerals in this region, the improvement in the knowledge about geological exploration, geochemistry and geophysics and the great experience accumulated by

the specialists of the scientific research links and economic organizations make possible a more detailed and thoroughgoing examination of this promising region.

The small increase of payable reserves in the deposits that are being worked and G. Dimitrov Mining and Metallurgical Combine's productivity, which keeps growing every year, are objective factors which foreordain the rapid exhaustion of minerals. All this makes imperative the speedy and energetic intervention of the specialists from the key organizations in order to assure the necessary raw materials.

All the representatives participated actively in the discussions and a good creative atmosphere was created for the exchange of experience and opinions among the specialists.

In view of the prospects and trends of the geological explorations in the region, the participants in the scientific and practical-applications conference adopted concrete resolutions regarding an expansion of the package of geological, geophysical, geochemical and geochronological investigations, an analysis of the mineralogical investigations, and the preparation of comprehensive procedure for a detailed search for "hidden" orebodies so that practical results in increasing the raw materials base of nonferrous metals of the Georgi Dimitrov Mining and Metallurgical Combine will be achieved in the very first years of the Eighth Five-Year Plan.

6474
CSO: 2200

COMPLAINTS ON MINING EQUIPMENT SHORTAGE VOICED

Sofia RUDNICHAR in Bulgarian 2 Oct 80 p 2

[Editorial: "More on the Problem of Whether Miners Will Have Hammer Drills"]

[Text] In issue No. 28 of RUDNICHAR [Miner], dated 10 July 1980, we published an editorial "More on the Problem of Whether Miners Will Have Hammer Drills."

In this connection the editors have received a letter from Dimitur Mikhovski, director of the Maintenance and Repair Directorate in the Nonferrous Metallurgy Department of the Ministry of Metallurgy and Mineral Resources, in which he says:

"We thank the editors of the [illegible]paper RUDNICHAR for keeping a close watch on the mechanization problem in mining. The check that you made correctly found that the promised mechanization has not yet been proposed to the miners. The obligations of the interested parties must, however, be differentiated if these proposals are to be monitored."

Further on, the letter repeats again and again and in great detail the history of the problem of providing miners with hammer drills, pneumatic rigs and mining drills, and spare parts for hammer drills, the usefulness of which is not apparent. It would, perhaps be more useful to tell what has been done to hasten solution of the problems and, primarily, of the recommendations in Decision No 63, dated 6 May 1980, of the Central Committee of our trade union.

It is surprising that at the last inspection, made on 22 September 1980 at office 44 of Technoimport ISO [Engineering Economic Organization] it was found that no requisition for hammer drills for 1981 had been received from Gorubso SMMK [Bulgarian-Soviet Economic Mining and Metallurgical Combine] or Srednogorie SMMK [Sredna Gora Mountains Economic Mining and Metallurgical Combine]. This was categorically confirmed once more by Economist Yordanka Paunova, head of the Mining Equipment Sector, after carefully checking the requisition documents at the same office.

This all confirms once more that direct contact is still not maintained between the Ministry of Metallurgy and Mineral Resources and Technoimport ISO in order to put requisitions in good order and, hence, the obligations of the parties.

6474
CSO: 2200

IMPORTANCE OF RETURN ON INVESTMENT UNDER SET OF MEASURES STRESSED

Prague HOSPODARSKE NOVINY in Czech 3 Oct 80 p 4

[Article by Eng Josef Fogl, Chancellery of the CSR Government, and Eng Arnost Culik, CSR Ministry of Finance]

[Text] Capital Investment

> Preparation of investment from intent to attainment of planned parameters quite often takes almost 10 years, and once a facility has been built it must keep producing for 15, 20 and sometimes even more years. However, such a long-term approach is in direct contrast to the stakes participants in the investment process have in annual plans or in the five-year plan. Now, as before, the key problem in this area remains how to invigorate the long-term character of economic stimulation and its orientation not only to quantity, but also to quality of output. Can this purpose be served by indexes of the return on investment?

The enduring problems of capital investment can be divided into three main categories: protracted time of construction (or, as the case may be, failure to meet originally specified deadlines, or introduction of new capacities into operation), exceeding originally budgeted costs and failure to maintain design specifications once new facilities are in full operation. These digressions reinforce the risk that actual investment shares will differ from those originally envisioned. These risks, however, concern not only investors and direct operators of new facilities, but also customers and future production contractors. In other words, their fallout widely affects relations between supply and demand, as they represent a potential for the occurrence of bottlenecks in the reproduction process. The above-mentioned deviations can thus, to a substantial degree, spell the difference of a trend toward economic balance or imbalance.

It appears that the overall characteristic instrumental in assessing to what extent the mentioned potential risks make themselves actually felt is the difference between the originally envisioned and actually attained return on investment. We are of the opinion that this difference not only provides an ex post facto record, but, properly utilized, can also actively minimize the mentioned risks before the fact.

Thus, return on investment can constitute one of the key characteristics for assessment of not only past developments, but also become a tool for systematic management of current and future development.

Consequences of Construction Delays

Some existing regulations, e.g., edit of the Federal Ministry for Technical and Investment Development no. 30/1970, lead to assessment of return on investments only from the point of launching pilot or full operation. This means that an investment in a project that experienced unforeseen delays can be ascribed equal merit as an investment in a project completed on time under otherwise identical conditions. This, however, distorts the results by ignoring the deficit in generation of resources caused by delays in construction and can adversely affect relations between supply and demand.

The CSR Finance Ministry investigated 18 selected large investments in the industrial sector, agriculture and food, and construction. The total budgeted costs for this selected sample amounted to 11.7 billion koruna, of which 14 were centrally overseen construction projects of a total budgetary cost of 10.8 billion koruna.

When we compared the original schedules for launching operations in these facilities with the actual terms, we found that by the end of 1977 deficits in goods production amounted to 6.7 billion koruna, and capital depreciations to 0.4 billion koruna. These deficits also had adverse effects on relations between supply and demand, and in many cases necessitated imports for free currency beyond provisions of the plan. At the same time, diminished goods production accounted for 57 percent of construction delays, and for 43 percent of failure to attain the planned specifications. Lower generation of profits and depreciation was due to construction delays by 46 percent, and by 54 percent due to the failure to attain planned specifications.

All this, of course, significantly protracted return on these investments. According to planning and budgetary documentation, 44.3 percent of invested capital appropriations were to be reimbursed through generation of profit and depreciation write-offs by the end of 1977, while the actual reimbursement by that date amounted to only 24.1 percent, i.e., only slightly more than one half.

Return on investment is defined here as the percentage of reimbursement for invested capital appropriations at a specifically selected point of time. This involve the ratio of the net production from the given new facilities acquired through investment to the total amount of the invested means. In this case net production is considered in its total amount from the moment of launching full operations in the new facility until the time of measuring the percentage of reimbursement, i.e., in our case, until 31 December 1977. However, as we did not have at our disposal for the sample investments under investigation the volume of net production, we approximated the reimbursement percentage merely on the basis of total profits and write-offs.

The above-mentioned ratio (percentage of reimbursement) can be computed from the original planning and budgetary documentation, i.e., as it was planned, and confronting it then with the reimbursement percentage actually attained. Hereby the planned and actually attained percentage of reimbursement can be followed, e.g., for individual years of the entire term of the five-year plan.

Percentage of Reimbursement

It is obvious that the differences between originally planned and actually attained returns on investment, or percentage of reimbursement, are influenced by three basic effects:

--Deviations from the original construction schedule and launching of facilities into operation,

--deviations from planned specifications after launching operations in new facilities,

--deviations from the originally planned amount of budgetary costs.

Additional effects can be produced by some other factors and, as the case may be, by price changes. However, effects of the complex overhaul of wholesale prices as of 1 January 1977 were negligible.

It can be seen then that an identical percentage of reimbursement at a given time can be arrived at by various combinations of the listed deviations in the preceeding period. For example, exceeding original budgetary costs can be accompanied by attaining operational parameters that show an improvement over the original plan. If this improvement becomes reflected in lower production costs, meaning higher profit, or net production, it is still possible to meet the planned percentage of reimbursement (if the original construction schedule had been met). Similarly, delayed launching of operations can be compensated for by either cutting costs, or improving actual operational parameters above those called for by plans. Similarly, certain failures in meeting the planned specifications can be compensated for, from the viewpoint of reimbursement percentage, by early launching of operations in the new facility and savings in budgeted cost of the project.

It stands to reason that such compensations are realistic only to a certain extent. Moreover, such compensations need not be expedient from the viewpoint of national economy. Smooth continuity of the reproduction process can be adversely affected not only by delayed launching of facilities into operation (resulting in short supplies), but also by premature launching of operations, when customers might not be ready to accept delivery (resulting in unplanned surplus of supplies).

However, mere elimination of shortcomings in existing regulations will do little for assessing the return on investment by means of computing the percentage of reimbursement. Rendering such an assessment routinely feasible and yielding conclusive results would have as its prerequisite some elementary assumptions in documentation, accounting and calculations.

It would mean, first of all, devising a multifaceted and stable interface between plan documentation and plant accounting and statistics regarding actual developments. The same holds true of followup between plan documentation and resultant calculations. Of importance also is maintenance of comparability between both data groups.

A systematic formation of such prerequisites and their full utilization cannot, as a rule, be accomplished merely by promulgating new regulations, directives and instruments. This calls for generating realistic, economically based interest.

Multilateral Limit

Percentage of reimbursement can be determined for a single investment or for a set of investments, or, as the case may be, for various combinations thereof. But it need not be derived merely as a dependent constant given by the amount of budgeted costs, operational parameters of the new facility and the duration of construction. In such a case it would become an assigned task, a limit, on the basis of which it would be necessary to process all planning and budgetary documentation and the project schedule in such a manner as to meet the specified percentage of reimbursement at the given level and at the specified time. This particular function of reimbursement percentage offers the possibility for its application in actively influencing the investment process.

In the phase of investment preparations and in formulation of the investment plan, the percentage of reimbursement (as an independent constant) can fulfill the function of a certain multilateral limit for designers, planners and suppliers. These subjects would have to jointly coordinate control of the project and backing of the planned investment by suppliers in such a manner as to meet the predetermined percentage of reimbursement distributed into the specified number of years. This constitutes the first active function of this indicator.

Its second active function concerns the period of capital investment materialization. After the investment is made, the percentage of reimbursement does still constitute an assigned task, but simultaneously the completion of this task is becoming dependent on factual adherence to the level of costs budgeted for the project, meeting of the construction schedule and attainment of the planned parameters in operations.

The obligations of designers, planners and suppliers continue throughout this phase, as implementation of the project proves or disproves the accuracy of their assumptions and the quality of their performance. Moreover, the circle of interested parties is joined by the investor, or the future operator (manufacturer). At a specified percentage of reimbursement it is in his own interest to systematically carry out his functions in seeing to it that planning as well as territorial preparations are ready, to include budgetary documentation, and, during actual materialization of the investment, to monitor the progress of construction operations, as well as adherence to the work schedule and to planning and budgetary documentation.

If these prerequisites are met, his interest then shifts to launching the new facility into operation and the operation itself. This is so because if the technical conditions were met on the part of the designer and the supplier, then attainment of the planned parameters in operations would depend primarily on the operator: namely, how he organizes and provides for the needs of production and maintenance of equipment and its utilization and how well he adheres to the technological process.

The Principle of Long-term Economic Stimulation

It appears then that the percentage for reimbursement of investments could be used as one of a group of criterial plan indicators, to include personal material incentives for supervisory personnel in suitable sectors. Herein the respective percentages of awards and premiums relevant to this indicator ought to be set not

only for the supplier and designer, but also for the investor in a mutual relation. Incentives designed along these lines would obviously be operative over medium- to long-term periods for all participants in the investment process in conformity with the chronological profile of the process itself. The percentage of reimbursement would then be used as an integral part of access to the program.

Among other things, this would serve to effectively materialize in a given sector one of the key principles of the Set of Measures for Improving the Planned Management System of National Economy after 1980: reinforcing the long-term duration of economic stimulation and economic interests of the investment process.

Planners and suppliers participate in a number of investment actions which are then gradually completed in individual years. Under the system of incentives which we propose, they would participate in awards and premiums linked to meeting the percentage of reimbursement of an essentially annual basis. These awards would not be related to performance for the given year, but to performance related to preparation and implementation of investments started several years before, i.e., to performance the final results of which did not become manifest until the given year. Thus, awards and premiums would be declared for performance delivered in the current year, but would become payable only after the requisite investments have been implemented through translation into operations, and that again depending on adherence to the planned percentage of reimbursement in individual years of the new facility's operations.

This would serve to reinforce the long-term character of economic stimulation and its orientation not only on quantity, but also on quality of performance. In addition—and this is very important—it would serve to reinforce coordination and cooperation among investors (operators), planners and suppliers, because they all have a hand in meeting the planned level of the percentage of reimbursement for investment in the individual years of the five-year plan.

It stands to reason that implementation of this proposal would in many cases also call for requisite modification of the existing system of incentives. In addition, the proposal also calls for further, more detailed elaboration. The latter, however, is beyond the scope of this article.

8204
CSO: 2400

NEED FOR ENFORCING QUALITY INDICATORS STRESSED

Prague SVET HOSPODARSTVI in Czech 23 Sep 80 pp 1, 2

[Article by Ladislav Benes, Federal Ministry of Finance: "Strict Observance of Production Quality Indicators Necessary"]

[Text] The special economic sanction to penalize inferior production is in its second year of use in our manufacturing organizations. It consists of lowering, for the purposes of the incentive system and evaluation of the annual achievements of the operation of enterprises and economic production units, the actual level of profits and outputs (receipts, goods manufacture or values added) by losses incurred because of inferior production; this diminishes their fulfillment of the plan as compared to the planned level.

The penalty is related to the indicators of outputs, profits and returns of the operating assets, and therefore affects the amounts of payable wages; bonus payments for the managerial personnel; allocations to special compensations funds (and consequently the amount of rewards, bonuses and shares in the production returns), to cultural and social services funds, and to small business investments (development fund). The penalty is also reflected in the annual evaluation of the enterprises and economic production units and their account balance (without reservations, with reservation, etc.).

The penalty, which represents an economic stake for the organizations having disproportionately high losses from inferior production, is intended to motivate them to act and eliminate the main causes of inferior production, be they in the design of the products, technology of their production, work organization, workers qualifications, input and output control, and the like.

Despite some problems encountered in application of this penalty, its effect has been positive. The management system has acquired a new element which compensates a well functioning and greatly expanding monetary incentive system for quality production in organizations.

The penalty is used particularly in those industrial enterprises, where terms such as losses from rejects, expenditures for repairs under guaranty, fines, nonperformance penalties and discounts because of responsibility for defects of delivered inferior products, are commonly known. They form the core of the losses from inferior production. In other fields, such as construction, agriculture,

transportation and communications, the losses from inferior work have not yet been adequately defined, and hence quantified, although we cannot always be fully satisfied with their work quality.

The losses that are incurred because of inferior production are becoming an important, complex indicator that characterizes the level of inferior work in every industrial organization. This indicator allows us to evaluate the production quality in organizations at time intervals from a single viewpoint and to make comparisons among them. It must be pointed out that the level of losses from inferior production corresponds to the assessment of production quality in the pertinent organizations by the domestic and foreign trade and by consumers. Losses from inferior production on the average do not reach an unusually high ratio in the outputs of industrial enterprises. In 1979 they represented only 0.2 percent. A greater range of these losses is noted in the individual sectors, as evident from the table below:

Organization	Losses from inferior production in percent of outputs
Federal Ministry of Metallurgy and Heavy Engineering	0.08 percent
Federal Ministry of General Engineering	0.62 percent
CSR Ministry of Industry	0.07 percent
SSR Ministry of Industry	0.08 percent
CSR Ministry of Construction	0.07 percent
SSR Ministry of Construction	0.13 percent

Economic production units have shown an even greater spread (for example, in the Federal Ministry of General Engineering from 0.06 to 3.7 percent, and in the CSR Ministry of Industry from 0.03 to 0.17 percent). Greatest differences are seen among individual enterprises. It must be pointed out, however, that only a few enterprises have incurred unusually high losses because of inferior production (above 3 percent); the highest losses were shown by three engineering enterprises, 12.13, 10.99 and 6.48 percent, respectively.

The type of work that the organization performs is responsible for the differences in losses from inferior production to a considerable degree, but so also is the management of the organization involved. Comparisons of enterprises or economic production units manufacturing essentially the same products have confirmed this. We shall cite only a few typical pairs: 12.13 and 1.52 percent; 0.20 and 0.14 percent; 0.12 and 0.08 percent; and 0.04 and 0.01 percent. In general the losses from inferior production are lower in the manufacture of production equipment than in the manufacture of consumer goods, and in the latter they are lower in the consumer industry production than in engineering.

The penalty imposed under the title of losses from inferior production is commensurate with their level. In general it is relatively low (in 1979, for example, it represented an average reduction by 0.18 percent in the volume of wages payable in industrial enterprises). The penalty is sensibly focused on the organization which show disproportionately high losses from inferior production. Generally, however, it only adds to and accentuates their generally poor management. The

penalty strikes most the bonus payments for the managerial personnel of the organizations; in some instances it also reduces the shares from production returns and, exceptionally, it lowers the allocations to the cultural and social services fund and the development fund. In most organizations the penalty results in solving problems related to the causes of the high losses from inferior production. There are also, however, some organizations that instead of trying to firmly resolve the problems in their organization are more concerned with justification of the causes of these losses and with a search for administrative ways to reduce the penalty.

Starting with 1980, the losses from inferior production also include losses from in-house rejects when they exceed the permissible level specified by the superior central organ. The impact of this measure will be small, however, because with some exceptions the specified permissible levels are higher than the actual losses in 1979 from in-house rejects. The permissible limits for in-house rejects are thus failing in their function: to bring about reduction of rejects.

According to the Set of Measures for Improving the Planned Management System of the National Economy After 1980 the penalty for inferior production will be in force also in the Seventh Five-Year Plan. It will become a part of the legal code. The mandatory imposition of the penalty, the definition of losses from inferior production and the categories of the incentive system to which the penalty will apply, will be set forth in the ordinance of the CSSR Government. Pertinent regulations concerning the wages and rewards and financial regulations governing the formation of the cultural and social services fund, development fund and export incentive fund, will specify the details for application of the penalty.

In the Seventh Five-Year Plan the principles will be essentially the same, but some modifications based on current experiences are expected in the particulars. Consideration is being given to the expansion of the scope of organizations which will be subject to the penalty. The determinant factor should be the specific activity in the organization involved, rather than the type of the organization or its organizational category. It is assumed that specific definitions of losses from inferior work will be formulated for the fields of construction, transportation, communications and agriculture. Definitions of losses from inferior work will be particularized according to the issued explanations, especially as regards the allowed discounts, guaranties and lump sum payments under guaranties; formation and use of reserves for repairs under guaranty; compensations from the risk fund for losses from inferior production; and determination of permissible limits for rejects received from other sources in the engineering metallurgy products and in deliveries within the framework of the concerns. The permissible limits for in-house rejects will be better defined so as to be more effective in reducing the volume of such rejects. Consideration will be given to the establishment of permissible limits for rejects received from other sources in certain fields, where because of the nature of the products and their production, the technical control of the entire production process is not feasible. Steps will also be taken to solve the discrepancy between the guaranty terms for the end products and export products and for the partial supplies for these products (materials, semifinished products, components, parts and subsidiary supplies).

The listed modifications will strengthen the penalty for inferior production and in the long run it will become an integral part of the planned management of the organizations.

9562
CSO: 2400

CROP, WEATHER REPORT PUBLISHED FOR AUGUST 1980

East Berlin FELDWIRTSCHAFT in German Vol 21 No 10, Oct 80 p 480

[Article by Dr D. Krumbiegel, GDR Meteorological Service, Central Weather Bureau, Potsdam]

[Text] The Weather in August 1980

Brief sunny high-pressure and more extended active low-pressure periods alternated several times. The southern GDR was at an advantage compared with the northern part in terms of air temperature and drying conditions.

Daytime average air temperatures mostly from 3 to 5K too high were followed by temperatures somewhat too cool up to the 13th and then, till the end of the second 10-day period, a little too warm. Between the 22nd and the 26th, air temperatures dropped by from 3 to 6K below normal values. By the end of the month, it became warmer again. Daytime maxima in the first 5-day period came to around 25°C and, on the 3rd, around 30°C widespread (locally, up to 33°C). Similar high maxima recurred around the 16th and the 29th. When the weather was cool in the third 10-day period, maxima hardly rose above 15°C. For the rest of the time, they usually came to around 20°C. At the start of the third 10-day period and by the end of the month, nocturnal ground temperatures dropped below the 10°C limit only for a few days. On the 14th, the first early frost (-3 to -0°C) was recorded on the Brocken, and on the 26th, at some stations in the southwest. There is less than a 5 percent probability of local ground frosts in the GDR plains in the last 10-day period in August. There was little sunshine in the third 10-day period. All told, the duration of sunshine was poor in the northern part but normal in the southern.

The whole area remained completely or almost completely without rain in 12 days. In the second 5-day period, from the 13th to the 18th and from the 25th to the 28th there was the least amount of rain, but most abundant rain fell on the 3rd (northern part, 5 to 10 mm, locally as much as 25 mm), the 12th (north, 10 to 20 mm; south, 5 to 10 mm), around the 20th (local daily volumes between 20 and 35 mm), and at the end of the month. Daily averages of relative air humidity hardly ever dropped below the 70 percent limit and usually ranged between 70 and 90 percent.

Temperature Data for August 1980 according to the Chief Climatological Office, Potsdam

1. Average Monthly Air Temperatures and Deviations from Normal Values

Schwerin	16.3°C	-0.4K	Erfurt	16.9°C	+ 0.9K
Neubranden-burg	15.8°C	-0.5K	Leipzig	17.5°C	+0.3K
			Goerlitz	16.4°V	-0.3K
Potsdam	17.0°C	+0.1K			

2. Average Precipitation according to Bezirks

Rostock	93 mm = 135%	Halle	41 mm = 69%
Schwerin	76 mm = 107%	Erfurt	35 mm = 54%
Neubrandenburg	83 mm = 126%	Gera	57 mm = 85%
Potsdam	59 mm = 92%	Suhl	59 mm = 78%
Frankfurt	54 mm = 89%	Dresden	56 mm = 72%
Cottbus	44 mm = 66%	Leipzig	42 mm = 65%
Magdeburg	56 mm = 90%	Karl-Marx-Stadt	64 mm = 72%

3. Evaporation Potential

Northern bezirks	50...65 mm
Central bezirks	70...85 mm
Southern bezirks	70...90 mm

Soil, Crop and Labor

Surface soil temperatures, around 20°C in the first 5-day period, dropped somewhat first and moved around 18°C up to mid-month. Then the soil warmed up temporarily and greatly cooled off again starting with the end of the second 10-day period. Between the 22nd and the 26th, surface soil temperatures stayed below 15°C widespread. In the last 5-day period, the soil again got warmer. The subsoil temperatures followed the trends of the surface soil temperatures to some extent. By the end of the month, from 15 to 18° were recorded at a 50-cm depth, from 14 to 17°C at a 100-cm depth. Ground water volumes alternated in accordance with the amounts of rain falling. In the northern GDR the values below the turf mainly fluctuated between 60 and 80% of useable field capacity. In areas that clearly got less rain (especially the bezirks of Halle, Erfurt, Cottbus, Leipzig and the southern half of Magdeburg), ground water volumes dropped greatly already in the first 10-day period and usually ranged between 30 and 50% of useable field capacity. That gave the soil and the crops there a much less favorable ground water budget than the other parts of the southern half. By the end of the month, the difference from field capacity at a 1-m depth below the turf in the bezirks referred to came to from -70 to -130 mm, otherwise from -30 to -70 mm. For the most part, it was fairly easy to work the grounds, even though it was under some detriments in the southwest, due partly to moisture deficiencies and in the northern bezirks, locally due to too much moisture. By and large, soil climatic conditions were good. Except for the

cold weather period in the third 10-day period, the conditions for growth were good or even very good. While there was an adequate natural moisture supply available for most of the GDR, optimum use of it could not be made for assimilation due to insufficient sunshine at times. That the precipitation was fairly evenly distributed in terms of time was of great advantage. Most favorable was the effect of the weather on the growth of all forage crop, including corn, and beets. For the grain, the effect was still positive, yet proliferation and second growth, and in the northern bezirks even proturberance, resulted for flattened grain acreages. There was much potato rot that made the potato-tops die off prematurely. Winter rye, the seeding of which was about 90 percent finished during the third 10-day period, and the summer catch crop encountered good germination conditions. Weeds kept meeting beneficial growth conditions. Phenological development remained fairly evenly delayed, some 5 days in the plains and some 10 days in the mountain areas.

Field work, especially the grain harvest, was often hampered by the rain. Very high regional differences occurred in this regard. The number of days with permanet relative air humidity below 70 percent of more than 10 hours (good harvesting days) were recorded as follows: Rostock Bezirk, the northeast of Schwerin Bezirk, the north and middle of Neubrandenburg Bezirk, 1 to 4; to the south of it down to the Gardelegen-Muencheberg line, 7 to 10; the rest of the plains and the hill country, 16 to 21; the mountain areas, 4 to 10. By the end of the month, barely half of the grain harvest was in at Suhl Bezirk and Karl-Marx-Stadt Bezirk, roughly 70 percent of it was in in the northern bezirks and at Erfurt Bezirk and Dresden Bezirk, and everywhere else approximately 90 percent of it had been concluded. Often, the harvest goods required extra drying activities. Especially in the northern bezirks, the trafficability of acreages was cumbersome because the ground was so wet. In the first two 10-day periods, there were relatively good preconditions for ensilage production. Only the southwestern plains were in need of irrigation starting at mid-month.

Meteorological Projections for Farming for October 1980

Since in most of the bezirks the soil's water absorption capacity was low by the end of August, considerable interference with field work is to be expected provided the autumn months get their normal amounts of precipitation. Therefore increased importance attaches to optimally observing the agrotechnical time-frames for harvesting the root-crop, seeding the winter wheat, the fall plowing and the maximal use of available working time. For the same reason it is being recommended to make sure that the drainage installations will work properly.

Harvesting plans for sugar beets should be optimized with an eye to the trafficability of the acreages and to still additional growths (crop density being the crucial factor).

5885
CSO: 2300

PARTY SECRETARY INTERVIEWED ON ROLE OF QUADRANGLES

Budapest NEPSZABADSAG in Hungarian 19 Sep 80 p 3

[Interview with Gyorgy Kovacs, party committee secretary of the Ikarus Factory, by Janos T. Rac]

[Text] Following the adoption of the Youth Law, the triangles that provided the setting for economic and political leadership at the workplace have been replaced by quadrangles. These organs, operating under the supervision and with the coordination of party organizations, now include representatives of the KISZ. They have now become true participants in the leadership of factories and institutions.

Two years ago, the 16th District Party Committee prepared guidelines for the party organizations within its jurisdiction in order to help keep political attention focused on the tasks they face. Subsequently, the situation and the activities of the organs mentioned has been put on the agenda of a conference of party secretaries as well as a training course. Pursuant to a request by the party committee, a directive on this subject was issued by the director general.

This year the time has come for a collective evaluation. In May, the topic was discussed at an expanded session of the factory-wide party committee. The report formulated at this session was analyzed shortly afterwards by the executive committee of the district party organization.

The operational experience of the guadrangles and the tasks required for future progress were the subject of our conversation with Gyorgy Kovacs, secretary of the party committee of the Ikarus Factory.

A Setting for Leadership

"The resolutions and guidelines of higher party organs provided indispensable help for a more concrete formulation of certain things," he began. "I think the same is true elsewhere. It would be an exaggeration to say that we had to start from scratch. It is, however, senseless to deny that certain misunderstandings were still widespread 5 years ago due to the relative novelty of the lesson. Among these, the most persistent one was the apparently plausible assertion to the effect that we have a highly developed democracy at the workplace because the quadrangle always discusses every important question. The degree of democracy at the workplace may be high or low even if this is true, because this entity is an organ

of leadership, not democracy at the workplace. A workplace is certainly under control when the quadrangels, under the coordination of party organizations, discuss all important questions with the participation of economic and political managers and representatives at regular working sessions. For example, none of those involved could imagine the management of Ikarus without the so-called 'Wednesday 7:30 conference' of the enterprise quadrangle."

[Question] The participants are representatives of mass organizations. Due to their mass influence, the activities of the quadrangle still have something to do with enterprise democracy...

[Answer] This does not contradict what I have said before. I merely wanted to underscore, in view of mistaken ideas in the past, that conferences of the enterprise, economic and social leadership are not a substitute for democracy at the workplace. Of course, they can and should exercise an influence. This must take place, however, through enterprise organs which include, among others, workers' meetings, party and KISZ meetings, conferences of the delegates of union shop stewards or production meetings. To mention a recent example: A session of the quadrangle at one of our plants found that the last production meeting was, to put it squarely, quite dull. As a result, the representative of the party organization called on the economic manager to prepare a more lively report that is more likely to provoke a debate at the next session. The trade union and KISZ were urged to encourage active participation by the people present, so that they can contribute to a real analysis of the report.

Creating Harmony

[Question] What types of questions are discussed by the quadrangles of enterprise leadership?

[Answer] They discuss only those questions that are within their jurisdiction. Fortunately, we no longer have a situation where representatives of one organization or another could protect themselves whenever unpopular decisions were made by saying "There is nothing I could do, the quandrangle made the decision." The secretary of the basic party organization who proudly announced to the party committee that he signed the wage development list at the session expected praise but has, in fact, received just the opposite. What are foremen and union shop stewards for? There was a period when personnel decisions involving specific individuals were also "approved" by the quadrangle although this is both incorrect and illegal. We have an economic leadership, a personnel department, party and KISZ committees and shop floor committees, each of which has the power to discuss matters of this sort within their jurisdiction. The quadrangle should present its views but the decision should lie with the appropriate leader.

[Question] Up until now we have discussed what the quadrangle should not be. This was quite useful but the question remains: What should be the role of the quadrangle?

[Answer] This is an important topic for discussion because our experience shows that the role of the quadrangle within the enterprise is still not completely clear in the public eye. In some cases people expect something more or something different from its proper function. The importance of this entity is increased, not

reduced, by the fact that its primary role is to define principles and initiate action in important matters and not to make decisions. Its discussions provide a setting where participants of the leadership can harmonize their views. They ensure that questions on which they disagree do not lead to mutual insult, an abuse on the shopfloor or the corridors. Instead, they can exchange information and formulate a united stand in a constructive exchange of views. This is very important because each of the participants returning to their workplace after a meeting of the quadrangle must stand behind the view formulated jointly. It is important for every participant to arrive to these meeting with the resolutions formulated by the meetings of the organization they represent as well as the information presented there. The converse is also true: Reports and materials intended for higher levels of direction must also be prepared here. The quadrangle also provides a setting for organizing mobilization for political events, celebrations and volunteer work programs. It is the place where a joint formulation of the answers to questions asked at the forums of enterprise democracy can be arrived at. In our factory the standard practice is that the quadrangles make proposals for awards and decorations. This list remains public for 2 weeks displayed on the bulletin board; the final decision is made by secret ballot at the production meeting.

Well-Tried Methods

[Question] Does the economic leadership accept the input of the representatives of social organization in all areas?

[Answer] This has not been a problem for a long time. Every manager understood that the quadrangle is a forum for party direction and coordination as well as unified leaderhip, thought and action. In a number of plants within Ikarus the standard practice is for the economic managers to ask for, and receive, support from the quadrangle for new initiatives. This is where overall work organization plans begin to crystallize. Frank information is given even in so-called sensitive areas. For example, a frequent topic of quadrangle conferences deals with the replacement of lower-level managers. Of course, the successor will be named by the appropriate management. Another example: In one of our plants there were some discipline problems. One indication of this was the fact that a group of people were already at the gates of the plant at the moment the official workday has ended. At a session of the quadrangle, the party secretary pointed to the need to do something about this. The representative of the trade union was charged with the task of warning one of the foremen, together with the plant manager, to stop providing a bad example by being the leader of this premature march toward the gates.

[Question] How do you intend to further expand the activities of the quadrangles?

[Answer] These organs operate within the workplace, which explains why their discussions are concentrated mainly on work. We already made sufficient progress to make sure that the topic of discussion includes problems of the workplace and other tasks besides production and wage matters.

We have left the time of the triangle behind us a long time ago. The representative of the KISZ organization is now an equal partner. Another achievement is that the participants at these conferences occasionally number more than four in order to represent every section in situations where the organizational structure of the economic or social organizations demands such an arrangement.

Political Uses

In conclusion, I can say that the conceptual activity and organizational framework of the quadrangles are being strengthened and unified, although this development is clearly proceeding more rapidly in areas of manual work. At a number of white-collar workplaces, main departaments and departments the lack of regular meetings is often explained in terms of the scattered structure of the area or just the opposite: That they meet everyday in any case and have sufficient opportunities to talk to each other. We object to both of these views: In the first case, regular, businesslike exchanges between political and social leadership would be especially important in areas where activities are scattered. In the second case, we say that although spontaneous discussions are welcome, they are no substitute for responsible meetings. Insisting on regular meetings of these organizations is not just a mania for meetings. It would be unbelievable if 2 weeks or a month could pass without the emergence of a single topic that is of equal interest to the social and economic leadership.

[Question] What kind of profit do you intend to derive from the recent discussion of this topic by elected bodies of the party?

[Answer] Political utilization has in fact already started at these meetings. A rich and very active debate at our party committee meeting has reaffirmed all that has been achieved by these entities. Informing the factory and the party organization about these experiences and the contributions at these meetings is all the more important since new party secretaries were elected in three of the seven party committees of the Ikarus Factory in Budapest and 8 of the 22 basic organizations. The preparation of these comrades for quadrangle work has started earlier, since a participant at these meetings, and especially the party secretary, must do more than just sit and listen. The district executive committee has given us a good mark for our work in providing party direction for the quadrangles. It proposed that our experience should be used by party organizations in other factories. As a result, alot of people asked for our report, concluded the secretary of the party committee of the Ikarus factory.

9164
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CONSCIOUSNESS, AUTOMATISM IN ECONOMIC MANAGEMENT DISCUSSED

Budapest TARSADALMI SZEMLE in Hungarian No 10, Oct 80 pp 33-43

[Article by Dr Adam Juhasz, state secretary Ministry of Heavy Industry: "The Role of Consciousness and Automatisms in Our Economic Guidance"]

[Text] The relative place, role and importance in the building of a socialist society of the three chief elements of the institutional system of economic guidance--the plan, the regulators (mechanisms) and the guidance (organizational) system--have been subjects of debate for a long time. Even today this is judged differently in different socialist countries and practice differs within a single country, too, as the changes within one country or between different countries take different or even opposed directions. At a given time, central guidance will be strengthened in one country and in the interest of this industry will be concentrated in combines while in another country the decentralization of the large enterprises or trusts will be considered useful. The number of plan indexes will be increased in one country and decreased in another. In one country they will consider it possible and necessary to realize the world market effects (including prices and inflation) while in another they will try to exclude or neutralize them.

This is an excessive simplification of these contradictions and we do not find them in such as exclusive form, declared as principles, but it is a fact that in the historically short developmental period of socialist society the most purposeful linking of the three factors (plan, regulation and organization) has not yet developed in the most unambigous way. This cannot be surprising if we consider the very different conditions and circumstances under which the several socialist countries function and the long historical period through which the preceding social systems developed or are developing. The economic guidance practice of capitalism has changed more in recent decades than it did since capitalism existed and certainly a significant role was played in this by the challenge of the socialist societies. Whether it intended to or not the existing socialism is forcing a development of the social system of existing capitalism in the direction of muting the internal contradictions. Naturally the fundamental (antagonistic) contradictions of capitalism remain and are even added to by new ones in the present period of imperialism.

From time to time we should again put on the agenda an examination of the role and interconnections of the three elements of economic guidance, analyzing them and carrying out the necessary modifications, primarily because:

--the internal development of the economy requires a systematic examination and constant modernization of the superstructure;

--the effect on the economies of the individual countries and the consequences of the development of socialist international economic integration require appropriate adjustments;

--the changes taking place in the developed capitalist and developing countries demand from the economies of the socialist countries an appropriate adjustment and reaction, especially in a time of such radical changes as those following the 1973-1974 price explosion;

--the peaceful competition between the socialist and capitalist economic systems will be decided historically by the economic achievements of the two systems; in this competition, in recent years, the rate of growth of the socialist system as a whole, which earlier had been a good bit greater than that of the capitalist system, decreased, in which a role was obviously played, among other causes, by the backwardness of the institutional system as compared to the requirements; and

--the lasting deterioration of our foreign market balance, our significant indebtedness, indicates that the capacity of our economy has lagged behind increasing domestic and foreign market requirements.

The further development of our economic mechanism and price system, beginning in 1980 and affecting many areas, serves this purpose and makes possible a more effective treatment than earlier of a number of problems which have been accumulating for years. We are also constantly studying the development of other elements of the institutional system of the responsible party and state organs, analyzing them and working on the necessary measures in the interest of developing our planning practice and organizational system. The resolutions of the 12th congress also underline the necessity of progress in the development of economic guidance. The daily and professional press reflect the increased interest of the public opinion of the country in these questions but they also show the surprisingly great spread of views among experts and in public opinion.

In what follows I want to deal with only one theme of this extraordinarily diverse range of problems, the role and method of conscious intervention in economic processes, as a question which has evoked especially much debate recently.

Consciousness in Management

Consciousness is a basic characteristic of the socialist society. Consciousness is precisely that something extra which lays the foundation for the superiority of the socialist society as compared to preceding social systems but, of course, only if consciousness is used skilfully, in its proper place, and not in the place of a well functioning automatism but rather along with such elements to strengthen their effect and achieve those goals which cannot be achieved by them. The socialist society not only makes possible but also makes it our obligation to cousciously intervene in the spontaneous processes of the economy. Our society, starting from the discovery of the lawful necessity of economic-social relationships and processes, consciously strives to constantly harmonize the development of the base and the superstructure. In general the requirement for harmony follows from

the laws of development and from the mutual interdependence of base and superstructure, frequently this harmony realizes itself, but generally harmony must be created by the conscious elimination of the regularly reappearing contradictions and the conscious adjustment of the economic guidance and institution system to the changing requirements of development.

Naturally the conscious efforts can often come into real or apparent contradiction with other effects influencing the functioning of the economy. For example, such contradictions can appear in the relationship of balance and standard of living, plan and regulators or national and enterprise interest. So the practice to be followed in the event of the appearance of such contradictions is to decide who must intervene, and when and how, in the economic processes so that consciousness should be realized in every case when the spontaneous processes of the economy do not follow or do not follow adequately the direction which has been recognized (hypothetically) as the most useful. This is perhaps the theoretically least unambiguously clarified and regulated area of our economic leadership and organization. This lack of clarification has many harmful consequences in the form of superfluous, perhaps harmful intervention and in the form of failing to take or postponing necessary measures.

Conscious influences are realized at every level of the economy (shop, enterprise, branch and national economy). In the final analysis the economic mechanism, the regulators and automatisms are embodied in the conscious activity of the enterprises. Basically considered the national economic plan is the result of conscious activity even if the economic conditions severely limit the freedom of planning. It is necessary to emphasize also that the national economic plan is only one element in the realization of consciousness (in economic guidance); there are many other forms of its manifestation as well. These include, for example, price control, credit policy, structure policy, special taxes and supports, authorizing export and import, defining the sphere of enterprise activity, partial centralization of technical development funds, cadre work and very many other general and ad hoc measures and regulations. The economic guidance mechanism itself contains a number of elements which represent conscious intervention and ad hoc measures. These include, for example, supports of various size for export modernization, the regulation of agriculture in a way differing from that for industry, using different pricing systems for different products, different wage systems for different enterprises, use of different wage multipliers, etc. This also includes the directives and requirements of guiding political and economic (and not only branch) organs which appear in a direct or apparently indirect form.

In the interest of limiting the theme we should regard as conscious only those measures and effects which are not determined or not primarily determined by the interest relationships or automatisms of the economic mechanism but rather in which the defining element is primarily the initiative and intent of those making the decision. It can be seen from this formulation that it is difficult even in principle to precisely separate the decisions determined or elicited by the automatisms from those which are conscious because every decision contains elements which are determined and a degree of freedom which requires consciousness. For this reason it would be an error to deny the necessity of conscious intervention in general or to oppose consciousness to the mechanism and the effect of the automatisms. It is also an error to consider every conscious economic guidance

measure a "directive" and thus to reject it as harmful regardless of its real content. Can we let our economy toss about on the stormy sea like a ship without a rudder? Obviously not. But just as faulty is the practice which demands immediate central (primarily branch) direct intervention in economic processes and enterprise management when practice does not precisely correspond to the real or imagined but in any case frequently changing higher interest.

We must approach the role of consciousness in a differentiated way, starting from the concrete situation. Instead of the false opposition "consciousness or mechanism" we must strive for a unity of the automatisms and incentives following from the mechanism and conscious economic guidance which supplement and strengthen one another, paying constant attention to the harmony of the two effects. We must develop the mechanism of economic guidance in the interest of this, developing the elements of it so that they most efficiently attain our economic policy goals, realizing the conscious elements in the guidance of the economy only when and where the automatisms cannot do this or cannot do it effectively enough. This must be done in such a way that the two effects should not clash but rather should strengthen one another. This view is supported by many factors of which I will list a few.

The Constructed Nature of Our Mechanism

Our national economy functions under unique conditions independent of us in many respects. It is characteristic of this that in our economic contacts the developed capitalist and developing countries have a weight almost identical to that of the socialist countries. The two relationships often pose different conditions and require different methods.

In the socialist relationship the trade contacts are based on medium range and annual quotas established at the state level; in the capitalist relationship individual deals at the enterprise level are characteristic. The requirements of the two markets differ significantly in volume of shipments, variety and even quality and the conditions and methods of marketing work are different.

The CEMA price principle regards world market prices as a base but this principle is applied with a suitable delay and an elimination of business cycle effects; for this reason and as a result of other factors the actual CEMA ruble prices differ significantly from the current world market prices in both our export and our import. A sort of average of these differences is reflected by the fact that the value ratio of the forint in relationship to the dollar or to the ruble does not reflect the declared value relationship of these two exchanges to one another.

The conditions of the domestic economy differ significantly from both relationships; here we have simultaneously in different areas market competition between producers, elsewhere a shortage situation (in regard to quantity, variety or both) and still elsewhere a monopoly situation of producers or consumers.

For the enterprise, in the case of domestic or socialist sales, the value judgment of the world market (in regard to the magnitude of national income produced or the efficiency of resource use) is realized either not at all (prices based on production cost) or is realized only very indirectly. In a monopoly situation or under conditions of a shortage economy (for example, in the absence of import

products) the prices do not reflect precisely the value judgment of the market and by exploiting the laxity deriving from this the enterprise can achieve extra profit more easily than by actually increasing efficiency. The new price mechanism does much to improve this situation but in a significant part of the production and service sphere the value judgment of the world market still cannot be realized with sufficient strictness and flexibility via the prices.

Our mechanism must take into consideration the conditions of all three relationships and we must strive to develop regulators and a price system which will create a suitable harmony between the interests of the national economy (different for each relationship) and the enterprise interests. It is obvious that the result of this can only be a "constructed" mechanism containing a number of compromises and artificial "game rules" which only approximately convey the value judgment of the world market and the changes therein. Under such circumstances the mechanism cannot be suitable for defining every activity automatically. Conscious elements must be built into the mechanism itself (capitalist export incentives, import limitations, price supports, turnover taxes which differentiate prices, fixed prices for some product groups, the damping of price changes, arbitrary prices, maintaining production cost type prices, setting rates of exchange for rubles and dollars, a dual rate of exchange for the forint, etc.) the purpose of which is to bring enterprise interests and national economic interests closer together but the constructed nature of it and the systematic delay in the changes make it possible to realize this approximation to only a limited degree.

Taking into consideration that the conditions, requirements and price relationships of all three relationships (especially the capitalist one) frequently change in a way which can hardly be foreseen a full and lasting harmony can be achieved only approximately with the internal automatisms of the mechanism and if the frequently destroyed harmony is to be restored and if the volume or level of enterprise performance is to be the objective measure of the efficiency of enterprise activity then the mechanism, and the price system as a part thereof, must be regularly adjusted to the changing conditions. This, however, requires conscious activity and the utility of the mechanism depends on the success and flexibility of this activity.

So the constructed nature of the mechanism is not a fault but a given; we must learn to adjust to it flexibly and wisely. The task of economic guidance is to develop the mechanism according to conscious considerations, to create an ever fuller harmony of national economic and enterprise interests on the basis of the world market and domestic value judgments in the interest of resolving the constantly reappearing contradictions. It is the task of the enterprises to predict the changes which can be expected in external effects and in the mechanism and prices which transmit these effects and to manage with an awareness of this.

The Need for Foresight

The mechanism and the automatisms thereof do not "think" and do not see into the future; by their very nature they evaluate the present activity of the enterprises and influence it in a direction advantageous for the enterprise. In themselves they are not suitable, or are not suitable enough, to influence the strategic thinking and developmental activity of the enterprise in a direction which

corresponds to the requirements of the national economic structure policy. Structural development frequently requries conscious developmental or structure changing decisions which are not more economical, or not sufficiently so, as compared to the existing product structure under present conditions (for example, world market or domestic price relationships) but with the development of market needs and prices which could be predicted their economicalness would increase or that of the present products would decrease. Thus when making strategic enterprise decisions we may need decisions which contradict the short range interests transmitted by the automatisms. The banks offering developmental credits and the state organs developing the infrastructure and offering preferences (for example, export development or energy rationalization support) must realize conscious considerations keeping in mind the economicalness of the future.

Thus a correct structure policy and the selective development or curtailment which constitute the foundation thereof cannot do without consciousness. Research and development activity and marketing activity must be put in the service of this consciously and with determination.

Defining the Requirements

Enterprise performance can constitute an objective measure for evaluating efficiency only where the world market value judgment is realized directly (capitalist export) or where the capitalist market export price is the basis for our domestic prices and the price of the materials and energy used is based on world market prices. Enterprise performance is not a precise measure of the efficiency of the activity in our socialist export (because of the inconsistent realization of the CEMA price principle) and in the case of domestic activities where the prices are fixed or are of a production cost type or where there is a shortage or monopoly situation.

In any case enterprise performance is a synthesis of many factors the individual efficiency of which may vary greatly. For example, products which have been produced economically may be made uneconomical by amateurish marketing or enterprise performance which seems suitable may hide (because of shortages or a monopoly situation) waste of live work or energy. Because of these and similar factors we earlier had the situation of a "poor national economy with rich enterprises."

The 1980 modification of the mechanism significantly tightened the management requirements. This was an extraordinarily important step and it suggests lasting tendencies. But for the above reasons enterprise performance in itself still will not be enough for a many-sided evaluation and analysis of the efficiency of enterprise activity and leadership work. For this purpose we cannot dispense with the method of a many-sided comparison with the world level either in evaluating results or defining requirements, especially when we examine those components of the synthetic performance index the domestic prices of which are undervalued (for example, live work efficiency and energy requirements).

Organizing the Innovation Process

By the innovation process we mean the entire chain of research, technical development, production, marketing and generation of assets. Since we have neither the material nor intellectual assets or resources for the simultaneous development of all

activities and maintaining the level set by world market requirements it is necessary to concentrate our forces on the selective development of trends determined by structure policy while holding the level in other areas and curtailing some activities. This can be realized effectively only in a more conscious, more coordinated way than the practice thus far. In general the selection of the mechanism being realized on the basis of economicalness aids this conscious activity but long-range strategic decisions will not necessarily be in harmony with the short-range economicalness evaluations of the mechanism. Analyzing the possible contradictions and assuming the risk accompanying a deviation from the current economicalness value judgment are among the most difficult economic decisions. But we must consciously assume such a risk at both the enterprise and the national economic level because avoiding this and sticking to what we are used to at any price would mean conserving our obsolete structure.

We have known for a long time that technical development resources can be used efficiently only in a concentration which exceeds a "critical mass" but we regularly violate this principle, disperse our resources on too broad a front and profit even less from the little. Selecting the realistic research and development goals from among the innumerable possibilites and concentrating the assets on these goals is the task of economic guidance to a certain degree in every country.

Similarly we cannot dispense with the conscious and determined central guidance of foreign market marketing activity. The rational concentration of forces, the "critical mass" principle, is just as valid here. The marketing network, advertising and the service network can be effective only above a certain level of concentration, can be capable of laying the foundation for lasting export of sufficient volume at competitive prices. We have much to do in market organization at both the enterprise and guidance levels since the quality of marketing frequently has greater influence on the economicalness of the activity than the efficiency of the production process itself. We can hardly say that our foreign trade organization and practice, which correspond to the developmental level of the 1950's, would be suitable for satisfying the fundamentally changed conditions.

Economy Organization Tasks

Turning economic processes in the desired direction, especially the development of the production structure therein, is possible only with conscious economic organizing work. This theme is extraordinarily complex so I will pick out only a few characteristic examples.

The founding of a new enterprise or the elimination of existing ones, with the exception of amalgalmations or absorption, are most rare phenomena in our present practice. Swift accomodation to market needs requires greater flexibility in this area also. We should facilitate the founding of new enterprises, especially small independent enterprises. There is especially great need of this in the area of the so-called background industry and industrial services. It would seem useful to facilitate the expansion or changing of the sphere of activity set in the charter establishing existing enterprises and to remove unjustified restrictions, including the more grandiose authorization of foreign trade rights for enterprises ripe for such activity. It is primarily enterprise interest which should motivate the development of enterprise organizational structure. The realization of this

should be facilitated but neither the founding of a new enterprise (with the exception of associations and daughter enterprises) nor the elimination of existing ones can be solved (at least according to our present practice) without conscious economy organizing decisions.

The purposeful development of cooperation links between enterprises and branches, the expansion of export and the replacement of imports all require conscious measures and incentive via interest relationships. The conscious measures include decisions regarding credit for developmental purposes where one must presume conscious decisions taking into consideration structural policy and the "reliability" of the enterprise, in addition to the predicted evaluation of economicalness and a selection among enterprise goals of almost identical economicalness (we cannot afford everything), in this case on the part of the banks and branch ministries.

Energy management is a unique economic organizing task of ever greater significance. Here also, naturally, an important role is played by the mechanism, the interest relationships, because energy supply and the gigantic investments and imports connected with it are a bigger problem for the national economy than for the enterprises, which do not feel the costs of the energy producing investments and regularly receive imported fuels more cheaply than the world market price. On the one hand there must be an attempt to see that the enterprises increasingly bear the world market costs of fuels directly and that energy use should not be a hidden support; on the other hand there must be an attempt to decrease energy needs and to decrease the costs of the development and operation of energy production and use, by means of a coordinated system of enterprise and central measures.

I think that it is no exaggeration to say that the results achieved (or the failures suffered) in structural development and energy management best characterize the level of guidance of a national economy.

The Level of Enterprise Management

It would be an erroneous simplification to suppose that the enterprises will always do everything which is advantageous for them in terms of incentives, which they know to be necessary for them now or in the future and which they could find a way to do with good work. If this were true then, except for the definitely obsolete enterprises with definitely unfavorable natural conditions (which would be striving to liquidate themselves!), we would have only profitable enterprises manufacturing products which could be sold advantageously on every market and in the forefront of technical progress. As is well known this is not the case and that this depends primarily on the level of enterprise management is proven by the fact that we do have a good number of such enterprises, small and large, state and cooperative and belonging to the competitive and noncompetitive spheres alike. Naturally the effect of the economic environment is not secondary even so because the fact that those which are weak, live for today and do work far behind the world level can live for years or decades and make a profit and even be classified as good is the fault of the lax economic environment which sets standards in terms of the domestic average--if you like, the fault of the mechanism. The tightening of the requirements and the accomodation to the world market has changed this a great deal, but we must go farther in this direction.

In any case it is fortunate that even hitherto many enterprises have consciously done more than the lax requirements of the mechanism would have encouraged them to do. In the future also outstanding enterprise management will be the result not primarily of the incentives but rather of conscious efforts. Progress, wanting the best, is a conscious aspiration. It is the task of the political and economic leadership to consciously demand the best everywhere, to demand that work come up to the leading world level.

Here there is another, very common problem, that the enterprise (or its leadership) does not do everything one might expect of it for the realization of such national economic interests as, for example, market oriented technical development, modern marketing activity, material and energy conservation, increasing productivity, etc. but, because the enterprise is working well in other areas, its combined performance is not worse and may even be better than the average. In many cases the interest automatisms are not efficient enough to make people deal with energy conservation, for example, where the energy costs make up only 2-3 percent of the production costs. There can hardly be any doubt that in such cases it would be useful and even necessary to intervene consciously in enterprise management, but who should do so and how so as not to violate enterprise independence is a question which has not been resolved unambiguously.

The Spontaneous Centralization of Decisions

The socialist character of industry, agriculture and trade is necessarily accompanied by a significant reduction in the number of organizational units and farms. The combination of artisans into cooperatives further strengthened this process. And the organizational concentration brought with it a radical reduction in the number of those with the right of making decisions, which was further increased by the excessive centralization within the enterprises. In the period of extensive development, strongly isolated from external market effects, the disadvantages of this process did not appear so much. Later, especially in recent years when the value judgment of the capitalist market appears ever more directly in our economy, the lack of flexibility deriving from the small number of those with the right to make decisions, the slow and insufficiently effective reaction capablity, the underestimation of human factors and other internal and external factors have combined to lead to the deterioration of the balance of the national economy.

The flexibility of the economy depends primarily on a swift reaction to external and internal effects, on decisions which serve to protect against unfavorable effects, on initiative in discovering new possiblities and reserves and on the assumption of risk which accompanies this. Initiative requires authority and independence in harmony with the carrying out of decisions. Many useful initiatives miscarry because of the lack of the independence needed to carry them out. Of course there are hardly fewer missed opportunities due to the fact that those with authority do not make use of it, always seeing possibilities for the realization of good initiatives only in the sphere of authority of others. In addition there are always many more good ideas than those with authority can handle or process. It is certain that there could be more successfully realized initiatives if there were more people with the right of making independent decisions. A well known fact follows from this, that the rational decentralization of decision making authority (which is not necessarily the same as organizational decentralization) will increase flexibility and aid the success of good initiatives.

Considering the fact that at the enterprise and national economic level alike there is a spontaneous tendency for decision making levels to creep upward there is a need for a coordinated system of conscious measures to see that decision rights (and obligations!) are again decentralized to the level ensuring the greatest useful flexibility. There is a need for and the possibility of a decentralization of decision making authority in the plants, especially in the internal organization of trusts and large enterprises, but this is also needed in the shops and plant sections where restoring the former authority of the foremen could greatly increase the ability to carry out good initiatives.

But the decentralization of decision making authority only provides a possibility; it will not initiate, much less force, the necessary initiative and risk taking. This requires suitable motivation also. Not to deny the outstanding importance of positive material incentive, we should not forget about negative material incentive either (running at a loss, decreasing premiums or even wages, termination, etc.). In addition to material motivation a no smaller role can be played by the frequently neglected human incentives such as the feeling of success, the spirit of competition, pride in accomplishment, the trust of superiors and subordinates, etc. It is well known that in general the capitalist corporations are led by paid managers for whom human motivations have a greater role in success than direct material interest. I believe that a more conscious appeal to human factors and ensuring the conditions for the realization of useful aspirations might contribute to a crucial degree to raising the competitiveness of our economy to the world level.

Consciousness in Cadre Work

It is primarily the leadership, the quality and suitability of the leaders, which determines the success of enterprises and cooperatives, the effectiveness of their work. There are many examples where the work of an enterprise, plant or shop, which had been working poorly for a long time for "objective" reasons, improved virtually overnight with the assignment of a suitable leader. Unfortunately there are also examples where an enterprise or unit which had been working well earlier swiftly deteriorated or fell apart under the leadership of a bad leader.

In a capitalist economy leadership selection takes place in the smaller enterprises in a "spontaneous" manner as a result of the prosperity or bankruptcy deriving from the objective value judgment of the market. In the larger enterprises, which usually operate as corporations, the value judgment of the market is supplemented, in naming or firing leaders, by the value judgment of the controlling stockholders, usually a small group of owners. So "humane" considerations are hardly realized in the selection and termination of the managers.

In the practice of our cadre work, on the other hand, the justified humanism deriving from the basic human-centered nature of our society frequently lapses over into its opposite, a pseudohumanism, because we have regard only for the person of the leader so we are "humane" to him even when hundreds or even thousands of subordinates suffer disadvantages and cannot realize their potential because of his unsuitability.

It is extraordinarily important that a properly interpreted consciousness be realized in the appointment and exchange of leaders. This must be based on objective criteria, primarily the performance delivered. But there is also a need

for certain automatisms in cadre work. For example, it would be useful to state that the top leaders of enterprises which run at a deficit must be removed automatically and that in suitable cases they could again be entrusted with leadership tasks only for a definite time after individual consideration.

It continues to be absolutely necessary to fully realize the triple requirement in connection with leaders. But the interpretation of leadership ability or suitability must be modernized because without competitive leadership there cannot be competitive production either. So when selecting a leader the primary consideration must be whether he is capable of carrying out the given task at an outstanding level. What is now needed for this, in place of the earlier one-sided technical bias, is a leadership attitude and ability of the manager type which combines these and is market oriented. It is indispensable that the leader know not only the given plant or domestic practice but also the world level in regard to technology, organization and development. He must be enterprising and creative and capable of collective work, of guiding the collectives and of selecting the best colleagues, must have good organizing ability and be willing to work.

The most reliable measure of the consciousness of leadership is the level of cadre work.

8984
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OFFICIAL NOTES CONDITIONS IN MACHINE INDUSTRY

Budapest MAGYAR HIRLAP in Hungarian 5 Oct 80 p 5

[Interview with Bela Rabi, state secretary for the Ministry of Metallurgy and Machine Industry, by Ilona Kocsi--date and place not given]

[Text] Bela Rabi was born in 1929, his first trade was that of a locksmith. He finished his university schooling in economics in the Soviet Union, and then he was employed at the Csepel Works in various areas of work in economics. He then moved to the National Planning Office, where for a number of years he worked as industrial group leader. He has been with the Ministry of Metallurgy and Machine Industry for 5 years, first as deputy minister and then for 2 years as state secretary. He is a member of the Budapest Party Committee.

The Hungarian economy and all its branches are nearing the end of a 5-year period that has been filled with changes. Following accelerated growth, the creation of economic equilibrium was given first place on the scale of tasks in the second half of the plan period.

How did the machine industry make it through the more difficult periods of the Fifth Five-Year Plan? How did the machine industry enterprises react to the modification in regulators which occurred a number of times? In what direction did profit move, the sensitive "instrument" which measures the efficiency of the economy? Ilona Kocsi, a staff member of our newspaper, talked about these things with Bela Rabi, the state secretary of the Ministry of Metallurgy and Machine Industry.

[Answer] We have never known such a varied and eventful 5 years. I can say this in a good and bad sense. At the beginning, most of our enterprises exploited the upswing that was evident both on the world market and at home. But beginning in 1978, prosperity was swept away by the recession, and domestically there was a reduction in investments. The effects were evident at first only in sales that grew more difficult, and enterprises tried to counter the narrowing of the domestic investment market by increasing their exports. This year, however, certain capacities of various managing units remained unused.

[Question] To a certain extent we can defend ourselves against the unfavorable effects: we need more flexible reactions and, accordingly, a structural change....

[Answer] In the machine industry the key words today are: the important tasks. But public opinion expects spectacular solutions, and frequently it links the closing of plants and the opening of new ones to structural changes. And yet we are dealing with considerably more ordinary tasks. The elimination of old products fits just as well into both the concept of flexible adjustment and lesser modification. If, for example, a refrigerator will have in the future a different form and color because this is what the buyers put value on, this represents to a certain extent a flexible adjustment, or, if you wish, structural modification. With this, of course, I merely want to say that modernization has also begun in the Hungarian machine industry, but the greater results will become evident only later. In the manufacture of public road vehicles, we realized a central development program in the past two five-year plans--we are now reaping the results. But in the machine tool industry there were significant developments only in the current plan period, and we will feel the effects later. The machine tool industry is capable of manufacturing the most modern type of numerical guidance NC, CNC machinery but cannot meet the demand. The task exceeds its resources.

[Question] But perhaps the trouble is with the speed. Structural transformation is successful in the final analysis only if it is carried out in time....

[Answer] This is how it is in the machine industry, too. As an example I shall cite three enterprises of the metalware industry: Lampart, the Firearm and Gas Equipment Factory, and Elzett Works. Market demands do not cause us problems but rather the management of enterprises. They were unable to adjust their product structure adequately and in time to demand, or to develop their capacities. Flexible and rapid reaction can be achieved only with a very significant development in market work. Where they have recognized this, they have discovered the upward-arching course even under difficult circumstances; where they have not found it, development is slowing down. Of course, reality is considerably more complicated than this somewhat simplified description of the situation. I cannot say that the market work of these enterprises--the Ganz Electric Works, the Hungarian Ship and Crane Factory, the Lang Machinery Factory, etc.--is bad. But their products can be marketed only with credit: whoever offers the most favorable conditions and the longest repayment terms wins the competition. And this does not depend on enterprise work but on credit-extension possibilities in the country.

And since we are now pointing to examples, the United Incandescent is known for products it has successfully introduced on the market and its modern marketing network. But recently it has found it more difficult to sell and today the problem is that the market work of the enterprise has also become more difficult. It was unable to shape production costs in accordance with competition and the internal production management is lagging behind requirements. With this I do not mean to say, of course, that United Incandescent is a bad enterprise, only that a momentary omission, a slowing down can cause troubles even for a well-functioning firm.

[Question] All in all, what can we expect by the end of the Fifth Five-Year Plan, the fulfillment or the nonfulfillment of the plan?

[Answer] The production value of the machine industry will not achieve the annual average growth rate of 9.3 percent called for in the plan. At comparable prices, development up to the end of the past year comes close to the 6.3 percent called

for in the plan. At comparable prices, development up to the end of the past year comes close to the 6.3 percent called for in the plan, but in 1980 we can only expect to reach the past year's level. At current prices, the production of the machine industry this year will be 4 to 5 percent less than a year ago. The deviation from the plan is caused partly by the economic policy goals calling for a more moderate economic growth—as shaped following the preparation of the plan--and partly by the price and regulator modifications that came into effect on 1 January 1980.

In marketing, the following situation has developed: nonruble export must be increased almost three times as compared to the fulfillment of the previous five-year plan. The branch will fall below this target by only 2 to 3 percent, and in these 5 years it will fulfill exports worth almost one-half billion dollars. In 1977 to 1978, dollar imports grew significantly, but beginning in 1979 they declined. As compared to the foreign trade deficit of previous years, the machine industry may reach a surplus of about 90 to 100 million dollars.

Exports in ruble trade grew at a more moderate rate, but we essentially fulfilled our quota obligation, with minor shortfalls in only a few areas. Various problems cropped up in imports: we were able to import fewer and fewer of the products Hungarian industry needed. Thus the targets for the plan's socialist imports will apparently not be met.

Regarding domestic sales, I may say that for the most part we fulfilled our obligations in the contract. But there were some items which frequently were not available in the stores, and this evoked a bad reaction among buyers. These were electric boilers, gas heaters, the Mini-mat washing machine, and the heat-accumulating electric stove to mention only a few.

[Question] The plan also called for an increase in productivity. What is the situation here?

[Answer] It has developed favorably in theory but still I am not satisfied.... I believe that in the machine industry there are still too many unused productivity reserves, and too much inadequately employed manpower. The state of organization is poor in many places. A year ago we initiated a program for developing manpower management which extended to the entire branch of the industry. I hope for development in the future. I hope that by next year this too will have important results.

[Question] Regulator changes in recent years, and chiefly the modifications of 1980 brought many surprises. Many enterprises which were previously regarded as good proved to be fundamentally deficient and operating at loss. This phenomenon, to be sure, is not unknown in the machine industry either....

[Answer] Naturally, we too have faced this fact. Of course, the purpose of the changes was differentiation, that is, to put in an advantageous position those enterprises which were managing better. It is doubtful, however, whether enterprise revenues were actually differentiated accordingly, and not as a consequence of other factors also. On seeing the profits for the first half year, I may say that the economic political goals were fulfilled and we succeeded in centralizing a large share of enterprise monies. But still it provides food for thought that for 60 percent of the enterprises the profits were 50 percent below those of a

year ago, and there are more than a few units where the profits do not even come to 10 percent of last year's. For example, this is the case at Orion, Elzett and the Beloiannisz Communications Technology Factory. There will also be some enterprises which will close out the year with a deficit.

To be frank, I am a bit saddened by the picture. I believed that the enterprises would discover themselves sooner and find the antidote to a decline in more efficient work.

[Question] There may also be an advantageous aspect to shrinking enterprise revenues. Many people, however, call attention rather to the disadvantage, that is, what will the enterprise use in the coming years for expansion purposes?

[Answer] The data for the first half of the year has called attention to a number of negatives, but it would be reckless of us to draw final conclusions from this. The changes regularly shocked the enterprises, a real stress situation was created.

In the second quarter the picture was clarified: the stress situation was replaced by an attitude of expectation. Certainly, many people speculated that if the revenues were too low, some kind of correction would be carried out. I think that after the second half year it will be possible to see clearly who has been put actually into a difficult situation. Apparently there will be an increase in the number of fundamentally deficient enterprises for whom it will not be possible to continue credit repayments according to earlier agreements. Here in some cases central assistance may also be unavoidable. More worrisome, however, is the fact that the enterprising spirit of the enterprises has ebbed. But even under more difficult economic conditions, only the enterprises that show initiative can count on success both abroad and at home.

6691
CSO: 2500

ROLE OF ASSOCIATIONS IN AGRICULTURE WEIGHED

Budapest NEPSZABADSAG in Hungarian 12 Sep 80 p 3

[Article by Ferenc Biro, vice president of the National Planning Office: "Partnerships in Agriculture"]

[Text] Agricultural production, even when compared to international standards, has been significantly developed since the establishment of cooperatives, the creation of state farms and the introduction of socialist production. The branch adapted well to the country's social, economic and financial possibilities, and it has helped in solving the problems that have emerged during this time.

During less than 20 years, a socialist industrial agriculture has been created, which, is based on up-to-date technology and on extensive relations of production and marketing. During the 1960's, industrial proportions and organizations were created for the existing technology, appropriate for the material and spiritial conditions.

Through the modernization of technology, production increase and high yields, the farms are facing new tasks in construction, renovation, parts supply, storage and marketing which they find hard to deal with despite continuous production management.

It has already been mentioned several times that most of this kind of essentially service activity should be done, on the basis of orders from cooperatives and state farms, by special non-agricultural enterprises organized in other branches of the national economy.

Many Kinds of Advantages

It has become a historical fact that industrial plants and enterprises were created for the manufacture of farming equipment, machines, chemicals and other things. On the other hand, enterprises that help agricultural production with various producer services, were not established in other branches of the national economy, partly because of financial managerial reasons and partly because of certain attitudes. For this reason, it was the large agricultural plants, with a few exceptions, which had to organize the supply to meet demand. Thus cooperations, productions systems, joint enterprises and farm industrial partnerships--in summary, economic partnerships--were established through the joining of a few cooperatives and state enterprises. At present, about 700 economic partnerships are operating in the country.

A large part, about 76 percent, of the partnerships were created for goals that can be achieved in the foreseeable future.

Characteristically, no independent or separate and large managerial or administrative organization was developed; instead, one of the partners takes care of administration with its own organization, on the basis of the management body's decisions. This includes the organization and implementation of management, administration and other things. Consequently, these partnerships are not independent legal entities.

The rest, i.e., almost one fourth of the economic partnerships, are joint enterprises with independent legal status. Their common characteristic is that they are organized for carrying out longer-range tasks the extent of which is generally undetermined. On the basis of the decisions of the managerial bodies that are made up of representatives of the partner enterprises, independent organizations of leadership, administration and management are established, which are separate from the partner enterprises and which have their own bank accounts. Most of their assets--resources--needed for their operation are supplied through contributions by the partner enterprises.

It is a great advantage of the economic partnerships belonging to both circles especially those belonging to the first one is that they are very expedient. When they reach their goal, they either stop their operations or find new goals. In the latter case--and this is more frequent--there is a great probability that not all partner enterprises will have an interest in the realization of the new tasks. On the other hand, there may be enterprises which hitherto have not been included that are willing to join the partnership.

Thus the possibility exists for enterprises which have no more interest in further participation to leave from these partnerships, and for others which find it justified and worthwhile to join them. From this aspect, the partnership is an exceptionally flexible economic form which adapts well to the possibilities. All of this favorably affects the efficiency and stability of the participating enterprises and cooperatives.

According to Interest

It is well to note that all state farms and 95 percent of the cooperatives belong to economic partnerships. Most of them join, according to their interests and even more than one partnership simultaneously. About 1,500 large agricultural plants are identified in more than 7,000 partnership relations in the various associations.

It is apparent that those activities in which a joint effort boosted the efficiency of production increase, processing, marketing and service for the public, drew larger numbers of partnerships. The number of partnerships in construction, industry and trade created mainly for construction related to farming is smaller. These help farm production in part directly, e.g., through manufacturing spare parts for farm equipment and repairing machines, and in part indirectly, e.g., through filling orders from industrial plants. The distribution of the economic partnerships' activities is as follows: farming 35, food processing 21, public service 20, construction 8, industrial 6, other 11 percent.

The advantages of economic partnerships were recognized primarily by well managed and strong cooperatives and enterprises, and in their own way are trying to make the most of them. On the other hand, many large plants which are less profitable--because of unfavorable farming characteristics--do not exploit these possibilities or do it [only] to a smaller extent. Whereas the latter are precisely the ones which could be helped most by the partnerships because of their economic situation.

Evidently, there are also a few good examples of this in the country. Among others, for example, the Petofi cooperative of Dunavarsany, the Mitchurin cooperative of Danszentmiklos, the 15 March cooperative of Hernad and others which, in spite of their unfavorable farming characteristics, achieved outstanding results in production for years. This results partly from the fact that they are active participants and even organizers of the various economic partnerships.

Increasing Requirements

The economic partnerships have improved greatly in recent years. Their assets are worth almost 18 billion forints. The efficiency of their operation can be evaluated in both direct and indirect ways. Based on their results of last year, for example, their profits proportional to the engaged assets exceeded 15 percent. On the other hand, the indirect effect of their activity is manifest in the results of the member cooperatives which created the partnerships: the cooperatives, state farms and enterprises. It is rather well known: one of the best results of the spreading of production systems is that through economic means they almost forced the overwhelming majority of the participating farms to have labor discipline and a targeted, professional and well-managed production.

It is also apparent that those economic partnerships which proved to be more efficient and able to survive were those which did not alienate themselves from the member enterprises and the fundamental goals which contribute to a more efficient management of the partners.

In farming and even in food production it is not expedient at present to further increase the size of average or larger plants. In addition to size and the stabilization of independent enterprises, it would be much more suitable to better exploit the possibilities of cooperation between cooperatives and enterprises. The requirements for economic efficiency are increasing in food production and also marketing. The agricultural and food industry plants and marketing enterprises can meet these requirements more efficiently if they strengthen their relations and broaden their wide-range cooperation.

A big advantage of economic partnerships active in food production and marketing is their variety, which can help make better use of natural and economic possibilities. Thus it will be well to conserve this variety of cooperation in the future as well.

Important Requisites

It can be foreseen based on experience that the various types of production systems which efficiently help member farms in one or another production branch will continue to play a significant role.

It is also necessary to further increase cooperation in food processing and marketing. It would also be well to better examine how one could promote the expansion and export of foreign trade commodity funds through the whimsic characteristics of cooperation, for instance with the formation of foreign trade associations.

Through the development of farming more and more modern machinery and production equipment is reaching the farms. Overhauling and major repairs on these, and the organization of spare parts supply by individual plants costs a great deal of money and is not uneconomical. Evidently, the state trust--and its enterprises--which have been established for this purpose are the ones that can do the most to improve spare parts supply. But this, too, could be made less expensive and more efficient in a wider circle through expedient cooperation.

The initial results in agricultural partnerships are encouraging. Based on their results, it is very probable that the cooperation of large agricultural and food industry plants will increase in the long run, which makes possible to more sensibly locate production resources and to develop these resources more smoothly without further fusions and mergers of cooperatives.

I consider it is very important to bear in mind the practical experience that successful cooperation requires a coordination of real economic interests, respect for mutual interests and organizational and economic independence of the participants.

9414
CSO: 2500

STRIKES FORCE CUTS IN COAL DELIVERIES TO FINLAND

Helsinki HUFVUDSBLADET in Swedish 24 Oct 80 p 14

[Text] Poland will not be able to deliver the amount of coal agreed on this year. This is because Polish coal mine strikes have led to a sizable decline in coal production. Due to the decline in Polish coal production Finland will be forced to import coal from other countries, including the United States.

This year it was agreed to import around 4.5 million tons of coal from Poland. At this time neither the power plants nor industry can tell how much of the quota will remain unfilled.

"Imatran Voima was signed up for 1.8 million tons. This quota has been reduced by 200,000 tons which the company must import from the United States," we were told at Imatran Voima. The 1.1 million ton quota for the city of Helsinki will probably also fall short by a similar amount.

Industry had planned to buy around 1.8 million tons of coal from Poland. When the strikes broke out, 0.6-0.7 million tons had not yet been delivered according to managing director Richard Waller of the coal consumers' cooperative.

So far industry has purchased 150,000 tons of coal from the United States. Ships have also been sent to Poland to await coal deliveries which are coming in slowly with no definite timetable for coal shipments at present, Waller said.

"But the situation is not grave, there is enough coal in stock to last about 6 months," Waller added. He went on to say that the major problem is getting ships reinforced for ice passage if we have to import coal in the winter.

The power plants and industry will need supplemental deliveries of between 0.5 and 1 million tons depending on how much the Poles can deliver.

Waller said there is plenty of coal in the world and there is no problem getting the coal needed. Coal is available at reasonable prices from the United States.

Since the distance traveled is greater, freight costs will also rise sharply. And not all coal ports can be used to unload these shipments since larger ships are required for long-distance shipments.

6579
CSO: 3109

IMPORTANCE OF PROFITABILITY IN ECONOMIC SPHERE

Bucharest ERA SOCIALISTA in Romanian No 19, 5 Oct 80

[Article by Dr Gheorghe Sica, director in the State Planning Committee]

[Text] The concept of profitability has its origin in the requirements for action of the objective economic laws and expresses the ability of an economic or social-cultural unit to produce a net income for society. It is known that social-economic development at sustained rates requires assurance of an appropriate broadened reproduction, concluding of the money-goods-money economic circuit under conditions of recovering the expenses made in the production process and in obtaining a profit which, through the multiple jobs it has in the economy, in turn serves the cause of development.

Defined as the ratio between profits and costs, the rise in the rate of porfitability is essential as the major goal in technical-economic activity, a basic need for resuming production on a greater scale and satisfying the general needs of society. The level of a socialist enterprise's profitability characterizes the extent to which it contributes to the country's progress. On the other hand, the lack of profitability of an enterprise is an alarm signal, a reflection of technical, economic or organizational defects.

During a certain period the thesis mistakenly was sustained that in socialism, as long as the profitability of the national economy as a whole is assured it is not absolutely necessary to achieve profitable activity at all levels and in all the economic links. But, to keep some unprofitable enterprises and products harms the process of development of the national economy and is incompatible with the nature and goals of socialism. As Comrade Nicolae Ceausescu said at the broadened plenum of the National Council of Workers on 13 June 1980, "It is necessary that we well understand that there is no sector of activity and of material production and, in general, human activity which should not take place on the basis of the principle of maximum efficiency, including economic efficiency and profitability."

As a very complex overall indicator of economic efficiency, profitability reflects the action of a series of factors, among which the most important are the following: reduction in production costs, volume, structure and quality of production, level of sale prices, speed of rotation of capital. Reduction

in production costs and rise in the volume of production and level of prices act directly on the rate of profitability, bringing a rise in profits or net income included in the production price. Improvement in the structure of production and its quality, faster speed of rotation of assets and, in general, efficient use of the means of production act indirectly on the rate of profitability, affecting the action of direct factors positively, however.

Without going into detail, we mention that the rate of profitability may be determined in two basic ways; they are depending on the production cost and depending on total production capital advanced by society (fixed and circulating). As the ratio between profits and costs, the calculation of profitability proceeds from the level of production expenses (total and material) which, subject systematically to a reducing action, is a sure and healthy way to increase society's net income. The calculation of profitability as the ratio between profits and total production capital advanced by society takes into consideration more completely the effort made by society in the economic-technical processes and takes into account the degree to which various branches and subbranches are supplied. We feel that in order to get a more complete picture of the efficiency of economic processes, the workers' councils in the economic units should analyze the evolution of profitability calculated on the basis of both methods.

Regardless of the theoretical or methodological considerations in calculating profitability, judgment of the economic processes through the prism of the results obtained is required as an objective requirement. In this stage, when we are applying the new economic-financial mechanism and when the Romanian economy is modernizing its structures, profitability and economic efficiency should be assured at the level of each enterprise as well as at the macroeconomic level, both in the immediate future as well as for a longer period of time.

The increase in the technical, material and human potential of our socialist units, together with the creation of a broadly democratic framework to lead it, have demanded as an objective need the introduction of a mechanism which would provide use of production capital placed at their disposal by society under conditions of higher efficiency.

In this context, a special role has been given to profit as a main resource for the participation of each unit in the general development of society, for self-financing of economic activity and material incentives for the workers' collective. The opportunity to establish ones own capital from profits for financing the extending and modernization of production capacities , the increase in circulating resources, social-cultural expenses and housing construction and to establish a fund for worker participation in profits in proportion to the contribution made to obtaining the general results of the unit in itself proves the importance in obtaining as large a profit as possible and in increasing the profitability of all economic activity. The party documents very seriously draw attention to the fact that under the conditions of applying the new economic and financial mechanism there should be no sector of material production in which activity does not have at its base the principle of maximum efficiency and of continually increasing profitability.

Primarily, this means that each economic unit should organize its activity on the principles of self-management, worker self-leadership, while its own budget of incomes and expenses should be used as the main tool for practical implementation of the particular principles. Both in the stage of working out the plan as well, in particular, in the activity of seeking to fulfill it, each enterprise must weigh very well with what material expenses and labor force it is achieving production and should adopt the most proper measures which would assure a powerful increase in the value of net production. The leadership councils of the economic units and all labor collectives are obligated to take action to achieve the planned physical production under conditions of increase in efficiency and profitability in order to satisfy the general interest as well as in their own interest. In this regard the units' financial organs play an important role and they are called on to aid the workers' councils in carrying out activity on economic principles and not to advise on any expense which is not efficient from an economic viewpoint. The demands of the current stage require that the entire banking apparatus and central, county and local financial control apparatus should exercise their duties and role in carrying out control over expenses and establishing the measures which must be taken to increase efficiency and profitability in all the Romanian economy.

Worker self-management, as a major demand, means shortening the terms for paying back the capital entrusted for management to society. For this it is necessary that "the production-good sold and recieved" should develop at high rates and continually should be under the critical observation of the decisionmaking factors in the economic units, since only in this way does the money-goods-money cycle close and is the net income obtained which is needed for the enterprise and for society as a whole.

If we examine the evolution of this indicator, we find that in 1979 (a year for which we have available final data) the enterprises belonging to the Ministry of Forestry Economy and Construction Materials fulfilled it by 100.9 percent, those of the Ministry of Light Industry--100.1 percent, the industrial enterprises belonging to the county people's councils--by 108.2 percent. In exchange, in the same year the enterprises belonging to the Ministry of Machine Construction Industry only fulfilled production-good sold and received as planned by 93.5 percent, while those of the Ministry of Agriculture and Food Industry--91.3 percent. Clearly, under these conditions neither the profits nor the planned net income were fulfilled.

Along with the physical production and net production, the production-good sold and received is an indicator which reflects both covering a social requirement of real consumption as well as rotating speed of the capital by closing the economic circuit and satisfying the demands for economic management. That is why a basic goal in technical-economic activity in the enterprises is that there should not be differences between the volume of production-good manufactured and the volume of production sold and received, or they should be minimal. Then and only then can worker self-management fully assert itself. This requires permanent concern with obtaining orders and having available "order portfolios" with firm short-term and long-term economic contracts. But this involves a systematic and efficient search of

the domestic and foreign market with scientific resources and techniques. Unfortunately, there still are many cases where there is production without assured sale, which means that there are rather large differences between the indicator of "production-good" and the indicator of "production-good sold and received. A single example: Last year the production-good of the units under the Ministry of Agriculture and Food Industry was 10.7 percent larger than in 1978, while the production-good sold and received rose only 8.1 percent. As a result, 2.6 percent, which amounts to many hundreds of millions of lei in absolute figures, remained in stock, blocking warehouse space and tieing up large circulating resources.

The level of total costs and, separately, the material expenses by unit of product are another element which determines profitability. Putting all the factors leading to a reduction in production costs into movement--from the increase in labor productivity, scientific organization of production and work, raising the quality of products, reduction in material consumption, reuse of recovered resources, improvement in utilization of fixed capital to drawing the internal reserves specific to each unit separately into economic circulation--can contribute massively to increasing profitability. Materialization of the measures in the programs to reduce costs and adoption of technical-economic decision taking into account the restrictive conditions imposed by costs are endogenous elements of profitability.

It is a positive fact that in 1979, under comparable conditions, the level of costs per 1,000 lei production-good, for enterprises in national industry as a whole, was 8.2 lei less than in 1978 for total expenses and 5.6 lei for material expenses. Territorially, eight counties as well as Bucharest Municipality achieved large savings over the plan forecasts. However, a large number of industrial centrals, particularly in the chemical industry and machine construction industry, did not fulfill their plan to reduce costs. Similar results as a trend also were recorded in the first half of 1980.

Worker self-management also involves a critical analysis of the factors hindering the growth of profitability so that this major goal of economic-technical activity should be fulfilled under the best possible conditions.

Accelerating the speed for reaching the technical-economic parameters for the enterprises and new sections is a way to increase profitability in the economy. It is not a "fatality" that any new enterprise should reach the parameters of the documents which were at the basis of the documents within two years, as is customary now. Difficulties in the initial production phases may and should be overcome faster so that the new unit can cover its expenses, obtain profits and effectively contribute to increasing the national income.

Some data we have available show that in the first quarter this year the technical-economic parameters were reached at the Wire Rolling Mill No 3 at the Hunedoara Iron and Steel Combine, the Neferal Enterprise in Bucharest (section of hardboard), the Piatra Neamt Wood Processing Combine (furniture and panel factory) and many others. At the same time, it should be noted that the planned parameters were not achieved at 72 capacities.

Taking into account the demands of the new economic-financial mechanism, the existence of products or activities with losses in some overall profitable enterprises cannot be tolerated, either. This situation shows that some products "live" due to others and they affect the results obtained for the entire enterprise. The losses being recorded for some products are not always analyzed critically and they escape the attention of the leadership factors in the economic units. The products with losses "sift" among the profitable ones. We feel it is necessary that the list of these products always be subject to a critical, exacting analysis in the general workers' meetings and that a climate of intolerance toward them should be created. Solutions can be found which would also make these products profitable through redesign, rationalization and quality improvements.

The party leadership has drawn attention to the fact that worker self-management should be understood in a broader sense and not circumscribed only to the sphere of material production. Actually there is no activity in the social sphere which--if it truly is useful--should not propose recovery of the expenses made. For example, the units in the social-cultural area--sports clubs, movies, culture houses and even educational units--can pose the problem of obtaining incomes which would cover their expenses and even obtain a certain rate of profitability.

Of course, in order to achieve such a goal more thought and inventiveness are needed and an intensification of social-cultural actions, regular concern in the particular area, with a long-range view. The socialist state subsidizes strictly necessary social-cultural activities(hospitals, schools, social assistance units and so forth), but this does not mean that all the social-cultural units should be subsidized. It is a prestigious "calling card" for a theater or a culture house, for example, which, through the content of its activity and, in particular , through its quality, succeeds in living on "its own feet" and covers its expenses and also obtains profits. From the economic and social viewpoint, such an activity truly is positive.

The problem is posed even more sharply in the sphere of services provided to the population, in the subbranch of public food service and other areas. Here there is an urgent need to take action so that incomes cover expenses and that profits be obtained. Extending the system of commission in the commercial operations, sales of goods by mandate or shares of receipts, raising the quality of services to the population, adopting working hours which coincide with the choices of the large masses of consumers are ways which can lead to profitability for all the units in the sphere of services and public food service. Of course, the units' own contribution to reduce expenses, to increase quality and value of use of the products and services must be at the base of the actions to increase profitability.

Strengthening the national currency, assuring a healthy monetary circulation are substantiated on the principle of "equal price for equal useful effect," which means the broad mobilization of all the reserves for increasing profitability, proceeding from the efforts of the enterprises, centrals, economic and social-cultural units themselves. It is contrary to the interests of the

national economy to have some "press" on the general level of prices, to seek to make a certain activity profitable by price changes which do not have at their base a real increase in the quality of the products and services.

The basic coordinate of efficiency and an important goal of worker self-management, profitability in the current stage is of maximum exigency with regard to the quality aspects of activity and a criterion of reference in judging technical-economic processes.

8071
CSO: 2700

GROWTH OF STANDARD OF LIVING TRACED OVER 30-YEAR PERIOD

Bucharest REVISTA ECONOMICA in Romanian 26 Sep, 3 Oct 80

[Article by Dumitru Ciucur and Constantin Popescu: "The Growth of the Standard of Living - The Supreme Goal of the Party's Policy"]

[No 39, 26 Sep 80, pp 13-14]

[Text] A realistic, lucid analysis of the results obtained by our country in economic-social development and in raising the material and spiritual standard of living of the people must include the truth as a fundamental trait, as has been vigorously and consistently stressed by the secretary general of the party. According to this concept, everything that has been accomplished in socialist Romania represents "...the result of an unprecedented, heroic effort of our people who, as masters of their own fate, proposed to eliminate in the shortest possible time their backwardness and to ensure a dignified, happy and free life through their work and not on the backs of others."*

The successes obtained by our people during the years of socialist construction demonstrate through the firm power of deeds that socialism, by liberating man from oppression and exploitation, placing socialist property over the means of production and developing in a planned manner the entire national economy, created for the first time in history a new awareness for the members of society, an awareness that their labors determine the general progress of society and the welfare and happiness of each member of society.

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*Nicolae Ceausescu - "Speech at the Second Congress of the People's Council," Politica Publishing House, Bucharest, 1980, p 41.

Fundamental Economic Correlations

The experience of building socialism in Romania demonstrates the fact that at the foundation of raising the quality of life, as projected over a long period of time, there is a scientifically substantiated distribution of the national income to the investment fund and the consumption fund. In this regard, special attention has been given to ensuring a high rate of investments, a strategic option of great significance that has created the favorable context for building the technical-material base of the new order and for harmoniously distributing the forces of production throughout the country (see Table No 1).

Table No 1

The Intensity and Efficiency of Development Efforts During the Period 1950-1980

Indicatori	1950—1965	1966—1980	1950—1980
Rata medie anuala a acumulării (%) (1)	19,5	32,1	25,7
Volumul investiţiilor (miliarde lei) (2)	362	1 830	2 192
% din total	16	84	100
Fondurile fixe totale (miliarde lei (3) la sfîrşitul perioadei)	517	1 950	1 950
— spor mediu anual (miliarde lei) (4)	20,6	93,5	58,1
Numărul locurilor noi de muncă (milioane persoane) (5)	2,2	3,2	5,4
Venitul naţional (6)			
— pe locuitor (lei) (7)	7 670	27 000	2 760 / 27 000
— spor mediu anual (mild. lei) (8)	7,4	26,6	17
Numărul judeţelor cu o producţie globală pe locuitor (lei)			
pînă la 35 000 (9)	38	—	—
35 000—70 000	1	27	—
peste 70 000 (10)	—	12	—

Key:

1. Average Annual Investment Rate
2. Volume of Investments (Billions of Lei)
3. Total Fixed Assets (Billions of Lei at the End of the Period)
4. Average Annual Increase (Billions)
5. Number of New Jobs (Millions of People)
6. National Income
7. Per Inhabitant (Lei)
8. Average Annual Increase (Billions of Lei)
9. Number of Counties With a Total Production per Inhabitant (Lei) up to 35,000
10. Over 70,000

As shown in the table for the period 1950-1980, there was an average rate of investment of 25.7 percent. This significant volume of funds was expressed in the growth of the volume of fixed assets in the national economy from 517 billion lei in 1965 to 1,950 billion lei in 1980, which represents an increase in fixed assets of 1,433 billion lei, or nearly 75 percent of the entire 30 year period (1951-1980).

The concern for the allocation of an important part of the national income for development, concomitantly with the rational distribution and the use of all resources with a maximum of efficiency for increased production, resulted in a continuing increase in the growth of the national income. Thus, compared to the 111 billion lei that represented the growth of the national income during the first 15 years of socialist construction, during the 1966-1980 period the figure was over 400 billion lei, which represents approximately 80 percent of the growth obtained during the entire 1951-1980 period. Reported in terms of the population, the national income per inhabitant increased from 7,670 lei in 1965 to over 27,000 lei in 1980, while there was an increase in economic strength of one percent in its average annual rate of growth, a fact which shows the ever greater efficiency of the economic-social development efforts. The figures show that if during the 1966-1980 period, for example, the rate of investment that been only approximately 25 percent, national income would have increased at an average annual rate of 7 percent instead of 10 percent and the consumption fund would have increased at a rate of only 4 percent compared to 7.4 percent. This would have meant that the volume of fixed assets at the end of the current five year plan would have been approximately 600 billion lei less and the total consumption fund would have been decreased, in turn, by approximately 600 billion lei.

In accordance with the demands for continuing to raise the standard of living and improving the quality of life for everyone, the strategy of optimizing the investment rate includes, in addition to a correct sizing and distribution of the development efforts according to objectively determined priorities at each stage, the use of each leu spent with a maximum of efficiency. In this sense, at the Enlarged Plenum of the National Council of Workers, comrade Nicolae Ceausescu pointed out that "we must permanently pursue the economic efficiency of investments, their use within planned timeframes and the achievement of a just relationship between investments to be started and the ability to carry out these investments within a year so that materials and manpower are not immobilized and the start-up period is shortened."

The concern for an increase in the results of labor, for the full and maximally efficient use of all existing machinery and equipment, for the higher, intensive use of the land, raw materials, fuels and energy, and for the increase in the profitability of economic units must be placed in the center of the concerns of all those involved in the economy and all workers.

The 12th Congress of the Romanian Communist Party established as the fundamental objective of the next decade the radical transformation of investments, that have been primarily quantitative in nature, into a new, superior quality so that "all our economic activities will be carried out with the highest efficiency, ensuring the continued growth of national wealth, the certain and sole base for the continuing development of the country and the improvement of the well-being of the people." This constitutes the final condition for carrying out the strategy of the Romanian Communist Party for optimizing economic-social development in full accordance with the interests of rapid and multilateral progress and with the full affirmation of our people's independence and sovereignty in the ranks of the nations of the world. Elaborated with the direct participation of the workers and carried out through the conscious activity of all our people and having as a supreme goal the well-being and happiness of those who live and work in the land of socialist Romania, the strategy of accelerating the economic-social development of our country is the clearest proof of the revolutionary humanism of our socialist order, a society that is being built with the labor of its people for their good and happiness.

The Undeniable Strength of Facts

The evolution of the principal indicators that characterize the growth of the standard of living during the 1950-1980 period, covered in Table No 2, shows the fundamental lines of the policy of increasing the standard of living as promoted by the party and the results obtained during this period.

Table No 2

The Dynamics of the Principal Standard of Living Indicators

Indicatori	1950	1965	1980	1980/1950
Retribuția medie netă a personalului muncitor lei/lunar (1)	337	1028	2256	6,7 ori (3)
spor absolut (lei) (2)	1951—1965 691		1966—1980 1228	
Retribuția minimă lei/lunar (4)	161	613	1425	8,8 ori
spor absolut (lei)	1951—1965 452		1966—1980 812	
Retribuția reală — total personal % (5)	100	225,6	422,8	4,2 ori
Veniturile nominale nete ale țăranimii obținute din muncă în CAP și din gospodăriile personale, pe o persoană activă (lei/lunar)(6)	167	495	1290	7,7 ori
spor absolut (lei)	1951—1965 328		1966—1980 795	

[Table No 2 continued on next page]

Veniturile obținute de populație din fondurile sociale de consum ce revin în medie pe un locuitor lei/anual (7)	215	1204	3663	17	ori
	1950—1965		1966—1980		
spor absolut (lei)	989		2462		
Desf. de mărfuri cu amănuntul prin comerțul socialist (miliarde lei) (8)	12,1	63,7	214,9	18	ori
	1951—1965		1966—1980		
spor absolut (miliarde lei) (9)	51,6		151,2		
Consumul mediu anual pe locuitor (10)					
— carne și produse din carne kg. (11)	16,7	26,6	62	3,7	ori
	1951—1965		1966—1980		
spor absolut (kg)	9,9		35,4		
— lapte și produse din lapte (inclusiv untul) litri (12)	107,6	105	200	1,9	ori
	1951—1965		1966—1980		
spor absolut (litri)	— 2,6		95		
— ouă bucăți (13)	59	115	270	4,6	ori
	1954—1965		1966—1980		
spor absolut (bucăți)	56		155		
— zahăr și produse din zahăr (kg.) (14)	6,9	15	30	4,3	ori
	1951—1965		1966—1980		
spor absolut (kg)	8,1		15		
— legume și produse din legume (kg.) (15)	65,6	75,3	160	2,4	ori
	1951—1965		1966—1980		
spor absolut (kg)	9,7		84,7		
— fructe și produse din fructe (kg.) (16)	20,7	26,7	63	3	ori
	1950—1965		1966—1980		
spor absolut (kg)	6,0		36,3		
— țesături inclusiv confecții mp (17)	13,19	16,26	29	2,2	ori
	1951—1965		1966—1980		
spor absolut (m.p.)	3.07		12,74		
— încălțăminte perechi (18)	0,62	1,97	4	4,5	ori
	1951—1965		1966—1980		
spor absolut (perechi)	1,35		2,03		
Prestări de servicii către populație (miliarde lei) (19)	2,7	9,4	42,9	15,8	ori
	1951—1965		1966—1980		
spor absolut (miliarde lei)	6,7		33,5		

Key:

1. Average Net Salary of the Worker, in Lei/Month
2. Absolute Increase (Lei)
3. Times
4. Minimum Salary, in Lei/Month
5. Real Salary - All Personnel, in Percent

[Key continued on next page]

6. Nominal Net Incomes of the Peasantry Made While Working in Agricultural Production Cooperatives and on Private Plots, per Worker (Lei/Month)
7. Incomes Made by the People from Social Consumption Funds, in an Average per Inhabitant (Lei/Year)
8. Retail Sale of Goods through Socialist Trade (Billions of Lei)
9. Absolute Increase (Billions of Lei)
10. Average Annual Consumption Per Inhabitant
11. Meat and Meat Products, in Kilograms
12. Milk and Milk Products (Including Butter), in Liters
13. Number of Eggs
14. Sugar and Sugar Products, in Kilograms
15. Vegetables and Vegetable Products
16. Fruits and Fruit Products
17. Textiles, including Clothes, in Square Meters
18. Shoes, in Pairs
19. Services for the People (Billions of Lei)

As shown by the above data, the growth in the salaries of workers and peasants has been the principal means of increasing the standard of living. This year, compared to 1950, the average net salary for workers is 6.7 times greater.

In comparing the two periods of socialist construction, the data show a much greater increase in the average net salary during the 1966-1980 period, of approximately two-fold compared to the first 15 years, 1951-1965, or 691 lei to 1,228 lei. This is an accurate reflection of the results of an impetuous development policy for the forces of production and the decisive branches of the economy, and a sustained growth of national wealth and national income.

[No 40, 3 Oct 80, pp 13-14]

[Text] On the basis of an accelerated development of the forces of production, we have carried out in our country a broad process to improve social relations, to further socialist democracy, to establish the norms and principles of socialist ethics and equality in all social affairs, to raise the material and spiritual welfare of the people to a constantly higher level and to fully affirm the human personality. Within this context, an ever more important role is being played by the law for the payment of salaries according to the work done, expressing the relations between the members of a socialist society, relations that are formed in connection with the creation and distribution of that portion of the social product, the national income, slated for individual use according to the quantity, quality and social importance of the work done.

In the spirit of socialist ethics and equality, the realization of individual interests is conditioned by the each person's participation in the growth of the volume and efficiency of social labors and in the realization of the premises necessary to carry out the purpose of socialist production. The payment of salaries according to the work done thus provides to the highest degree the material incentives for the workers, blending together personal economic interests and the fundamental ones of society.

Our party's economic policy consistently pursues the closest correlation of incomes with each worker's contribution to economic-social activities and with the opportunities offered by the growth of the national income. In such a view, throughout the years of building a socialist society, our party has constantly pursued a policy so that, to the degree of the continual increase in national income, an ever more significant part of the general consumption fund could be allocated to the individual consumption fund. Significant in this regard is the growth of the average net salary of the workers (lei per month) from 337 in 1950 to 1,028 in 1965 and 2,256 lei in 1980, or 6.7 times greater in 1980 than in 1950.

Working in the spirit of social equality and rights, our party has ensured a more accentuated and rapid growth of the smaller incomes. For the entire 1950-1980 period, the minimum wage has increased 8.8 times over, more than the rate of growth of the average net salary or, in other words, faster than the larger incomes.

From the analysis of the absolute increase for the two 15-year periods, we see that in the last decade and a half the size of the increase was 812 lei, or approximately twice as great as the first three five year plans. Such a trend demonstrates our party's consistent concern, especially after 1965, in order to achieve an equitable relationship between large and small incomes. If in 1950 this relationship was approximately 23 to 1, and in 1965 10 to 1, currently it is 5.5 to 1.

Without achieving a leveling of incomes, the relationship currently achieved ensures both a personal, efficient material incentive for all workers in relationship to the quantity, quality and social importance of the work done, and respect for the principles of socialist ethics and equality in the distribution of the individual consumption fund. At the Second Congress of the People's Councils, comrade Nicolae Ceausescu once again stressed the necessity of much more substantial increases in the smaller incomes, also increasing proportionately and appropriately the larger incomes, within the limits of this relationship. "Certainly," comrade Nicolae Ceausescu stressed, "we understand that there must be a difference in the salaries according to the type of work and its quality. This difference

exists and we must maintain it, but it must be in the spirit of communist principles and ethics and in relation to the work done, and it must not exceed certain limits, since it would then no longer be within the realm of socialist and communist principles, but would involve principles that belong to another society, one which we forever eliminated in Romania."

In evaluating the justness of our party's policy of increasing the standard of living, we must keep in mind the relationship that is created between the dynamics of workers' incomes and the evolution of prices.

For the entire 1950-1980 period, the stability of the national economy ensured a growth of salaries under conditions of a strict control of prices, which, in general, did not exceed one percent per year during this period. This development truly shows an increase in the real salary of the workers which equals an increase in buying power of 4.2 times in 1980 compared to 1950.

There several examples which illustrate that this growth in income is a real increase, and that buying power has correspondingly increased, as expressed in products of general interest.

With the wages of 1950, as the secretary general of the party has noted, one could buy 153 loaves of white bread each weighing 500 grams, while with today's salary one could buy 1,025 loaves of bread. One could buy, for example, 42 kg of pork, while today one could buy 90 kg; in 1950, 19 kg of chicken, and today 94 kg, and so forth.

Paralleling the development of the national economy at a sustained rate and the achievement of progress in the growth and modernization of agricultural production, the nominal net incomes of the peasantry has continually increased. Currently, this increase is 7.7 times greater compared to 1950, with the greatest increase, 795 lei, being recorded during the 1966-1980 period, compared to only 328 lei during the first 15 years of socialist construction. This increase of over two times in the growth of the nominal net incomes of the peasantry working on agricultural production cooperatives and private plots, per active worker, in the last decade and a half compared to the 1951-1965 period, constitutes another argument that this stage is the most fertile one in the history of the socialist development of Romania and with regards to raising the standard of living of the workers in the villages.

At the same time, it is necessary for us to stress that this increase in the nominal net incomes of the peasantry resulted in the improvement of the relationship, in the spirit of socialist equality and rights, between the incomes of the workers in agriculture and the average net incomes of workers. While in 1950 this relationship was over 2 to 1, today it is approximately 1.7 to 1.

Understanding the size of the increase in the material and spiritual standard of living of the people also requires the analysis of the incomes made by the people from the social consumption funds. The 30 years of socialist construction are accompanied by a 17 times over increase in these incomes per inhabitant, which demonstrates the major concern of our party and state to satisfy the social needs of the workers at a higher level, in parallel with the growth of national wealth and income.

While increasing the workers' incomes, our party and state has been concerned at the same time for the development and diversification of the production of consumer goods and services for the people, in this way ensuring a permanent balance between the value expression and the physical expression of the conditions for increasing the standard of living. The result of such a scientific, realistic policy is shown in the growth of the sales of retail goods through socialist trade that is 16 times greater today compared to 1950.

On such a basis, it was possible to increase the average annual consumption per inhabitant of meat and meat prodducts, milk and milk products, eggs, sugar and sugar products, vegetables and vegetable products, fruits and fruit products, textiles, footwear and others. Here it is worth noting that the 1966-1980 period is characterized by the most substantial increases. The increase in consumption per inhabitant is over three times greater for meat and meat products, over eight times greater for vegetables and vegetable products and so forth.

In order to fill out the picture that characterizes the achievements made by our country in raising the standard of living of the people it is also necessary to analyze the evolution of the charges for services for the people, the housing units built from state funds and the pensions for social security, as well as many other accomplishments in the social-cultural fields in all the areas and localities of the country.

If we were only to pause upon the number of apartments built from state funds during the 1950-1980 period, the number is impressive, approximately two million. Similarly, the harmonious economic-social development of the country resulted in the growth of the number of cities from 148 in 1950 to 365 today, with the urban population today representing over 50 percent of the total number of inhabitants in the country.

On the basis of the great achievements made by our people in its economic-social development, the current five year plan is chalking up the most significant accomplishments. For the entire five year plan, the strongest growth in real salaries is being recorded in the history of the planned development of Romania, with this being approximately 30 percent compared

to the 18-20 percent foreseen in the Directives of the 11th Congress and the real incomes of the peasantry reaching 30 percent compared to the 20-25 percent forecast. At the same time, the current five year plan is also recording an increase in the people's incomes made from the social consumption funds of over 40 percent.

Under the conditions of the general price index of approximately eight percent, during the current five year plan an increase in the people's buying power is taking place, as reflected in the growth of the volume of good sales by 52 percent and in the rise in the average annual consumption per inhabitant of products of general interest.

Carrying out the provisions of the 1981-1985 five year economic-social development plan will permit the continuing growth of the material and spiritual welfare of all the people. According to the Program-Directive for Increasing the Standard of Living, approved by the 12th Party Congress, the total real incomes of the people is to increase in 1985 by 23-25 percent compared to 1980, with average real salaries increasing by 16-18 percent under conditions of maintaining a 5.5 to 1 relationship between the minimum salary and the maximum salary. Also in this period there will be a more substantial increase in the smaller salaries, with the minimum salary increasing from 1,425 lei per month in 1980 to 1,985 lei in 1985. Concomitantly, the achievement of a better balanced correlation will be pursued between the incomes of the workers in the cities and in the villages, so that the real incomes of the peasantry will increase by 20-25 percent.

As a result of increasing social-cultural expenditures financed from the state budget, as well as from the incomes of the economic units, for the development of education, health care, social assistance, culture and sports, in 1985 the level will reach 14,200 lei per family compared to 12,000 in 1980 and 8,780 lei in 1975.

Ever greater attention is given to the problems referring to the multilateral instruction - professional, political and cultural - of the younger generation and the training of cadre. In this regard, there is special significance in the Law on Education and Training and the decisions of the first Congress on Education and Training, organized at the initiative of comrade Nicolae Ceausescu, designed to provide a modern, revolutionary education closely tied to life and the needs of social-economic development. Currently, in education at all grades there are over six million children and young people. Every fourth citizen of the country is involved in an organized form of education.

Similarly, in the field of health care there is stress on the organization of prophylactic actions to identify and prevent those causes that negatively influence public health.

Against a background of maintaining strictly controlled limits on the dynamics of the prices for consumer goods and charges for services, the buying power of the people will increase, as reflected in the growth of the volume of goods sales by 30-35 percent in 1985 compared to 1980, while the volume of services will increase by 54 percent. These changes will result in the growth of the average consumption per inhabitant for products of general interest.

Parallel with the accomplishment of these provisions, the raising of the standard of living and the improvement of the quality of life of our people will also be achieved by the building of 1,100,000 apartments from the state funds, as well as by implementing the second stage of the program to reduce the length of the work week, so that by the end of the 1981-1985 five year plan the work week will be 44 hours.

"All this," comrade Nicolae Ceausescu pointed out, "speaks for itself and demonstrates strongly the fact that everything we achieve in our country is destined for the general development of the country, as well as raising the standard of living of the people — the essence of socialist society and the essence of the policy of our communist party, which gives first priority to man and his needs, the full expression of the human personality and the realization of a society in which man fully enjoys the advances of material and spiritual civilization and is an active participant in the making of his own destiny."

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WORKER SELF-MANAGEMENT IN ACTION IN MEDIAS

Bucharest ERA SOCIALISTA in Romanian No 19, 5 Oct 80 pp 4-6, 52

[Article by Teodor Moldovan, first secretary of the Medias Municipal Party Committee]

[Text] Qualitatively new and complex tasks always require raising political and organizational work to a higher level so that it contributes effectively and decisively to carrying out the economic and social options. Currently, the priority goal is the firm application of the new economic-financial mechanism and the principles of worker self-management , with its being one of the basic conditions for moving to a new quality in all areas of economic-social life, which involve the party organs and organizations and all workers profoundly and in every regard.

This requires firm orientation toward the concrete goals which concentrate the efforts of the workers' collectives in the direction of increasing net production and physical production, raising labor productivity and profits and obtaining high economic efficiency. Whether it is a question of the leadership and planning of production, of the technical and quality level of the products, of raising labor productivity or of reducing material costs per unit of product, the application of the new mechanism is synonymous with the demonstration of a powerful revolutionary spirit characterized by the effort at renewal and maximum utilization of technical and scientific creativity and by the decisive struggle against what is old and everything that is extra weight or a hindrance in the rising path of our society. The party demands that all party organs and organizations and all those who work assure more efficiency in all their activity, strengthening of order and discipline, demandingness and responsibility so that the quality factors of production are asserted in all areas of social-economic life.

Basically, to militate to fulfill this vital desirable means actually to achieve raising party work to a high level and toward this goal it is necessary to take action to raise the political and vocational competence of the communists, to improve the style and methods of work of the party organs and organizations and to strengthen their revolutionary spirit and broaden ties with the workers.

To lead at the level required by the new economic-financial mechanism means for each party organization a broad outlook open to innovation, vigorous actions to break away from outdated practices, perseverence in promoting a style of work intended to assure full utilization of the advantages of the socialist system of organizing and conducting social-economic life, intense mobilization of material and human resources and utilizing them with higher efficiency.

The Medias Municipal Party Committee proceeds from the consideration that the force of the party organizations is measured by their ability to stimulate the workers' initiative and concentrate their energies on the major problems of the development of production, material goods and to militate steadfastly to utilize the workers' collective experience and wisdom more and more broadly.

On the basis of the guidelines included in Comrade Nicolae Ceausescu's speech at the RCP Central Committee working meeting this May and the Congress of People's Councils, the municipal party committee has reconsidered its leadership activity and guidance and control activity, with the emphasis being placed on improving the style of work and development of a sense of the party organizations' responsibility in order, thus, to bring the more and more active participation of the workers, regardless of nationality, in the leadership of the enterprises and in solving the problems raised by the increase in efficiency and profitability of the production of material goods. Continuing with greater intensity are the political-educational actions intended to contribute to an understanding of the principles of the economic-financial mechanism and to formulation of a new concept of economic development from the workers so that their efforts materialize in diversified production which is of high quality and high profitability.

This actually also means to give expression to worker self-management and to continually better fructify the workers' creative and initiative ability.

The Medias municipal party organization has available everything necessary so that the plan forecasts in all areas of activity are fulfilled under good conditions, thus creating a lasting base for moving to the new five-year plan. This, however, means that in each enterprise the results should be located at the maximum level of technical and organizational possibilities. This is a desirable on which we are concentrating our attention since, year after year, there are enterprises which do not fulfill the plan for one or another indicator in the municipality as a whole, despite the satisfactory results. The fact that mass political actions are not effective, interesting and convincing based on a dynamic style of work, a revolutionary style, in all enterprises to a large extent explains why material production expenses at the level of the municipality's industry have not been reduced in accordance with existing possibilities while some investment projects have lagged behind.

A large portion of the activity of the party organizations and workers' councils have a more accentuated growth in physical production and net production per 1,000 lei fixed capital as an area to fit into. This is especially so

since there still are large reserves existent in the efficient utilization of the fixed capital. Action is being taken with perseverence and high responsibility for the operation of the machinery, equipment and installations with high output with a view to raising their indicator of utilization to more than 86 percent. Experience has proven that in each enterprise the rational use of the existing technical means and optimum loading of them, without a supplemental investment effort, assures large increases in production. Along this line, special attention is being given to maintaining fixed resources and to doing the planned repair jobs on time and with good quality, preparing the necessary parts and subassemblies on time.

The municipal committee is closely aiding the party organizations in improving their style and methods of work, with this being a basic condition for raising all party activity to the level of current demands and for eliminating formalism from leadership activity. The effectiveness of party work cannot be measured according to the number of meetings but only according to the results obtained in fulfillment of the plan.

It is in the realm of truth that the application of the new economic mechanism means strengthening the responsibility of the enterprises, workers' collectives and collective leadership organs have exemplary fulfillment of the plan tasks and in mobilizing all reserves for a more emphatic growth in economic efficiency. Precisely for that reason the municipal party committee is guiding the party organizations toward decisive actions against men alities which still continue and which cultivate the harmful practice of awaiting a solution to the problems by the central or the ministry.

On the basis of the laws in force, we are aiding the party organizations and the workers' councils toward a realistic substantiation of the production plan at the enterprise level. We proceed from the consideration that working out an efficient plan can be done only on the basis of the real technical and human potential of each enterprise as well as on the basis of the economic contracts concluded on time, which permits correlation of the resources and possibilities with the requirements of production and of consumption. As a result, with the effective aid of the higher organs, the enterprises can solve their problems in covering the plan at the level of existing capacities with firm contracts, providing technical-material supply and the technological preparation of the products.

In practice, however, matters do not take place quite this way. The higher organs--the central, the ministry--continue to have a narrow understanding of the enterprises' extra independence in establishing economic contracts, in the sale of products and, especially, in providing economic cooperation based on criteria of high efficiency. This creates real difficulties in the contracting and sale of production, with undesirable implications for the results. In the first quarter, for example, we encountered a number of difficulties as a result of the failure to have complete assurance of the material base at some enterprises, which made us record some lags.

Having the higher organ change some indicators at the end of the quarter or even at the end of the year has an unfavorable effect on the enterprises' activity, which upsets the budgets of incomes and expenses. Besides the direct consequences for the enterprises' financial activity, such practices also are reflected in the indicators for the municipality as a whole, directly affecting the degree of plan fulfillment territorially.

Enterprises in the municipality of Medias as well as all over the country have accumulated rich experience in working out the plan, proceeding from a well-based study of the domestic and foreign market; timely contracting of the goods production; maximum utilization of production potential; application of the results of scientific research with the goal of the modernization of production and promoting of technical progress; superior utilization of raw materials and materials; general rise in economic efficiency and profitability; creation of the necessary financial resources for covering the production and circulating costs; establishing their own assets; making withdrawals for society and repaying credits with a view to assuring the balance between incomes and expenses.

A critical analysis of these stages in drawing up the enterprise's plan brings out a number of defects, such as time delays, unutilized reserves, restraints in promoting what is new, not covering financial and material resources and others, the elimination of which is sharply required by worker self-leadership and enterprise self-management.

As we know, in working out their own plan, the enterprises cooperate with the supplier and beneficiary units and with the industrial centrals and the ministries. Experience shows that there still are many "critical points" existing in this collaboration which must be overcome for the purpose of increasing general efficiency.

Here are several examples: The Automechanica Enterprise, month after month, is receiving subassemblies with great delay from the enterprises with which it cooperates in building the vehicles, being obligated to force its production activity in the last 10 days of the month; the mechanical plant is not fulfilling its physical production and economic contracts since it is not provided with the raw material for the assembly organs, while the annual plan is not correlated with placing the new production capacity into operation and with the number of workers for development; the Emailul Rosu Enterprise cannot honor its export contracts fully due to the lack of thin slate from the Galati Iron and Steel Combine and this is needed to build the enamelled dishes and others.

Undoubtedly, these problems cannot be solved at the enterprise level without concrete and efficient aid given by the industrial centrals or the ministries. The directors of the enterprises mentioned above have gone more than once to the industrial centrals to which they belong, where meetings were held and the difficulties encountered were analyzed and they even requested "problem notes" in writing but, unfortunately, a concrete solution and practical solutions have not been seen yet.

As a result, it is urgently necessary to firmly apply the principles of the new economic-financial mechanism, assuring conditions--on the basis of fruitful cooperation between the enterprises, industrial centrals and ministries--for complete contracting of the production established by the five-year plan, for the entire 5-year period, in conformity with the destinations from the balances by products. At the same time, together with adopting the annual plan, it is necessary also to make current the plan forecasts for the next year so that the distributions can be issued on time and necessary specifications made to the contracts concluded. Also, without exception, we must apply the provision of prohibiting the introduction of products into manufacture which do not have their sale made certain through contracts of firm orders. Of no less importance are strengthening of plan and contractual discipline, complete respect for the obligations assumed by the economic units, reduction in the time it takes for supply-manufacture-sale and speeding up the rotation of circulating resources with a view to utilizing the material and monetary assets with maximum efficiency.

Stressing the need to implant fruitful nand multilateral collaboration between the enterprises, industrial centrals and ministries, at the same time we bear in mind that the new economic-financial mechanism means strengthening the spirit of responsibility in managing material and monetary resources. In the activity of some enterprises there still are shortcomings in achieving economic self-management and in creating conditions for the good operation of the economic-financial mechanism. Thus, for example, in some enterprises the start and preparation of manufacture is not made appropriately, material-technical conditions are not created in time through correct correlation of the stocks of raw materials and materials with the need of production, the need for spare parts and tools, devices and controls is not provided, a correct follow-up on production and costs is not assured, while the budgets of incomes and expenses are not layed out down to the section level, and this limits the functions and qualities of economic self-management. In some cases, the programs of measures and schedules for recovery are not sought by the collective leadership organs and from here we also have implications on fulfillment of the physical production tasks and delivery obligations, fitting into the production costs and costs of net production, profits and assets of the enterprise.

Striving to eliminate these shortcomings, we must place a greater emphasis on improving the style and methods of work so that in each enterprise the party organization's activity is joined more and more closely with the work of the entire collective. There still are many places where the activity of implementing the plan is not well organized, control over implementation of decisions is deficient, while the actual, efficient and timely aid in solving problems is sporadic. But a truly scientific leadership is inconceivable without being permanently and vitally anchored to the direct realities of production, without organic integration of each communist in social-economic life and his direct participation in the collective in which he works in the concrete solution to the problems connected with the rising course of production activity, without a decisive assertion of the revolutionary spirit in work and establishing absolute order and discipline in all sectors of activity.

Firm application of the new economic-financial mechanism and the principles of worker self-management, among other things, involves the creation of a broad view of their activity by the workers, in the double quality they have as owners and producers, the development of a progressive attitude toward work and public wealth and social responsibility toward the fruits of their labor. In the party's concept, the workers' participation is not viewed as a simple presence invarious democratic organs but rather as a social action with profound implications for making the popular masses aware so that they exercise their leadership duties in a spirit of high political maturity and public responsibility, so they can decide,with a knowledge of the case , about the problems raised by the stage of maturity of our society and affirmation of socialist civilization.

At the broadened plenum of the National Council of Workers, Comrade Nicolae Ceausescu, the party's secretary general, pointed out that "each social-economic unit must organize its activity on the principles of self-management and worker self-leadership and must have its own budget of incomes and expenses." The enterprises where the party organizations and administrative leaders are conc rned permanently with use of the budget of incomes and expenses as a basic tool for economic leadership and as a means of analysis and control for assuring financial balance have succeeded in achieving economic self-mana gement in a specific way in their day to day activity. In most of the municipality's economic units, these tools have begun to fulfill the role established with good results. Through the power of synthesis and leadership over the economic-financial indicators and through the simplicity of this "model of rising balance," the budgets of incomes and expenses to an in reasingly greater extent have given the workers'collectives the opportunity to know the main problems raised in connection with the enterprise's financial situation, proving that it also has an important mobilizing and stimulating role in improving economic-financial activity.

However, there also are cases where the budgets of incomes and expenses have not yet gained superior significance with the financial plans used in the period prior to application of the new mechanism. For that reason, the workers' councils are being helped to create conditions so that the budgets of incomes and expenses reflect the enterprise's entire economic potential and they are perfectly correlated with all sections of the plans. Also kept in mind is the fact that the budgets of incomes and expenses should be accompanied by a distribution of the plan tasks which support the main financial indicators by sections, shops and other places of work and by drawing up of the budgets of incomes and expenses by subunits. In the end, action is being taken to improve the informational and record-keeping system with specific techniques.

Some of the enterprises' leadership cadres view the budgets of incomes and expenses more as a means of financial technique which enters exclusively into the duties and competencies of the financial-accounting departments. Undoubtedly these departments in the enterprises have a particularly important role in working out and seeking execution of the budgets of incomes and expenses, however these tools, in the language of the financial indicators, synthesize the entire activity of the workers' collective and express a certain level of leadership and technical-economic organization. That is why we must apply

these measures in each enterprise so that each party organization and each leadership cadre knows thoroughly how to work with the budgets of incomes and expenses.

Another very important economic-financial lever in the full affirmation of self-management is the enterprises' own assets. As a result of the good activity carried out by the party organs and organizations and by the workers' councils, the majority of our enterprises--Vitrometan, Windows, Tirnava, Methane Gas Extraction, Methane Gas Main Operation, Mechanical Plant and other--by forming the necessary assets have provided for self-financing of their own development and implementation of important social actions, contributing to the material incentives for the workers' collectives. There also are enterprises which have not been able to fully establish their own development capital as a result of failing to fulfill the profits planned and amortization forecast and, in these cases, in accordance with the law, they have received supplementary credits for which they will pay interest. That is why we feel it necessary for each unit leader to follow with the greatest attention the complete achievement of the economic development capital and circulating resources capital, social action fund and fund for worker participation in profits.

For each party organization in our enterprises, it is a primary demand that there be firm application of the order of party secretary general, Comrade Nicolae Ceausescu, according to which "we must achieve a powerful growth in economic profitability in all areas of activity in order to have available a greater fund for participation in profits."

The new economic-financial mechanism has proven its viability confronted with the practical activity and the multitude of economic phenomena. The efficiency of using it is measurable in all areas in which it is being applied. For that reason we are militating perseveringly so that the party organs and organizations, the workers' councils and all leadership cadres in the enterprises know and apply the principles of the economic-financial mechanism at the level of demands and requirements of the current stage.

8071
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FACTORS TO BE CONSIDERED IN PREPARING 1981 BUDGET

Bucharest REVISTA ECONOMICA in Romanian No 39, 26 Sep 80 pp 9-10

[Article by Gheorghe Boulescu, minister of finances]

[Text] The economic units currently are working out the draft budgets of incomes and expenses for 1981. Within the measures for applying the economic-financial mechanism they have a role as the means for stimulating the leadership organs of each economic unit to strengthen its economic-financial self-management, lead the activity and assure a financial balance. The budgets of incomes and expenses should reflect the more emphasized rise in economic efficiency, complete use of material and monetary resources with higher output, reduction in total production costs, particularly material costs, rise in the value of net production and establishment of a strict savings system in all departments.

The basic condition for working out the draft budgets of incomes and expenses in each economic unit under good conditions is working out and substantiating its draft economic plan on the basis of the indicators established by the immediately higher organ, its own calculations and measures established to assure conditions for fulfilling each of the indicators in the plan. Providing the sale of production, domestic and foreign, with contracts and the necessary provisioning also is a priority element in preparing next year's plan. Each unit's economic plan supplies some basic elements in working out the budgets of incomes and expenses as, for example, the volume of production , volume of investments, level of total and material production costs, salary fund and others, depending on the specific nature of the unit. The budget of incomes and expenses assures their reflection in the financial expression and it establishes the financial resources for carrying out activity, planned financial results and method for distributing them. Through its goals to establish financial results and reflect the strengthening and application of the requirements of economic-financial self-management and financial balance, the budget of incomes and expenses in each unit should have an active role in carrying out projects to work out the economic plan by bringing out cases of inefficiency, reduced profitability, incomplete use of production capacities and material and monetary resources. Under these conditions economic and financial planning are joined, complete each other and are integrated in a single process : subordinant to the same goal: development and efficiency.

The fullest possible use of the material base which each unit has available and of the production capital placed at its disposal by society or obtained from its own capital is one of the basic goals which must be sought in working out the budget of incomes and expenses. Increasing efficiency along this line in a more emphatic way means establishing and analyzing some indicators which express degree of efficiency compared with the previous year; these indicators are volume of production, activities or of receipts per 1,000 lei fixed capital or production capital, depending on the branch of which the unit is part and volume of profits per 1,00 lei fixed capital or production capital.

A careful analysis of the level of these indicators by the leadership of each unit should have as a result the decisions for finding solutions to improve the ratios expressed by the particular volumes, both in the plan and in execution of it. The decisions and solutions have a direct connection with the volume of production, of activity or of receipts, with the volume of fixed capital and production capital, including the investments requested in the plan year and with the unit's financial results. The decisions and solutions mean concrete ways which lead to an increase in efficiency, which should be reflected in the budgets and should have conditions assured for implementing them.

Determining the amount of expenses for obtaining production, of services provided or receipts from the activity carried out is an important element in working out the budgets of incomes and expenses. The level of production or circulation expenses per 1,000 lei from goods production or per 1,000 lei receipts from the activity carried in the plan year compared with the base year brings out to what extent the unit's financial results and its profitability mark an improvement. Rise in labor productivity in the unit, better use of existing material base, assuring that the materials, fuel and energy fit into the consumption standards lead directly to reducing costs and raising profitability. The solutions and measures in this direction should have the largest possible area and should include all the unit's working departments. An analysis of costs for the unit as a whole and for each product, service or activity, with a view to avoiding any useless or uneconomical expenses should lead to elimination of any cases where the expenses are not covered from incomes or lower profitability.

The receipts which are included in the budget of incomes and expenses for each unit, depending on the activity carried out, as well as the expenses made to achieve the particular receipts are the main elements leading to edtablishment of planned profit. In the context of applying the new economic-financial mechanism, profit gains increased functions. Profit reflects main requirement for implementing economic-financial self-management. Resources are provided from profits to establish the enterprise's own capital for social-economic development, resources for paying back the capital advanced by society, resources for providing material incentives to the workers to achieve profits by establishing capital for participation in profits and social actions as well as resources for a continuing rising contribution of each unit to society's general development by payments into the state budget.

Respect for the provisions of the Law on the Formation, Planning, Distribution and Payment of Profits as well as those in the Law on Finances on standards for distribution of profits through the plan is a requirement intended to assure use of the budget of incomes and expenses in implementing self-management and self-financing in each unit.

As a means of financial balance the budget of incomes and expenses reflects this balance in the plan and in operation for the unit as a whole as well as for each aspect of the unit's economic-financial activity. Thus, the following should be kept in mind in working out the budget of incomes and expenses: balanced planning, financially, of the incomes, expenses and financial results from the activity carried out by the unit in accordance with its profile; a balance between resources and expenses for investments; balance between resources and destinations for the circulating resources; balance between resources and the expenses forecast to be borne within the various assets provided by law to be established and provided at the unit's disposal. Establishing the balance between resources and expenses through the budget of incomes and expenses by various aspects of the units' economic-financial activity should not be viewed only from the viewpoint of accounting or mathematical equality but it should reflect the financial analysis and decision of the leadership organs in the particular unit on determining the best size for the volume of investment expenses, volume of circulating resources and expenses which are to be borne from each fund separately as well as with regard to maximum use of its own resources, existing reserves and with regard to raising the degree of self-financing for the unit as a whole and for each action separately. Financial balance requires the introduction of an emphasized spirit of good management of material and financial resources and for carrying out the planned actions with the least possible resources and under conditions of economizing on expenses.

In planning expenses for investments, the budget of incomes and expenses for an enterprise bears in mind the provisions of the investment plan, the degree and prospect for assuring the particular projects with technical-economic documents, the provisions of the execution contracts for projects and for acquiring equipment, length of time for doing the work, schedules for placing them into operation. An important element is distribution of investment expenses by the categories provided by law, depending on the financing resources. The analysis should seek the need and efficiency of the expense, avoiding tie-ups of assets by shortening the lengths of time for carrying out the projects and assuring the equipment in accordance with the assembly schedules. The analysis should lead to decisions with an economic-financial content for improving activity in this area. Having the most exact possible determination of its own resources for financing of investments, particularly those from liquidation and profits, distribution of them by quarters, depending on the periods for carrying them out, needs for making the expenses also are requirements in using the lever of financial planning for assuring that the process for financing the unit's investments take place under good conditions.

Introduction of the budget of incomes and expenses as a means for leading the economic-financial activity in the economic units has created conditions

so that in the area of circulating resources new elements are provided for improving the planning process and seeking and utilizing the resources concerned for this goal and for speeding up the rotation of capital. Depending on the production tasks, volume of activity, standards in force to determine circulating resources as a whole and for each element separately, rotation speed of the circulating resources in the base year achieved under conditions of normal flow of activity, the enterprises determine their necessary total of circulating resources by year and by quarter. At that time they seek for them to also fit into the levels established by the higher organ as well as continued acceleration of the speed of circulating resources in the plan year compared with the base year. Establishing measures which lead to improvement in supply, elimination of surplus stocks and stocks which do not move, avoiding tie-ups which exceed the norm in circulating resources, shortening the man ufacturing cycles for products, assuring steady sale of production on the basis of contracts are determining elements for setting the optimum size for the necessary total of ciculating resources, under conditions where the rotation speed is accelerated. Establishing the level of its own capital and resources drawn as well as of distributions from profits to finance the circulating resources requires a careful analysis of the correct size for them, distribution by quarters as well as with regard to assuring a rise in the degree of self-financing in this area. Determining the size of the resources drawn, that is, the stable debts, for financing circulating resources requires an examination on the basis of figures from accounting of the debt elements, which by their nature of permanence and stable level contribute to temporarily covering the circulating resources of the unit. In calculating them in the planning phase as well as the execution phase, following and eliminating the ones which are the result of slow-downs of discounts in the economy, financial indiscipline or unsatisfactory economic-financial activity are demanded.

In providing the enterprises' financial resources by various aspects of their financial-economic activity, the new economic-financial mechanism gives a greater role to bank credit. This becomes a resource for completing both the investments as well as circulating resources, alongside the units' own assets. The Law on Finances establishes the norms for the intervention of bank credit in the process of the economic unit's financing. In working out the budget of incomes and expenses, through the enterprise's close cooperation with the banking organs, the level of bank credit which is to be given to finance the investments or circulating resources is determined by year and by quarter. Clearly, the level of it, along with the conditions provided by law for giving it, depends on the sizes established in the budget for the level of investment expenses, volume of circulating resources as well as of their own resources.

The resources acquired through bank credit impose future obligations to also pay back the expenses for payment of bank interest. Including them in the budgets of incomes and expenses should be preceded by an analysis of the possibilities for raising the degree of self-financing and for assuring the use of these resources under conditions of maximum efficiency. Also, attention should be given in the budgets to the most exact possible forecast for

the resources needed to pay back the credits by the due date as well as the expenses for payment of interest.

The activity of working out the budgets of incomes and expenses is of a complex nature and should include a broad sphere of economic-financial problems of the particular unit, which should be provided the best solution under conditions of continual rise in economic efficiency.

The leadership organs in each unit, the financial-accounting cadres, and the banking organs have the task of making the compilation of the 1981 budgets of incomes and expenses take place under conditions where the measures for the new economic-financial mechanism are applied firmly.

8071
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ECONOMIC COOPERATION EFFORTS WITH AFRICAN COUNTRIES

Bucharest REVISTA ECONOMICA in Romanian No 39, 26 Sep 80 pp 11-12

[Article by Marcel Moldoveanu of IEM (expansion unknown)]

[Text] Socialist Romania, a country with a rising economy and an industry and agriculture in the full process of development and modernization, is promoting a policy of broad international economic, technical and scientific collaboration. In its foreign policy, Romania--itself a developing country--is giving a particularly important place to constantly amplifying and diversifying the relations of collaboration with the African countries, aiding them in their struggle to abolish any imperialist, colonialist and neocolonialist policy and in their efforts directed toward consolidating independence and national sovereignty and to eliminate underdevelopment and assure a harmonious social-economic development.

The visits made in recent years by Romania's President Comrade Nicolae Ceausescu with Comrade Elena Ceausescu to a large number of African states, as well as the visits made to Romania by heads of state from many countries on the African continent, are events with broad and profound significance for bilateral relations, Romanian-African relations as well as in the area of international life.

Thus, recent visits officially made to Romania at President Nicolae Ceausescu's invitations by the president of the United Republic of Cameroon, Ahmadou Ahidjo, by president of the Republic of Zambia, Kenneth David Kaunda, by the president of Mozambique, Samora Moises Machel as well as the visit by the president of the Republic of Zimbabwe, Canaan Sodindo Banana, which took place a few days ago, are included in Romania's general policy of the active development of collaboration with the African states and all states.

The agreements for economic and technical cooperation, the commercial agreements, the protocols and other understandings in various areas concluded with a large number of African states reflect strikingly the particularly productive results of the high-level talks.

Multilateral Cooperation To Speed Up Industrial Development

The actions of cooperation between Romania and these countries have the most diverse forms--from economic projects built by Romania or with its aid to the joint production and commercialization companies. Our country's economic relations with the African states are taking place on the basis of the more than 50 commercial and cooperation agreements which are annual or long-term and which aim at areas of major importance for the economy: the mining, petroleum, energy, chemistry, forestry industries, agriculture and transportation.

Romanian specialists in the geology and extraction industry sector are carrying out productive and valuable activity in various countries in the area of prospecting, exploitation and utilization of mining resources (ferrous and nonferrous) and petroleum. Thus, in Algeria important projects of petroleum drilling and utilization of mining deposits are being carried out; in Morocco copper deposits have been put into use in the country's south, in Ouansimi and Talaati-Iminirfi. The agreements with Morocco provide for the continued extending of economic and technical collaboration in participation in the design, exploitation and processing of new ferrous and nonferrous ores as well as participation in the prospecting for petroleum resources; with a view to aiding the Zambian state in utilizing its mineral riches the Mokambo joint company was established and its activity will extend to actions of cooperation in the exploration and exploitation of coal, nickel, iron, phosphate, molybdenum, hydrocarbon and uranium deposits; in Kenya the Kmil joint company is doing prospecting to utilize zinc, copper, lead and silver ores; in Burundi the Somiburom joint company has the goal of participating in the utilization of large nickel deposits in this country; geological prospecting and exploitation are taking place in Mozambique to utilize some coal and iron ore deposits; the Bensaminco joint company is seeking to carry out exploration and exploitation projects for mineral resources of Tanzania. Actions of cooperation in this area, currently being carried out or to be carried out in the future, also involve other countries--Guineea, Zaire, People's Republic of the Congo, Liberia and Angola.

Romania is building large chemical and petrochemical combines in the African countries as well as machine construction plants, cement factories and wood processing combines, ready-made clothing factories and knitwear factories. Specialized Romanian enterprises are building dams, railroads, highways, ports and are building hydrotechnical systems.

Development of Romania's Relations of Cooperation with African Countries in Recent Years

Country	Area of Activity	Form of Cooperation
Algeria	Build petroleum drilling projects	Cooperation in production
Burundi	Mining exploration and exploitation; build industrial and agricultural projects	Joint companies: Somiburom, Agriburom

Congo	Cultivation of cotton and other plants	Joint company: Socoton
Egypt	Industrial, agricultural and bank cooperation	Cooperation in production; Egyptian-Romanian Bank
Gabon	Mining exploitation	Joint company:Somifer
Ghana	Organization of farms to grow crops	Cooperation in production
Guineea	Iron ore exploitation	Joint company: Mifergui Nimba
Kenya	Mining exploration and exploitation	Joint company: KMIL
Liberia	Production of natural rubber	Joint company: Liberian Rubber Processing Company
Libya	Port construction and building and modernization of roads;	
	Land improvement projects and production of select seeds	Joint company:Librom
	Raising and fattening animals	LARP Company
	Sea Transport	Joint company:Roliship
Morocco	Port construction	Cooperation in production
	Organization of sunflower crops	Cooperation in production
	Mining exploitation	Joint company:Geomin-BRPM
Nigeria	Wood processing and industrialization	Joint company:Seromwood Nirowi
Central African Republic	Mining, agricultural exploitation and wood processing	Joint companies:Scaromines, Somcarom, Carombois, Lorombois
Tanzania	Mining exploration and exploitation	Joint company:Besamingo
Zaire	Agrozootechnical exploitation and tractor commercialization	Joint companies: Zairom Autotractor-Kinshasa
Zambia	Mining exploitation	Joint company: Mokambo

The following stand out among the projects and jobs carried out in the actions of cooperation in the African countries: the El Mex soda products plant and the complex for exploitation and enrichment of phosphates in Hamrawein, Egypt; the K-Sob accumulation dam, a large hydrotechnical project for Algerian agriculture; the Nador, Morocco sea port (on the Mediterranean coast) supplied with modern installations needed to receive large-capacity ships; the Tripoli fishing port was built in Libya and large civil construction (homes and schools), the Beni Valid-Tarhuna highway. Joint companies have been established for land improvement projects and for raising cattle as well as the joint company for sea transport, Roliship; in the Sudan the headquarters for parliament in Khartoum has been built, a modern building (with the Romanian side providing the design, delivery of the building materials, installations, equipment and furniture) and a large cotton mill is being built.

At the same time we mention the construction of large economic projects in Guineea, where Romanian enterprises have participated in development of the

activity of a mass plastic plant in Konakry and have built a tractor assembly line; in Nigeria--the activity of the Nirowi and Seromwood joint companies for wood exploitation and industrialization; in the Central African Republic, the Lorombois and Carombois joint companies have the goal of wood exploitation, while the Somcarom joint company is based on the cotton crop and other plants; in Angola Romanian enterprises are providing technical assistance for placing into operation the Baionasi textile factory with the purpose of organizing specialized farms for the cotton crop and the sunflower; in Burundi the Agriborum joint company has the goal of setting up an agricultural farm and doing reclaiming jobs with Romanian equipment.

In the relations of cooperation, our country is giving special attention to collaboration in the area of scientific research, programs of training the cadres and increasing technical assistance, the participation of Romanian specialists in the superior utilization of the entire material and human potential which the African states have available. Workers and technicians from the African countries are specializing in various industrial enterprises in Romania, while a large number of students are learning in our country's higher education institutes. Also, thousands of Romanian specialists are working in various African countries where they enjoy good opinions.

A Look Back at More Than A Decade of Achievements Projects Broad Prospects For Cooperation

Romania will continue amplifying and diversifying its economic relations with the developing African countries, extending new, mutually advantageous forms of cooperation in production with these countries.

During the high-level talks, which took place during the mutual visits of Comrade Nicolae Ceausescu in the African countries and of the heads of state of many African states in Romania, it was felt that the intensification of economic cooperation, of commercial exchanges, of cooperation in the area of science and technology, education and culture comes to the aid of the national effort of each country for economic and social progress. During the new high-level Romanian-Zambian dialogue, need to spur on cooperation in the industrial area was brought out, to be carried out through the building of copper slate factories, textile factories, footwear and ceramic articles factories, refrigerator warehouses, a wood industrialization complex as well as the building of an agroindustrial complex within the action to organize and exploit a large land area. The talks which took place during the official visit to Romania of the president of the United Republic of Cameroon brought out the multiple possibilities existing for jointly building some large economic projects in Cameroon. Understandings were achieved for cooperation in the areas of industry, mechanization of agriculture, dam construction, urban electrification as well as in other areas of mutual interest, through creation of joint companies and other modern forms of cooperation in production.

The joint statement signed recently by the president of the Socialist Republic of Romania and the president of the People's Republic of Mozambique evaluates the progress achieved in economic cooperation and commercial exchanges, deciding to intensify efforts to raise the volume of trade and accelerate the construction of economic projects agreed upon through the understandings concluded between the two countries. It is felt that the development of economic relations, particularly cooperation in production, is a basic element in deepening Romanian-Mozambique relations.

The fruitful talks between Romania's president and the president of the Republic of Zimbabwe will open new prospects for developing bilateral economic relations, particularly in the areas of industry, agriculture, transportation and energy.

New prospects for a broad Romania-Ghana cooperation in the economic technical-scientific and cultural area were brought out during talks between Comrade Nicolae Ceausescu and the delegation of the People's National Party of Ghana.

The joint governmental commissions for economic and technical collaboration play an important role in the development of Romania's economic relations with the African countries.

The present and potential actions for cooperation will contribute to increasing and diversifying commercial exchanges with the African countries, facilitating the Romanian export of machinery, equipment and means of transport and providing for the import of raw materials to a greater extent but also processed products, welcoming the policy promoted by the African states of the development and diversification of independent industry. In this framework, the hydrocarbon and mining sector could be an area with new values in the actions of cooperation. The potential possibilities for amplifying cooperation in this sector are caused by many plans for exploitation of large deposits of crude gas, natural gases, ferrous and nonferrous ores (iron, copper, zinc, cobalt, uranium, phosphates and rare metals), plans launched in the plans and programs for development of the African states. At the same time, the plans and goals to be fulfilled in various African countries for development of the chemical, petrochemical, iron and steel, building materials and food and textile industries bring out the greater opportunities for the Romanian enterprises in involvement in actions of cooperation. Agriculture, transportation and telecommunications also are important sectors for the future of amplifying relations of Romanian-African cooperation.

The constructions of dams and drilling for water are taking on a new dimension for the continent as a whole both in utilization of the hydroenergy potential as well as for the development of agriculture--a priority sector of the economy in a great number of African states--in some hydrotechnical plans and plans to revitalize the animal-raising sector. The transportation sector also is a favorable ground for initiating and amplifying actions of cooperation. The size of the continent and differences in the development of various regions sharply require development of the transportation sector.

The request for jobs, both at the level of each country as well as the continent as a whole, will be stimulated by compilation of the Program of the "Decade of Transportation and Communication in Africa," compiled by the United Nations Economic Commission for Africa for the 1978-1988 period.

At the same time, we mention that a number of economic projects which are to be built in the African countries will enjoy foreign financial assistance, either from international organs or regional ones (the World Bank, the Arab Bank for Economic Development in Africa, the African Development Bank) or from certain states, which implicitly will involve the participation of foreign investors in doing jobs in various sectors and branches of the African countries' economy.

The participation of Romanian enterprises in achieving actions of cooperation under conditions of higher efficiency means a detailed knowledge of the aspects connected with the type and scope of the project, schedules and conditions for building it, investments, sources and means of financing, economic policy regulations, involving specialized independent organs or third partners in doing various jobs, providing and forming qualified cadres and so forth.

The evolution of Romania's economy at a fast rate, the policy of broad international cooperation promoted by our country, the orientations and priorities of the development plans launched by the African countries and the policy promoted by these countries for superior utilization of the economic potential in cooperation with foreign partners is creating the proper framework for intensifying Romania's ctions of cooperation with the African countries.

In this way the position of our country, which is militating consistently in the international organs, in the "Group of 77" meetings and UNCTAD sessions to implement programs of measures to eliminate underdevelopment is found in the concrete plan of economic relations through active cooperation with the African states on many levels.

Comrade Nicolae Ceausescu, president of the Socialist Republic of Romania, said in his message addressed to the XVII high-level conference of the Organization of African Unity: "The frequent meetings I have had with the leaders of the states and national liberation movements in Africa, both in Romania as well as in Africa, and the meetings and understandings adopted at these times have been a lively demonstration of the determination of the Romanian people and the African peoples to strengthen even more their friendship and solidarity and to develop cooperation in the economic, technical and scientific-cultural areas and their cooperation on the international level."

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MEASURES TO IMPROVE LAND USE, TERRITORIAL DEVELOPMENT

Bucharest REVISTA ECONOMICA in Romanian 19, 26 Sep 80

[Article by Ion Bold]

[No 38, 19 Sep 80 pp 8-9]

[Text] Rational utilization of land resources is a priority component of the broad process of social-economic development, being considered a major factor closely connected with the rise in the national wealth and the people's well-being. Mainly it has been given this role by those irreplaceable functions of land resources: a general condition needed for the life and development of all production processes; supplier of food and raw materials for light industry and construction. At the same time let us recall that these resources are limited in extent and nonrecoverable (except under certain conditions and in all cases with considerable investment in the case of damage).

The problems of the land stock take on particular significance under the conditions of the intensive development and industrialization of agricultural production, toward which end the forecast is for increasing arable area to 10 million hectares, carrying out broad water management and land improvement projects, utilizing and continuing to improve damaged land and increasing their production capacity, which will assure that a production of 27-28 million tons of grain is obtained at the 1985 level and a rise in the volume of all the other vegetable products, with direct effects on the development of zootechnics, also.

The direct result of this is the urgent requirement to rationally manage land resources, assuring the protection, conservation, improvement, arrangement and efficient use of them in a unified concept intended to assure total utilization of the territory, sensible placement of production forces, by balancing requirements with resources.

Knowledge of Land Resources--A First Condition for Rational Management of Them

Knowledge of the production potential of all land and placement of it is in the forefront of the complex measures for rational management of land resources, an action which received a basic help through the compilation of

"A Basic Study for the Protection and Improvement of the Production Capacity of the Land Stock" for all the country's communes and counties, drawn up at the end of 1979. Substantiation for all the forecasts and programs for development of the various branches and integrated activity for rational and efficient use of the land resources operates on the basis of it, having at its base the following principles: increase in arable area due to inferior categories of use, agricultural and nonagricultural; agricultural area cannot be reduced; damaged land is established around the peripheries of grape-growing and vine-growing areas, developed and modernized in the vineyards and reservoirs (from the areas resulting from clearing away scattered vines and trees and old or declining plantations); development of fish-breeding arrangement only from swamp lands and other land not proper for agricultural use; enforesting damaged land from slides and excessive erosion; placement of industrial, agrozootechnical and social-cultural projects only on free land within the constructible perimeter of localities, predominantly damaged land or land not proper for agricultural production; finishing up the areas which need digging, drainage work and regularizing water flows, irrigation and combatting soil erosion and so forth.

Assuring the establishment of basic solutions for utilizing all areas of land in order to be brought back into economic circulation for agriculture, silviculture, fish breeding, reed-growing, arrangements for investments or hunting, the study offers complete figures on the current and prospective potential and it creates conditions for promoting the actions for conservation, improvement and increase in the production potential of all land under conditions of knowing the trends for regressive evolution as a result of destructive, objective processes. Thus, an adequate framework has been created for a concrete and complete definition of the provisions of the party and state documents for using the land stock, specifying in a unified concept the land improvement projects and agropedoimprovement measures needed to be carried out (in order of priority), the land resources needed to be transformed and utilized on a high level (and the necessary investments); the study thus is a first overall recording of the land resources of our country (see Tables 1-3).

Table 1: Rise in Agricultural Land Stock (hectares)

Year	Arable land	Meadowlands	Vine-growing plantations	Fruit-tree growing plantations	Total agricultural land
1950	9,377,900	4,534,600	247,300	164,200	14,324,000
1960	9,822,400	4,200,600	311,000	212,600	14,546,600
1970	9,736,700	4,418,400	346,800	428,400	14,930,300
1975	9,740,900	4,446,300	329,100	430,100	14,946,400
1980	9,817,300	4,485,600	309,000	355,100	14,967,000

Table 2: Agricultural Land Stock by Classes of Quality in 1980(hectares)

Class of quality	Arable aland	Meadow-lands	Vine-growing plantations	Fruit-tree growing plantations	Total agricul-tural land
I	2,805,500	50,600	52,700	15,700	2,924,500
II	2,448,000	189,900	70,100	28,800	2,736,800
III	2,459,400	727,600	80,200	93,500	3,360,700
IV	1,441,500	1,372,000	61,800	125,300	3,000,600
V	662,900	2,145,500	44,200	91,800	2,944,400
TOTAL	9,817,300	4,485,600	309,000	355,100	14,967,000

Table 3: Agricultural Land Stock by Groups of Slope (in 1980) (hectares)

Percent-age of slope	Arable land	Meadow-lands	Vine-growing plantations	Fruit-tree growing plantations	Total agricul-tural land
0-5	7,143,900	1,068,800	139,000	89,100	8,440,800
5-10	973,000	353,400	41,100	38,500	1,406,000
10-15	680,800	489,200	41,600	56,000	1,267,600
15-20	581,500	713,400	45,000	79,700	1,419,600
20-25	274,000	803,200	23,500	55,000	1,155,700
More than 25	164,100	1,057,600	18,000	36,800	1,277,300
TOTAL	9,817,300	4,485,600	309,000	355,100	14,967,000

Integrating the forecasts of the basic study for protection and improvement of the land stock with those for zoning of agricultural production in the context of the various national programs, the scientific framework has been created for a more rational management of land resources which mainly consist of the following actions:

Reorganization and relocation of uses of land through improving the demarcation between the agricultural and forest land stock, amalgamation of lands and correcting borders in accordance with relief, required limits and quality of the land, thus assuring economical land areas for exploitation;

Carrying out all placements, bearing in mind the production potential of the land, existing arrangements or ones possible to be carried out and integration of them into the overall process for territorial development (in conformity with the various national programs).

Organization of the Territory--An Integrating Factor in Utilization of Resources

An important place in the broad process of industrialization, urbanization and modernization of the economy is held by territorial systematization and

organization as an objective need in the rational use of land resources.

The action for territorial organization encompasses all the permanent interventions which seek the restructuring, outlining and optimum equipping of the territory, adequate for the new economic values, social particular features and natural specific nature, more and more strikingly asserting itself as an overall action integrated with the complex development of the economy. Being the single method for coordinating the spatial elements with planned development, territorial organization is being asserted as a total solution for optimization of the use of space, depending on the present and future requirements of society. The particular aspects take on new values if we bear in mind that the continued industrialization should be the basic option for economic development as the single alternative which assures the development and modernization of the entire economy, while in this context the territorial organization has become the main means for the coordinated placement of all investments and equipment. Complete utilization of land resources--the basic area for territorial organization--is a basic problem, also due to the rising requirements for nourishment and for occupying the agricultural land or agricultural potential to an increasingly greater extent by the various economic branches, technical supplies or populated settlements.

In this context, in order to avoid anarchic utilization of the land and to block the removal of high-quality land from the agricultural property, to have rational distribution of the production forces and to assure an order so that the various activities can be integrated harmoniously while the economic branches can develop normally, territorial organization is the decisive, irreplaceable factor. A scientific policy for territorial organization in a unified and complex system (see the diagram) is being assured at the national level, a policy which guarantees the unity of concept and action of all the organs--research, design, production and administration.

In agriculture, assuring the coordinated placement of investments, superior utilization of material and human resources, coordination of territorial development and unified organization of the territory, the united agroindustrial councils create the organizational-territorial conditions essential for the efficient exploitation of land resources, particularly by defining rational crop rotations depending on the zone of favorability, making the form of ownership an abstraction. Fulfillment of the specific tasks belonging to the united agroindustrial councils also favor the superior solution of the basic problems which exceed their framework, being of general social importance as, for example, the following:

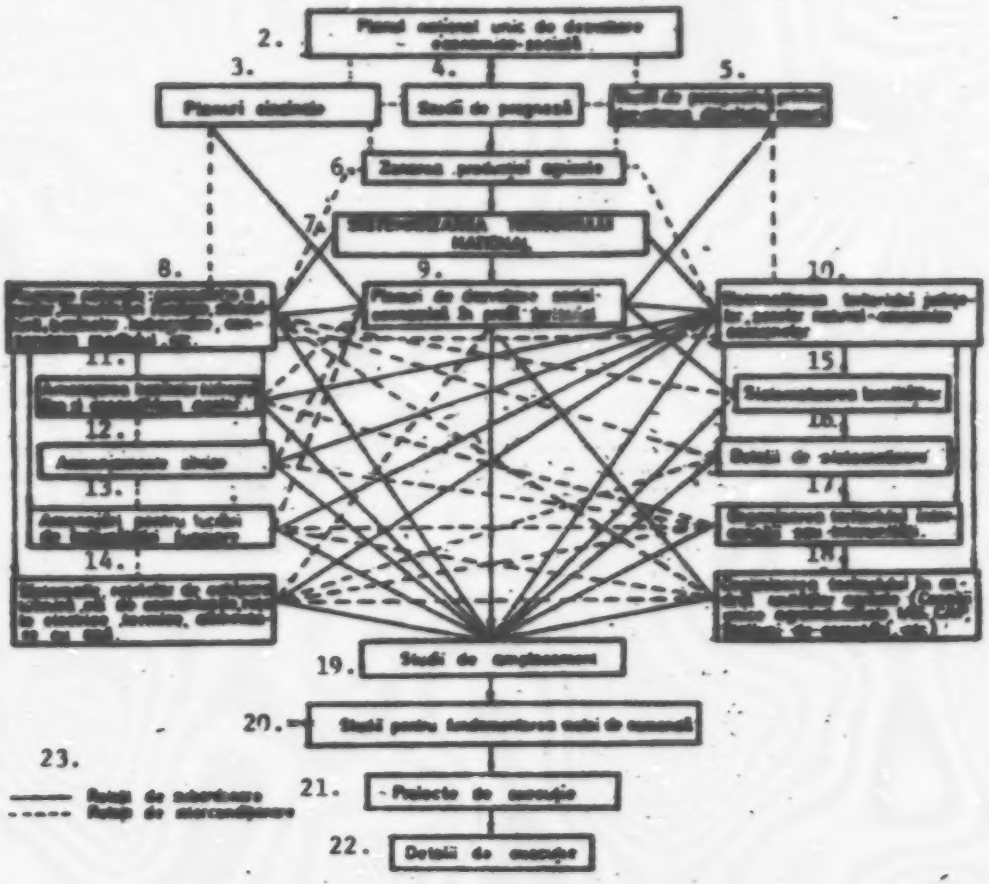
Sensible use of the entire land stock in accordance with the national programs for development of the various branches and activities on the basis of basic studies for protection of the land stock, studies for territorial systematization and organization, plans for setting up territory and so forth;

Use of the material-technical base (machinery and equipment, hydroimprovement systems and so forth) and, in particular, of the land under optimum conditions;

Coordinated placement of all future developments;

Acceleration of the urbanization process, with the coordinating locality becoming the polar center in the zone of activity of the council, with the technical supplying of the territory being carried out in a unified way.

1. SISTEMUL DE ORGANIZARE A TERITORIULUI ÎN R.S. ROMÂNIA



Key:

1. System of Territorial Organization in the Socialist Republic of Romania

2. Single national plan for social economic development
3. Five-year plans
4. Forecast studies
5. Long-range studies on the dvevelopment of various branches
6. Zoning of agricultural production
7. Systematization of national territory
8. National programs: water management, land improvement, silviculture, hydrographic reservoirs, environmental conservation and so forth
9. Territorial social-economic development plans
10. Territorial systematization of counties, natural-economic zones, communes
11. Set-up of hydrographic reservoirs and water management
12. Silvic arrangements
13. Arrangements for land improvement projects
14. Systematization of networks for technical supply, such as communication, electric, thermal networks, water supply
15. Systematization of localities
16. Details of systematization
17. Organization of the intercouncil or interunit territory
18. Organization of territory within agricultural units (united agroindustrial councils, state agricultural enterprises, agricultural production cooperatives, research stations and so forth
19. Location studies
20. Studies for substantiating the order note
21. Operations plans
22. Operations details
23. Relations of subordination
24. Relations of interconditioning

[No 39, 26 Sep 80 pp 7-8]

[Text] Rational Placement of Investment Projects

Placement is the basic generic act of any operation. Due to its fixed (immobile) nature, placement must be chosen only following a careful and complex study, with errors in placement in many cases being uncorrectable or hard to correct but with high costs.

Actually, placement of projects which must be built, without taking into consideration all the factors of incidence on their being carried out on a given territory, can have some of the most serious repercussions: reduction in the useful effects of the technologies used, affecting of the construction system, lower efficiency of investments and production activity.

Experience proves that many investments placed with ignorance of some basic principles support for long periods a considerable volume of payments, transport expenses (for products, materials and labor force and so forth) with direct implications for the economical nature of production, involving and removing from agricultural production land with high production potential. Thus, it is an absolutely objective need that all those contributing to placement of investments should make a thorough study of the complex of social-economic, natural and technical-construction conditions in the studies and plans worked out at the macroterritorial level (plans for social-economic development at the territorial level, forecast studies, national programs for development of various branches and activities, studies for zoning of agricultural production, territorial systematization studies, plans for territorial organization and arrangement on the hydrographic reservoirs, improvement perimeters and so forth) and at the microterritorial level (outlines for systematization of localities, plans for territorial organization and development of agricultural production in the united agroindustrial councils, improvement systems and perimeters and so forth) in order to determine the best placements which assure total utilization of the territory. Actually, sensibly combining the criterion of maximum economic efficiency with harmonious development of the economy at the territorial level, the placement of new projects is called on to contribute to the continued development of the country's economic potential, to superior utilization of natural, material and labor resources in all zones, particularly the zones which are lagging behind.

The following should be taken into account in placing new projects, seeking the goal of optimum utilization of resources and balanced development of the economy at the territorial level:

Development of all zones and localities should assure utilization of land resources and existing labor force;

Fitting into the profile of the branch (in order to assure a unified system of production and extending of interindustrial cooperation) and territorial distribution of necessary factors adequate for the territorial plans for social-economic development of national programs;

Fitting into the provisions of the studies for territorial systematization and outlines for systematization of localities;

Assuring economical distances from the utilities--electric network, water supply sources, overflow of used water, means of communication and possibilities for cooperation in providing utilities;

Opportunities for the development of already existent centers or units, using to the maximum the free spaces where new construction could be placed with a view to optimization of existing capacities;

Maximum possibilities for complex utilization of natural resources and of existing potential of the labor force;

Functional ties and optimum distances from the centers for supply and sales of production;

Providing the technical-economic factors needed for the general plan: optimum technological flow of production by achieving direct ties in correlation with adoption of an adequate transportation system; making the land the best size and marking the limits of the land at the best area; building large-capacity halls which increase the areas constructed; setting out the transportation networks so that they assure that minimum areas are occupied and that there is efficient use of the means of transport; concentration of construction on a reduced area, which also assures minimum networks for technical provision; respect for the requirements specific to the various types of projects;

Respect for the architectural requirements by placing all projects and each element in proportion to the overall systematization of the territory and localities, achieving a harmonious (aesthetic) unity of construction, free spaces, networks of communication and green areas;

Taking into consideration all the orographic and microclimatic, hydrogeological and hydrographic, geotechnical conditions and conditions for fire protection and so forth;

Respect for the particular features of the various branches, optimization of the placement being the result of an analysis of all the conditions pronounced and, in the end, of the operational flows and links so that all the costs attached (for investments, operation, transportation and so forth) are minimal, while the placement should be integrated into the harmonious development of the territory and the localities.

The problem of placement takes on special importance also through the fact that in the complex of measures for rational management of land resources rejection of any tendencies to reduce the areas cultivated and agricultural utilization of nonproductive and poor producing lands are a major social requirement. Yet, in current practice, as a result of the intensity of economic development, there have been and are situations of occupying productive land

for various industrial and agricultural placements, development and modernization of means of communication, of land improvement projects, hydrotechnical arrangements, surface mining operations and so forth. Thus, land with a total area of 205,060 hectares was removed from agricultural production for investment projects just from 1974 up to the beginning of 1980 alone, of which 67,094 hectares were eliminated once and for all from agricultural production. This is a seriously current problem if we bear in mind that in the last two years alone (1978-1979), the area removed from agricultural production totaled 33,060 hectares, of which 15,094 hectares were final (11,822 arable hectares, that is, 78 percent).

Under these conditions, it is necessary to entirely prohibit placement, at least on land in the I and II categories of fertility.

In the case of all placements, an obligatory analysis of supplemental variations in which an evaluation of the areas of land occupied should be the basic indicator in choosing the optimum variation is an obligatory step in arriving at a correct social and economic rationale.

Land Improvements--In Accordance With the Requirements for Efficient Utilization and Exploitation of the Land

Land improvements are the main projects which assure conservation and improvement of the land stock, a rise in its production capacity and actual obtaining of higher agricultural production; they are one of the main production forces of agriculture both through the area on which they are carried out as well as through the volume of investments involved and their long length of service (see table).

Rise in Main Land Improvement Projects (Hectares)

Year	Drainage	Irrigation	Combatting erosion
1965	789,000	230,000	40,000
1970	1,100,000	731,000	435,000
1975	1,966,000	1,474,000	983,000
1980	2,900,000	3,000,000	1,900,000
1985	3.7-3.75 million	3.7-4 million	2.85-2.9 million
1995	6,400,000	5,300,000	5,300,000

Providing regularization of the water system (bringing, evacuating and redistributing it) on the land set up so that optimum production conditions are set up as well as (later) land improvement, while in correlation with the territorial organization, creation of conditions for efficient exploitation of the land set up and land improvement projects play a decisive role in the management of resources.

Experience shows that only those projects prove efficient which have at their base a study of the complex of factors (natural, technical and economic), integrated with the requirements of agricultural production, that is, efficient exploitation of the lands set up with respect for the following basic principles:

Fitting into the provisions of the studies for territorial systematization of counties and hydrographic reservoirs;

Integration into the long-range national programs for setting up hydrographic reservoirs, water management and land improvement, conservation and development of the forest stock and so forth;

Superior utilization of all land and the creation of a framework for carrying out the production process under optimum conditions, assuring efficient utilization of the land and the water;

Utilization of nonproductive or poorly productive (adaptable) land for agricultural production, protection against secondary processes which reduce fertility, improvement in the general structure of use of the land, defining of crop systems (crop rotation) specific to the land set up, replacement of the road network in order to create the optimum territorial framework for using the earth and land improvement projects.

These jobs are carried out through concommitent compilation of programs for land improvement projects and territorial organization in order to guarantee the creation of the most reasonable and profitable forms for exploiting land resources and means of production closely connected with the earth within the production process (land improvement projects, retention reservoirs, agrozootechnical construction and so forth).

However, the construction concept still prevails in Romania in carrying out land improvement projects, despite the fact that the builders' task ceases at the same time as execution of the particular arrangements and not after reaching improvement parameters forecast in the plans only through production (somehow arbitrarily established) taken into the calculation of economic efficiency. Currently the production established for substantiating the investment opportunity has as its base the entire complex of agropedoimprovement measures which must be carried out;with the exception of basic investment (damming, irrigation, drainage, soil erosion combatting), the remainder of the necessary projects are provided for connected or collateral investments, with them to be carried out later by each agricultural unit (depending on the opportunities and when it thinks) and, thus, not at the same time as the basic investment and at the optimum time. It is in everyone's interest to have a real and total picture of the material efforts needed to promote a wide-reaching action as well as of the net results which can be obtained.

It is necessary for specialists and other responsible factors to take action to change the current concept by which efficiency in land improvement projects is substantiated in at least the following directions:

Considering the rise in production on land on which hydroimprovement projects are being carried out, not only as an effect of them;

Investments needed to achieve the production forecast on land set up should bear in mind not only the investments for the basic projects but also the connected ones;

Making the ratio of the technical-economic indicators to the area as large as possible (perimeter, zone to be improved) in order to obtain the most favorable possible indicators;

At the same time we see that a stringent need is respect for the following principles in order to assure the effect of land improvement projects:

Placing the land improvement projects in correlation with the future use of the land;

Mapping out the hydrotechnical and road network in order to provide both hydroimprovement exploitation as well as agricultural exploitation in correlation with the technical supply and equipping of the territory (populated settlements, production centers, means of communication), with natural limits (forests, courses of water, storage basins and so forth) and with organization of the land and requirements for efficient exploitation of the machinery and tractor system;

Mapping out the network of irrigation pipes within the land masses, seeking to avoid situations which involve reducing the economical nature of the exploitation: lack of uniform distances between antennas, lack of continuity of the antennas or lack of distance between them and the limiting plots(although the territorial conditions do not require this), irrigation through ridges and through overhead irrigation along the same antennas, lack of parallel antennas, intersecting of open canals and different distance between hydrants;

The obligation to build the connected and collateral investments at the same time as the basic investment (dams, drainages, irrigation, combatting soil erosion), aiming at achieving the parameters forecast in the plans for the level of production taken into the calculation of economic efficiency.

Unified Policy in the Management of Land Resources

Complete and efficient utilization of land resources is a basic problem of our era, particularly under the conditions of the contradiction between the rising demands of urbanization, development of industrial activities and of supplying the territory, on one hand, and the requirements of agricultural food products on the other. The complexity of problems in use of the land for producing food and wood (thus, for agriculture and silviculture) is accentuated by the cooperative nature of placing the industrial platforms and penetration of the networks for technical supply, which means that the total size of the agricultural territory should be reduced. Actually, uses of the territory are cultural ecosystems, that is, cultural systems in which man and society attempt to obtain their goals by exercising control over the variables in the global ecosystems. This vitality is controlled by society through the organization and set up of the overall territory and each use separately, appropriate for the natural-economic conditions and development of the material-technical base.

The following desirables require general attention for the harmonious development of the territory through rational placement of the production forces and for good management of the land resources:

Improving the legislative framework by working out a unified land code for the entire economy which would replace the more than 30 existing normative acts (laws, decrees, Council of Ministers decisions, orders and so forth) which actually are a disadvantage to the general interest of society with regard to use of the land stock by favoring the interests of one branch or one activity;

Creating a general discipline (in education and research) for management of land resources--land economics--which would assure the complete and complex formation of those who through their activity contribute to utilization of land resources in the process of the systematization, organization and set-up of the territory, regardless of the specialty or faculty graduated from;

Changing the planning system for agricultural production, establishing only the production to be achieved for the main products and not the areas which should be cultivated ,through redistribution of the crops depending on the size of the arable area held by the agricultural units. This would give each agricultural unit the opportunity to define the profile of production as best as possible, utilizing the production potential of the land in close correlation with the conditions for technical supply and provisions and with the possibilities for applying various specific technologies and for integrating agricultural production with the processing industry.

8071
CSO: 2700

PROFITABILITY OF AGRICULTURAL STATIONS IN POORER AREAS

Bucharest REVISTA ECONOMICA in Romanian No 36, 5 Sep 80, pp 12-13

[Article by Mihai Bogorodita, manager of the Cermei Station for the Mechanization of Agriculture in Arad County]

[Text] Increasing the profitability of all the enterprises is an essential condition for further ensuring the rapid rate of economic growth, of rise in the national wealth.

In the stations for the mechanization of agriculture, also, profitability is a primary objective, whether we calculate it as a ratio between profit and the operating cost or between the net income achieved and the production expenses made. The better this ratio, the higher the efficiency with which the means of production and labor are utilized are. Application of the requirements of the economic mechanism in agriculture, however, necessitates the determination and analysis of this ratio for each product, activity, and enterprise and not as a median indicator on a countrywide or countywide scale, for the various types of enterprises, and so forth. Of great importance is achieving profitability for each individual enterprise and product, because this is the only way to ensure greater efficiency in the overall economy.

The specific conditions under which business is done by the stations for the mechanization of agriculture, and especially those in the hilly areas, create difficulties in the drive to raise the profitability of these units. From this point of view also, the stations for the mechanization of agriculture [SMA] differ from the other economic enterprises due to the complex nature of the activity conducted, because they perform works on the lands of other units and intertwine profitable economic activity with support of agricultural production units for the purpose of boosting physical and overall output and economic strengthening of these units. Consequently, the need for increasing the profitability of SMA must be closely tied in with these units' chief task of performing agricultural operations on schedule and at a good qualitative level under any conditions, as they are directly responsible for the outputs obtained by the units in which they performed farm operations.

Hence, the profitability of SMA is assessed not only by the unit's own economic results, in consequence of performing farm operations, repairs and other works, but also in light of the efficiency obtained by the agricultural units that were serviced, the rates applied to works involved in mechanization, the payment for these works being made in proportion to the level of attaining the productions planned. Moreover, this means that we ought to take into consideration not only the manner in which the machine operations meet agrotechnical needs (in whose context these operations ought to be and are being performed) but also the existence (in the required amounts, at the right time and in the adequate N:P:K ratio) of chemical fertilizer and pest killers and the other direct and indirect factors involved in achieving the farm outputs.

Furthermore, another specific factor of SMA activity involves the broad diversity of conditions in which these units operate, as a result of the very diversified natural and economic scene in our agriculture. All this results in differentiated measures and results of the specific project to increase profitability for all stations. The broad diversity of the conditions in which production activity develops also is reflected in the great differentiation of expenses and incomes in each individual unit. For SMA in hilly areas these conditions involve lower incomes and larger expenses.

Even if the factors that ultimately influence the profitability of each mechanization station are incomes and expenses, the factors of balance between them are characteristic for each station and chiefly depend on: the pattern of crops, the payment rates for SMA works, the level of mechanization of operations, the soil type, the slope and the length of lots, the fertility zone, the level of development of ancillary and industrial activities and the limits for the expansions involved, and so forth. All these specific factors must be taken into consideration when assessing the efficiency of the economic activity of the stations for the mechanization of agriculture.

Because the relation between incomes and expenses in SMA units located in hilly areas is essentially affected by the policy of prices and rates fully warrantably furthered by the state, for the purpose of firmly supporting the agricultural cooperatives in those areas, the supplemental financial efforts made by these SMA ought to be covered by increasing the incomes from exceeding the volume of farm works and planned outputs or from activities which involve rates above the production costs. Covering supplemental expenses must take account of the limit of time available, the provision with technical equipment, in the context of overall completion of the tasks stated in the cooperation contracts. By making good use of the amount of time available between agricultural campaigns by expanding industrial activities in repairs centers of SMA (activities which now have a permanent and well-organized character in specialized centers, involving various repairs of farm tractors and machines or various types of products) or by expanding services provided by the sections for mechanization, the financial results of SMA located in hilly areas can be improved significantly.

But the increase in the volume of agricultural or nonagricultural works and performance of works other than those contained in technologies, or completion of projects with payment rates above the actual cost cannot be accepted

because of the very application of the economic mechanism and strict fuel savings necessitated by the energy crisis which is making itself increasingly felt. Moreover, the diversification of industrial activities through repairs centers attached to SMA will no longer develop if these centers are transferred to SMA Trust control.

Under these conditions, an important and almost exclusive source for raising SMA incomes still would involve exceeding the planned outputs because, in this case, payment rates increased up to 120% are granted. However, this significant avenue to making the SMA more profitable gives poorer results in hilly areas because of the lower fertility of lands and of the other specific conditions (pattern of crops, objectively smaller mechanization of operations, and so on).

The current payment rates for the works performed do not — in all cases — represent compensation and full equivalent of the expenses involved in the mechanization projects. These rates, being differentiated for the various production zones, in light of the fertility of the lands, are lower in the less fertile areas (in the hills and mountains) and higher in the far more fertile areas, the lowland. For instance, the payment rates in kind for the chief crops are differentiated for the various zones, being up to 45% lower in the less fertile zones versus the zones which provide large outputs per unit of surface. But precisely in these units where incomes are lower for the same volume of works, objectively the level of production costs is higher, as it is in inverse ratio to the rates applied. The natural conditions impact on decrease in the efficiency of the equipment, on the duration of utilization of the facilities during the year and on the level of mechanization. Implicitly, this results in higher costs for repairs and maintenance of the fleet of machines and tractors, the consumption of fuel and lubricants and remuneration for work. Hence, factors which have nothing in common with the skill, industriousness and work of the personnel in SMA rather significantly impacts on the level of production expenses and incomes to the effect of increase in the first-mentioned and reduction in the last-mentioned, significantly affecting the results of the economic activity of these units.

Consequently, the stations which are located in the less fertile areas, as a rule are unable to cover their expenses from their own incomes. Anyway, it cannot be assessed that these stations in a justified way register loss, just as the positive differences between incomes and expenses in the stations located in the lowland counties cannot be regarded as fully constituting entirely deserved profits.

It is known that the profit of an economic enterprise develops as the difference between the production cost and the selling price. In other words, there must be a positive difference (with the greatest possible amount) between expenses and incomes. In this concept, the difference must fully represent the own effort of the enterprise involved to augment its incomes and cut down its expenses.

However, in the case of the stations for the mechanization of agriculture, the profits obtained also are the result — sometimes to a great extent — of the state's economic policy of taking over and redistributing the differential rent. Hence, it would be unfair, in assessing SMA activity, for these positive difference to be considered fully as profit, just as it would be unfair for the negative differences to be considered fully as loss. For the purpose of making more profitable the stations that register negative differences also as a result of unfavorable conditions beyond their control, a practical approach would involve giving up the differentiation of payment rates for work in SMA according to fertility zones and setting payment rates for works effected in light of the level of actual costs. But we must admit that this measure can be taken only in case it is considered that the program for the economic-organizational strengthening of agricultural production cooperatives has been completed with good results.

If, however, the time has not come for giving up the current rates, differentiated for the various production zones in light of the fertility of the lands, another approach would involve maintaining the current payment rates but increasing the settlement prices for products, differentiated for the various zones, in inverse ratio to the rates, so that, in the final analysis, the equivalent value of agricultural works in each zone will be equal to the actual production costs.

From the early implementation of the economic mechanism in agriculture there is the need for delivery prices and the rates for services to be closer connected with social production expenditures and better reflect reality and the specific conditions of production. This would spur the effort centered on quality, technical progress and profitability in each enterprise. If none of the above-mentioned approaches can be taken into consideration at this point, there is the need for increasing the input of mechanization into economic rehabilitation and greater profitability of agricultural cooperatives by expanding the mechanization of farm operations in the context of the rates remaining as they are.

However, in order for the SMA to make best use of the productive potential of agricultural production cooperatives and state agricultural enterprises under conditions of profitability, by greater mechanization and increased input into obtaining agricultural outputs, there is the need for surveying the problem of increasing profitability at their level and in the given context of activity. Each SMA must consider the matter of self-management and self-financing in light of short-term forecasting studies which should provide optimal and rapid solutions to increase the level of utilization of the lands, farming machines and available amount of time for productive purposes, so that the seasonal character of agricultural operations may less and less impact on degree of utilization of the work force and of the fleet of machines and tractors. Moreover, this must also be the direction of the industrial activity in the repairs centers and mechanical shops attached to each SMA. Over the years, this activity has greatly expanded and has increased the prospects for raising the profitability of the stations for the mechanization of agriculture, regardless of the area in which they are located, but especially of those situated in hilly areas.

Consequently, to cover the negative differences which resulted from completion of farm works by SMA in hilly areas and in other less favorable zones, we propose that the current repairs centers remain under these stations. Moreover, for the smooth operation of the new economic mechanism in agriculture, the repairs centers almost exclusively ought to be attached to stations with negative differences (loss) because this profitable industrial activity (based on an expense of 890 lei for each 1000 lei incomes for repairs and 760 lei for each 1000 lei incomes for manufactured items) would largely make up for the loss from farm operations, a loss which, as shown above, is almost fully due to objective conditions, regardless of the quality of the SMA's activity.

It is our view that there is no valid economic motivation for justifying the detachment of centers for repairs under SMA and attachment of these units to SMA trusts, especially in the context of operation of the new economic mechanism when making each SMA more profitable is a must. Because the economic results of each SMA trust are obtained by totalling the results of the component SMA units, the activity of repairs centers, whether under SMA units or SMA trusts, in the final analysis is centralized at the trust, without influencing in any way its economic results. But if the repairs centers remain attached to each SMA they directly and positively impact on the economic results of the station, being an effective factor in increasing the profitability of each station and implicitly of the trust involved. For instance, the industrial production especially expanded in SMA located in hilly areas and in zones with less fertile lands (which accounts for 34-60 percent of the income plan in SMA) would result in fuller use of the available work time which still iein excess in these zones, of the technical built areas, raising the economic efficiency of SMA activity and directly helping to make them more profitable.

11710
CSO: 2700

DIRECTOR DISCUSSES DEVELOPMENT OF TRACTOR EXPORT MARKET

Bucharest REVISTA ECONOMICA in Romanian No 36, 5 Sep 80 pp 7-8, 10

[Interview with Engr Vasile Sechel, director general of the Brasov Industrial Central of Tractors, by Ioan Georgescu]

[Text] [Question] The Industrial Central of Tractors recently marked an outstanding event in the area of exports — the delivery of the 400,000th tractor to foreign customers. Would you please tell our readers about the significance of this figure and, on a broader scale, the importance of the export market for the activity of your central?

[Answer] Surveyed in the current context of the foreign market, the volume of our output and respectively of our exports entitle us to state that Romania today is one of the chief world makers and exportors of tractors. The tractor industry in Romania came into being more than 30 years ago and has continuously developed at rates which are far higher than those of world tractor production. Consequently, we have managed to meet our domestic economic needs and concurrently offer greater and greater exportable amounts. While in 1965 we exported three types of tractors this year we shall export more than 50 types in over 300 structural kinds. In terms of quantity the number of tractors exported annually went up by a factor of more than 20. Moreover, there is a special increase in the volume of exports under this five-year plan when the number of tractors provided for export equals the entire amount exported previously (until 1975). Exports now account for more than 70 percent of all the physical tractor output of the central.

The growth rate of export running ahead of the growth rate of the central's output primarily is based on the constant concern for quality, diversification of the range of powers and adaptability of Romanian tractors to various conditions of climate and soil in most diverse countries. Consequently, our system of tractors and farming machines now is on a par with that of major makers in industrialized countries.

[Question] What are the central's concerns in the area of research and development which resulted in the structural upgrading of the export lists?

[Answer] Tailoring tractor building to the customers' needs is a usual method for broadening the lists of exports, which permits diversification of the technical-structural approaches and of the range of products which we can offer, in light of the specific conditions of operation of machines in the partner country. The concerns pertaining to the strategy of developing tractor building also is based on the survey of the trends of development of Romanian agriculture. The Industrial Central of Tractors, in conjunction with experts of the Brasov Research and Engineering Center for Tractors, is now focusing its efforts on turning out new products, with high, competitive features, and on redesigning existing products to best meet domestic and foreign demand. In the words of Nicolae Ceausescu, we must "not declare ourselves satisfied and must even be critical of the products which hold first places in the world, and do this out of eagerness to retain these places." Consequently, our immediate efforts center on a strict, scientific valuation of the levels of performances and structural features of tractors on the foreign market, of the trends involved, and in this light we shall handle the design of the new products. We have in mind, under the next five-year plan, expanding the family of wheeled agricultural tractors for powers of 85 HP and 100 HP, whose documentation has entered the stage of technological preparation at the Brasov Tractor Enterprise. For these products the provisions involve a relatively short period for introducing the results of research in production, in consequence of the measures taken by the central to ensure the best possible cooperation of designers and manufacturing units.

Concurrently with expanding the range of agricultural tractors, by high-power types, we are concerned with developing the family of industrial crawler tractors, by producing types of 62-78 HP powers and by supplementing it with types up to 300 HP. Moreover, we shall reappraise the entire family of farm tractors of the 28-64 power range for the purpose of modernizing and bringing these tractors to the level of needs pointed out in the context of the market survey conducted in conjunction with the Institute of World Economics, Universal-Tractor and the central's Research Center.

In terms of Romanian priorities in the design and production of tractors I would like to point out the achievement of the tractor with hydraulic loader (445 TIH) geared for the mechanization of various farm and construction operations, a tractor that is capable of performing a great many operations by selecting 12 specific implements. Another beneficial technical idea involved superelevating the 45 HP tractor and thereby developing the 45 HC tractors. This provided users at home and abroad with the prospect of expanding the area of utilization of Romanian tractors in fruit-growing, grape-growing, sprinkling and hoeing special crops (cotton, tobacco, sugar cane and so forth). We must add the SM-800 crawler chiefly meant for work on slopes, that has a unique design, specifically for the steering system, and the industrial crawlers (bulldozer, frontal loader) S-1801 LS and S-1801 IF, having hydromechanical transmission with coupling under load and a unique control system for the tractor steering which cannot be found on the lists of many other makers. In the area of industrial wheeled tractors we turn out an equipment family of from 80 up to 360 HP and the largest facilities that are produced in CEMA countries, respectively the A-3602 L bulldozer and the A-3602 IF frontal loader.

Concurrently with diversifying the range of facilities, steps were taken to standardize and unify these facilities. Consequently, the Industrial Central of Tractors now offers for export agricultural and industrial universal and specialized tractors with powers ranging between 30 HP and 300 HP which cover the following areas: farming, fruit and grape growing, vegetable growing, forestry, construction, transportation, and so forth. They are on a par with the latest trends on the foreign market.

[Question] Maintenance of the products' high technological standard also involves systematic information about the evolution of the foreign market. What are the major information channels?

[Answer] Universal-Tractor Foreign Trade Enterprise, whose staff has specialized training in this field, bases all its trade activity on marketing and orientation studies. Consequently, it is constantly concerned with exploring the foreign market for the purpose of updating information about the tractor foreign market, keeps in touch with a number of foreign trade organizations, with specialized institutes, and with other tractor making companies. On the basis of the data obtained it works out marketing estimates on foreign markets and takes action to find local partners. Moreover, very great emphasis is placed on surveying the world-scale evolution of tractor building, the new models that emerge, the modernization and comfort and safety upgradings applied to tractors by various companies.

In line with the basic principles of the foreign policy firmly furthered by our party and state, the Industrial Central of Tractors completed several projects of cooperation in production with internationally reputed firms such as: Fiat Trattori, Fiat Allis, Motokov-Zetor Czechoslovakia, Clark U.S.A., and so on. Furthermore, we are dealing with other firms to initiate added cooperative projects under mutually advantageous terms. In the same context of diversification of the forms of cooperation and marketing of tractors, I would like to point out assembly lines in a number of countries such as: Egypt, Iran, Canada, U.S.A., India, Ghana, the People's Republic of China, and so forth. For this year contracts for assembly on these lines involve more than 30,000 tractors in the form of CKD and SKD. Under the next five-year plan (1981-1985) we plan to set up new assembly lines so that by the end of 1985, more than 60 percent of the tractor export may develop in the form of CKD or SKD. This kind of cooperative projects ensure a permanent dialog with partners in terms of technical refinements in products, evolution of markets, and so forth.

The quality and technical performance of our tractors are certified by reputed specialized institutes such as: Cneema Antony, France; Praha-Repy Experiment Basis, Czechoslovakia; Lincoln Nebraska, U.S.A.; Kraftfahrt-Bundesamt, Federal Republic of Germany; Athens Institute for Farm Machines, Greece; Centro Autovehicoli Milano, Italy, and others. During demonstrations and tests abroad and at international fairs in various countries the Romanian tractors distinguished themselves by their performances and won the customers' trust.

[Question] How did you manage to achieve this broad diversification of export markets?

[Answer] The export of Romanian tractors, that started in 1952, went up each year and now amounts to more than 65,000 tractors annually delivered to more than 90 countries.

In its marketing policy Universal-Tractor utilizes the systems generally applied by other exporters also, notably direct sales, sales through local agents, sales through local importers, sales through joint companies or own companies, participation in auctions, and sales under government agreements concluded between states.

In light of the continuous increase in the export of tractors, Universal-Tractor Foreign Trade Enterprise conducted a survey on upgrading and diversifying the tractor marketing network. The main provisions of the survey involve: establishing added joint companies for production and marketing; setting up additional assembly lines and increasing the number of supply centers for tractors and spare parts; establishing trade offices; arranging permanent shows with demonstrations; actively participating in auctions and bids; upgrading trade propaganda and advertisement.

[Question] What is the role of service in promoting the central's exports?

[Answer] For the tractors exported by the central through Universal-Tractor service is ensured in the following forms: a. Directly by the maker; b. Jointly (maker and importer) or by the importer. Specification of the form of service is provided under the selling-buying export contract concluded between Universal-Tractor and the importer, which states all the clauses of guarantee, technical assistance, service, and training. Regardless of the form of service agreed upon, the makers ensure, during the period of guarantee, technical assistance for the products exported. In the countries where we export larger amounts we have service groups headed by highly trained engineers or technicians and well-appointed mobile shops.

For a prompter handling of breakdowns supply centers for spare parts were established and it is expected that the network of such centers will be further expanded.

The Romanian staff, who are sent abroad for service, are highly trained, are perfectly acquainted with the products, and know at least one language of wide circulation. Training for the foreign staff is conducted by the maker both in the buyer country and in Romania, in the manufacturing plants, by their experts, or at the centers for tractor repair in this country. During this training, the trainees are taught about the product, handling and operation, maintenance, repairs, and correct use and adjustment of the facilities.

The technical documentation and booklets for acquaintance with the tractors are by no means neglected. Each tractor is delivered with technical instructions, catalog, and spare parts. We print booklets, folders, and brochures for tractors in widely-used languages and other advertising material.

11710
CSO: 2700

BRIEFS

FIRST XEROX MACHINE--One of the latest successes of the collective of workers, engineers and designers in the "Electromures" enterprise in Tirgu Mures is the achievement of the first xerox--electrostatic copying machine--of Romanian manufacture. After tests, the new type of xerox, (MEC-1) [electrostatic copying machine - 1], conceived and realized by a collective headed by design engineers Valentin Iuhasz and Ioan Babu, in collaboration with the Research and Design Institute for the Electrotechnical Industry, has been approved and it went into series production today. The apparatus has a high productivity; the copying cycle is completely automatic. Depending on the type of operation--single, multiple or continuous copying--it can achieve a speed of up to 515 pages an hour. The "Electromagnetica" and "Industria Optica Romana" enterprises in Bucharest are making an important contribution to the manufacture of the new product. [Text] [Bucharest SCINTEIA in Romanian 15 Oct 80 p 1]

FIRST RO-RO INSTALLATION--Recently, the port of Constanta was equipped with the first "roll-on, roll-off" installation, intended for the loading and unloading of goods on and off vehicles with entrances to and exits and from ships, on wheels. This installation, which was designed by specialists from the Design Institute for Auto, Naval and Air Transport in Bucharest, is the first of its kind in the country. The installation consists of an electronically operated retractable platform, completely automated, which can be regulated in accordance with the measurements of the ship. To begin with, all types of automotive vehicles manufactured in the country can be loaded by means of the new installation. In the future, a railroad line for loading cars and locomotives will be set up on retractable platforms. [Excerpts] [Bucharest ROMANIA LIBERA in Romanian 25 Sep 80 p 5]

CSO: 2700

ALLOCATION OF FOREIGN EXCHANGE FOR 1980

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 55, 3 Oct 80 pp 1634-1641

[Order on Foreign Exchange Allocations To Meet the Needs of Federal Bodies and Agencies and for Exercise of the Rights and Discharge of the Duties of the Federation in 1980, issued by the Federal Executive Council in Belgrade on 25 September 1980 and signed by the council's vice chairman Branislav Ikonic]

[Excerpts] 1. The foreign exchange to meet the needs of federal bodies and agencies and for exercise of the rights and discharge of the duties of the Federation as set forth in Subparagraph 2, Point 2, of the Order Fixing the Total Amount of Foreign Exchange for the Federation in 1980 (SLUZBENI LIST SFRJ, No 43, 1980) in the equivalent of 21,723,702,000 dinars may be used for noncommodity and commodity payments of federal bodies, agencies and organizations and for the noncommodity and commodity payments of certain organs of public organizations and institutions performing tasks of interest to performance of the functions of the Federation which perform their activity over the entire territory of the Socialist Federal Republic of Yugoslavia if their own funds to perform these tasks derived from their own revenues are not sufficient, and also to meet the other needs of the Federation, as follows:

1) for invisibles--up to the amount of 2,675,821,552 dinars;

2) for visibles--up to the amount of 16,013,205,719 dinars;

3) for upward differences in rates of exchange on foreign currencies spent before 6 June 1980--sum total of 2,761,674,729 dinars.

The sum of 273 million dinars of the total equivalent of 21,723,702,000 dinars shall be set aside to meet unforeseen and underestimated expenditures (reserve funds).

Allocation of Foreign Exchange for 1980

No	Recipient	Expressed in Dinars	
1	2	3	
1	State Presidency of the Socialist Federal Republic of Yugoslavia		
	Invisibles:		
	Official travel	7,123,000	
	Miscellaneous payments	358,000	7,481,000
	Visibles		287,000
	Total		7,768,000
2	SFRY Assembly		
	Invisibles:		
	Official travel	4,978,000	
	Assessments	474,000	
	Miscellaneous payments	20,000	5,472,000
	Visibles		10,645,000
	Total		10,117,000
3	Secretariat for Legislation of the SFRY Assembly		
	Invisibles:		
	Official travel		14,000
	Total		14,000
4	Council of the Federation		
	Invisibles:		
	Official travel		77,000
	Total		77,000
5	Office of the President of the Republic		
	Invisibles:		
	Miscellaneous payments		1,594,052
	Visibles		95,719
	Total		1,689,771

1	2		3
6	Administration of Brioni Islands		
	Invisibles:		
	Official travel	54,000	
	Miscellaneous payments	2,103,000	2,157,000
	Visibles		1,889,000
	Total		4,046,000
7	Federal Executive Council		
	Invisibles:		
	Official travel	19,546,000	
	Assessments	16,376,000	
	Miscellaneous payments	263,000	36,185,000
	Visibles		100,553,000
	Total		136,738,000
8	Service for Defense Preparations of the Federal Executive Council		
	Visibles		7,184,000
	Total		7,184,000
9	Translation Service of the Federal Executive Council		
	Invisibles:		
	Official travel	718,500	
	Advanced training	718,500	1,437,000
	Visibles		930,000
	Total		2,367,000
10	Constitutional Court of Yugoslavia		
	Invisibles:		
	Official travel		49,000
	Total		49,000

1	2	3	
11	Federal Court		
	Invisibles:		
	Official travel		63,000
	Total		63,000
12	Federal Public Prosecutor's Office		
	Invisibles:		
	Official travel		115,000
	Total		115,000
13	Federal Public Solicitor's Office		
	Invisibles:		
	Official travel		159,000
	Total		159,000
14	Federal Public Defender of Self-Management Law		
	Invisibles:		
	Official travel		44,500
	Total		44,500
15	Federal Secretariat for Foreign Affairs		
	Invisibles:		
	Official travel	40,143,000	
	Missions	1,416,828,000	
	Assessments	57,073,000	
	Miscellaneous payments	12,496,000	1,526,540,000
	Visibles		47,517,000
	Total		1,574,057,000
16	Federal Secretariat for National Defense		
	Invisibles:		
	Official travel	6,225,000	
	Missions	86,900,000	

1	2		3
	Assessments	350,000	
	Medical treatment abroad	7,140,000	
	Advanced training	38,733,000	
	Miscellaneous payments	4,764,000	144,112,000
	Visibles		14,826,110,000
	Total		14,970,222,000
17	Federal Secretariat for Internal Affairs		
	Invisibles:		
	Official travel	5,192,500	
	Assessments	2,324,000	
	Advanced training	1,382,500	
	Miscellaneous payments	59,325,000	68,224,000
	Visibles		116,311,000
	Total		184,535,000
18	Federal Secretariat for Finance		
	Invisibles:		
	Official travel	1,278,000	
	Advanced training	195,000	
	Transfer of legacies	9,843,000	
	Miscellaneous payments	81,052,000	92,368,000
	Total		92,368,000
19	Federal Secretariat for Foreign Trade		
	Invisibles:		
	Official travel	1,298,000	
	Assessments	11,463,000	
	Advanced training	143,000	12,904,000
	Total		12,904,000
20	Federal Secretariat for the Market and General Economic Affairs		
	Invisibles:		
	Official travel	275,000	
	Assessments	2,452,000	2,727,000
	Total		2,727,000

1	2	3	
21	Federal Secretariat for Jurisprudence and Organization of Federal Administration		
	Invisibles:		
	Official travel	552,000	
	Assessments	168,000	720,000
	Total		720,000
22	Information Center of Federal Bodies and Agencies		
	Invisibles:		
	Official travel		33,000
	Visibles		9,121,000
	Total		9,154,000
23	Federal Secretariat for Information		
	Invisibles:		
	Official travel	2,109,000	
	Miscellaneous payments	1,502,000	3,611,000
	Visibles		1,638,000
	Total		5,249,000
24	Federal Committee for Energy and Industry		
	Invisibles:		
	Official travel	1,204,000	
	Assessment	158,000	1,362,000
	Total		1,362,000
25	Federal Committee for Agriculture		
	Invisibles:		
	Official travel	2,335,000	
	Assessments	16,580,000	
	Miscellaneous payments	1,098,000	20,013,000
	Total		20,013,000

1	2	3	
26	Federal Committee for Transportation and Communications		
	Invisibles:		
	Official travel	2,075,000	
	Offices abroad	1,476,000	
	Assessments	6,902,000	10,453,000
	Total		10,453,000
27	Federal Committee for Labor, Health and Social Welfare		
	Invisibles:		
	Official travel	1,046,000	
	Assessment	34,747,000	35,793,000
	Total		35,793,000
28	Federal Bureau for Employment Security		
	Invisibles:		
	Official travel	832,000	
	Offices abroad	422,000	1,254,000
	Total		1,254,000
29	Federal Committee for Affairs of Veterans and Disabled Veterans		
	Invisibles:		
	Official travel	192,000	
	Medical treatment abroad	2,080,000	
	Miscellaneous payments	3,973,000	6,065,000
	Total		6,065,000
30	Federal Customs Administration		
	Invisibles:		
	Official travel	679,000	
	Assessments	1,218,000	1,897,000
	Visibles		39,287,000
	Total		41,184,000

1	2	3	
31	Federal Administration for Flight Control		
	Invisibles:		
	Official travel	426,000	
	Assessments	106,000	
	Advanced training	1,067,000	
	Miscellaneous payments	287,000	1,886,000
	Visibles		185,263,000
	Total		187,149,000
32	Federal Administration for Radio Communication		
	Invisibles:		
	Official travel	374,000	
	Advanced training	56,000	
	Miscellaneous payments	215,000	645,000
	Visibles		9,944,000
	Total		10,589,000
33	Federal Market Inspectorate		
	Invisibles:		
	Official travel		116,000
	Total		116,000
34	Federal Foreign Exchange Inspectorate		
	Invisibles:		
	Official travel		507,000
	Total		507,000
35	Federal Aeronautics Inspectorate		
	Invisibles:		
	Official travel	538,000	
	Assessments	40,000	578,000
	Visibles		434,000
	Total		1,012,000

1	2		3
36	Federal Bureau for Social Planning		
	Invisibles:		
	Official travel		389,000
	Visibles		1,354,000
	Total		1,743,000
37	Federal Bureau of Prices		
	Invisibles:		
	Official travel		84,000
	Total		84,000
38	Federal Bureau for International Scientific, Educational and Cultural, and Technical Cooperation		
	Invisibles:		
	Official travel	5,383,000	
	Assessments	25,082,000	
	Miscellaneous payments	80,682,000	111,147,000
	Total		111,147,000
39	Federal Bureau of Statistics		
	Invisibles:		
	Official travel	421,000	
	Assessments	15,000	436,000
	Visibles		8,430,000
	Total		8,866,000
40	Federal Hydrometeorology Bureau		
	Invisibles:		
	Official travel	226,000	
	Assessments	13,254,000	13,480,000
	Visibles		11,921,000
	Total		25,401,000

1	2	3	
41	Federal Bureau for Standardization		
	Invisibles:		
	Official travel	577,000	
	Assessment	3,551,000	4,128,000
	Visibles		787,000
	Total		4,915,000
42	Federal Patent Bureau		
	Invisibles:		
	Official travel		197,000
	Visibles		998,000
	Total		1,195,000
43	Federal Bureau for Weights and Measures and Precious Metals		
	Invisibles:		
	Official travel	170,000	
	Assessments	512,000	682,000
	Visibles		869,000
	Total		1,551,000
44	Federal Geology Bureau		
	Invisibles:		
	Official travel		186,000
	Total		186,000
45	Federal Directorate for Food Reserves		
	Invisibles:		
	Official travel		409,000
	Total		409,000

1	2		3
46	Federal Directorate for Reserves of Industrial Products		
	Invisibles:		
	Official travel		595,000
	Total		595,000
47	Yugoslav Commission for Cooperation With the International Fund of the Organization of the United Nations for Aid to Children (UNICEF)		
	Invisibles:		
	Official travel		136,000
	Total		136,000
48	Center for Entertainment Services for the Public Relations of Federal Bodies and Agencies		
	Invisibles:		
	Official travel	1,158,000	
	Miscellaneous payments	8,856,000	10,014,000
	Visibles		65,932,000
	Total		75,946,000
49	Service for Administrative and Accounting Tasks of Federal Administrative Agencies and Federal Organizations		
	Visibles		3,129,000
	Total		3,129,000
50	Garage of Federal Bodies and Agencies		
	Invisibles:		
	Advanced training		52,000
	Visibles		5,320,000
	Total		5,372,000

1	2	3	
51	Administration of Office Buildings of Federal Bodies and Agencies		
	Invisibles:		
	Official travel		164,000
	Visibles		3,641,000
	Total		3,805,000
52	Federal Fund for Credit Financing the Faster Development of the Economically Underdeveloped Republics and Autonomous Provinces		
	Invisibles:		
	Official travel		265,000
	Total		265,000
53	Presidium of the Central Committee of the League of Communists of Yugoslavia		
	Invisibles:		
	Official travel	1,437,000	
	Miscellaneous payments	2,874,000	4,311,000
	Visibles		6,638,000
	Total		10,949,000
54	Administration of the Building of the LCY Central Committee and the Central Committee of the League of Communists of Serbia		
	Visibles		6,402,000
	Total		6,402,000
55	Federal Conference of the Socialist Alliance of Working People of Yugoslavia		
	Invisibles:		
	Official travel	3,612,000	
	Miscellaneous payments	5,514,000	9,126,000
	Total		9,126,000

1	2	3	
56	Presidium of the Conference of the Socialist Youth League of Yugoslavia		
	Invisibles:		
	Official travel	2,339,000	
	Miscellaneous payments	197,000	2,536,000
	Total		2,536,000
57	Federation of Associations of Veterans of the National Liberation War of Yugoslavia		
	Invisibles:		
	Official travel	821,000	
	Assessments	32,000	853,000
	Total		853,000
58	Council of the Federation of Yugoslav Trade Unions		
	Invisibles:		
	Official travel	3,794,000	
	Assessment	438,000	
	Miscellaneous payments	3,314,000	7,546,000
	Visibles		1,098,000
	Total		8,644,000
59	Presidium of the Yugoslav Red Cross		
	Invisibles:		
	Official travel	1,206,000	
	Assessments	649,000	
	Miscellaneous payments	1,341,000	3,196,000
	Total		3,196,000

1	2	3	
60	Yugoslav League for Peace, Independence and Equality of Nations		
	Invisibles:		
	Official travel	410,000	
	Assessments	3,000	413,000
	Total		413,000
61	Federation of United Nations Associations of Yugoslavia		
	Invisibles:		
	Official travel	116,000	
	Assessments	36,000	152,000
	Total		152,000
62	Federation for Physical Education of Yugoslavia		
	Invisibles:		
	Official travel	6,740,000	
	Assessments	1,443,000	
	Miscellaneous payments	142,000	10,325,000
	Visibles		2,400,000
	Total		12,725,000
63	Popular Technology—Federation of Organizations for Popular Technology of Yugoslavia		
	Invisibles:		
	Official travel	656,000	
	Assessments	263,000	919,000
	Visibles		554,000
	Total		1,473,000

1	2		3
64	Firefighters Federation of Yugoslavia		
	Invisibles:		
	Official travel	263,000	
	Assessments	22,000	285,000
	Total		285,000
65	Tourist Federation of Yugoslavia		
	Invisibles:		
	Offices abroad	61,558,000	
	Miscellaneous payments	27,073,000	88,631,000
	Total		88,631,000
66	Yugoslav Traffic Safety Council		
	Invisibles:		
	Official travel	117,000	
	Assessments	65,000	182,000
	Total		182,000
67	Public Organizations		
	Invisibles:		
	Official travel	4,000,000	
	Assessments	4,000,000	
	Miscellaneous payments	1,120,000	9,120,000
	Visibles		200,000
	Total		9,320,000
68	Social Accounting Service of Yugoslavia		
	Invisibles:		
	Official travel	501,000	
	Assessments	201,000	
	Advanced training	2,140,000	
	Miscellaneous payments	4,036,000	6,878,000
	Visibles		358,508,000
	Total		365,386,000

1	2	3	
69	Yugoslav National Bank		
	Invisibles:		
	Official travel	2,468,000	
	Assessments	167,000	
	Advanced training	862,000	
	Miscellaneous payments	147,000	3,644,000
	Visibles		102,730,000
	Total		106,374,000
70	Yugoslav Economic Chamber		
	Invisibles:		
	Official travel	4,518,000	
	Offices abroad	109,685,000	
	Fairs and exhibitions	75,935,000	
	Assessments	2,126,000	
	Miscellaneous payments	1,151,000	193,415,000
	Visibles		2,011,000
	Total		195,426,000
71	Cooperative Alliance of Yugoslavia		
	Invisibles:		
	Official travel	537,000	
	Assessments	202,000	739,000
	Total		739,000
72	Tanjug News Agency		
	Invisibles:		
	Official travel	3,209,000	
	Foreign bureaus	57,643,000	
	Assessments	678,000	
	Advanced training	72,000	
	Miscellaneous payments	20,916,000	82,518,000
	Visibles		9,656,000
	Total		92,174,000

1	2	3	
73	SFRY National Committee of the International Board of Trade		
	Invisibles:		
	Official travel	147,000	
	Assessments	213,000	360,000
	Total		360,000
74	Federation of Health Insurance and Health Care Communities of Yugoslavia		
	Invisibles:		
	Official travel	165,000	
	Health care	51,794,000	51,959,000
	Total		51,959,000
75	Federation of Old-Age and Disability Insurance Communities of Yugoslavia		
	Invisibles:		
	Official travel	201,000	
	Assessments	524,000	725,000
	Total		725,000
76	Yugoslav Archives		
	Invisibles:		
	Official travel	86,000	
	Assessments	178,000	264,000
	Visibles		198,000
	Total		462,000
77	Filmske novosti [Newsreels]		
	Invisibles:		
	Official travel	211,000	
	Assessments	20,000	231,000
	Visibles		3,335,000
	Total		3,566,000

1	2		3
78	Institution for Maintaining Maritime Shipping Lanes		
	Visibles		11,282,000
	Total		11,282,000
79	Institution for Maintaining Inland Waterways		
	Invisibles:		
	Official travel	135,000	
	Assessments	43,000	178,000
	Visibles		2,285,000
	Total		2,463,000
80	Yugoslav Register of Shipping		
	Visibles		2,730,000
	Total		2,730,000
81	Yugoslav Center for Technical and Scientific Documentation		
	Invisibles:		
	Official travel	100,000	
	Assessments	53,000	
	Advanced training	25,000	
	Miscellaneous payments	76,000	254,000
	Visibles		2,692,000
	Total		2,946,000
82	Yugoslav Radio and Television		
	Invisibles:		
	Official travel	2,285,000	
	Assessments	24,881,000	
	Miscellaneous payments	21,625,000	48,791,000
	Visibles		654,000
	Total		49,445,000

1	2		3
83	Komunist Newspaper and Publishing Enterprise		
	Invisibles:		
	Official travel	1,014,000	
	Miscellaneous payments	2,055,000	3,069,000
	Visibles		29,000
	Total		3,098,000
84	Borba Newspaper and Printing and Publishing Enterprise		
	Invisibles:		
	Official travel	3,746,000	
	Foreign bureaus	8,189,000	
	Miscellaneous payments	4,137,000	16,072,000
	Visibles		39,947,000
	Total		56,019,000
85	Geomagnetic Institute		
	Invisibles:		
	Official travel		110,000
	Visibles		267,000
	Total		377,000
	Grand total		18,689,027,271

Recapitulation

Invisibles	2,675,821,552
Visibles	16,013,205,719

7045
CSO: 2800

PORT OF KOPER DEVELOPMENT PLANS TO 1985

Belgrade TRANSPORT in Serbo-Croatian No 8-9, Aug-Sep 80 pp 25-26

[Article by Vladimir Kobar]

[Excerpt] Development to Date

The port of Koper, established 23 years ago, is a relatively young work organization which thanks to enthusiasm, self-denial and competent work has developed into one of Yugoslavia's leading ports, especially in the field of up-to-date types of transport, i.e., container and RO-RO [roll on--roll off] transport.

Dynamic development over these two decades has also been accompanied by serious difficulties, since development began virtually from scratch. Until a short time ago construction was carried on exclusively with bank credits, and every member of the work force bore the burden of development and construction. When the self-managed community for rail and port traffic was established during the last planning period, funds were provided to build the infrastructure (the basin, docks and yards), but not in an amount sufficient to cover equipping the port for new forms of transportation. The low rate of accumulation and the high payments for capital investments made in the past meant that the purchase of machinery and construction of the superstructure could be financed only with credit from suppliers and contractors and the pooled capital of the banks, and disproportions occurred in capacities (bottlenecks, engineering and technological lag).

These essential problems which were holding back development were corrected thanks to successful performance of the financial rescue program, so that this medium-term development plan will be altogether fulfilled in physical terms, and in the transitional period a beginning will be made on construction of key projects for the coming period, i.e., Phase II of the container terminal, the bulk cargo terminal and investments in the social standard of living and space for cargo-handling operations.

Three dates in past development have been essential and have marked turning points in operation and development:

i. establishment of the port in 1957;

ii. the opening of the Koper--Presnica rail line in 1967;

iii. the opening of Phase I of the up-to-date container and RO-RO terminal in 1979.

The Point of Departure for Future Development

In view of the level of development of port facilities attained and the needs arising from the basic goals in development of the Slovenian economy, the port of Koper has set itself the following goals in its future development, in conformity with the transportation policy of the Socialist Republic of Slovenia:

i. further development of port facilities which from the standpoint of broader social benefit facilitate equal inclusion of the economy in international trade and the system of combined transport;

ii. realization of the potential of the Slovenian transportation system and its position with respect to further attraction of flows of transit cargo;

iii. achievement of conditions for faster development of the port's complex with an industrial and fuel and power zone;

iv. development and supplementation of specialized directions which are a reflection of the needs of the economy in the area served by the port and for which Koper has exceptionally topographic conditions and position from the standpoint of transportation geography. These are the following:

a. container and RO-RO transport;

b. timber;

c. bulk and liquid cargoes;

d. perishable goods;

and to create conditions for still faster inclusion of the port of Koper in combined transport systems, especially container and RO-RO transport;

v. introduction of up-to-date technological procedures and equipment in order to reduce the physical proportion of labor, improvement of operating efficiency and the quality of performance, and elimination of bottlenecks;

vi. reduction of the seasonal component of incoming cargo and elimination of the influence of weather conditions;

vii. rapid achievement of the social standard and further improvement of working and living conditions.

Particular significance will be paid to internal and external education and completion of education to raise the organizational and technical level of operation;

viii. augmentation of traffic to 2,855,000 tons, not including petroleum, by the following annual increments:

1981	1,918,000
1982	2,271,000
1983	2,521,000
1984	2,736,000
1985	2,855,000

The largest growth of traffic will be in the field of combined transport (container and RO-RO transport), for example, container traffic in TEU [(?) technical-economic units] would be tripled.

Along with technical and technological development, at the outset of the coming planning period there will be a new organization of self-management, so that there will be five OOUR's [basic organization of associated labor] and the joint staff services: OOUR "General Cargo," OOUR "Container and RO-RO Traffic," OOUR "Bulk and Liquid Cargo," OOUR "Timber Cargo" and OOUR "Services."

Development Projects

Twelve projects are projected for accomplishing the goals stated above, encompassing the following:

1. Phase II of the container and RO-RO terminal

with an annual capacity of 150,000 TEU for the LO-LO [(?) lift on--lift off] and RO-RO system and 150,000 tons of cargo on flats, chassis, vehicles and the ferry line. To the present Phase I will be added 400 meters of quay--12 meters for second-generation vessels up to 1,500 TEU, 5 RO-RO's and 1 ferry, a rail platform, 8.1 hectares of storage and handling yards with utility connections, 3 dockside cranes, 3 warehouse cranes on rails and 1 on tires, along with other machinery. Facilities are also envisaged for maintenance of machinery and containers, an operations building and the transition to computer recordkeeping and partial computer management of the terminal.

2. Bulk cargo terminal

with an initial capacity of 500,000 tons, predominantly of raw materials for livestock feed, with a dock length of 273/-14 meters (already built),

a continuous unloading [original reads "cooling"] tower and with rail connections to existing storage sheds. It will be possible to moor vessels up to 80,000 deadweight tons, to store 40,000 tons, and to handle more than 6,000 tons of incoming cargo and 2,400 tons of outgoing cargo daily.

3. Space acquisition

for further development of the port is 52.5 hectares, which will be used partially for building sheds, above all for timber and lumber.

4. Utility connections

including comprehensive road access and water and power supply.

5. Covered storage

construction of 42,000 square meters of open sheds for timber and enclosed sheds for general cargo and the filling of containers is envisaged.

6. Technological equipment

in addition to what already exists, elimination of bottlenecks and further reduction of the physical proportion of labor (forklift trucks 12--250 kN, wheeled loaders, truck trains, tractors with trailers, towers and link conveyors for loading and unloading, radio equipment, and so on).

7. Service facilities

because of the increased share of equipment and especially of specialized equipment service stations are to be built with the equipment necessary at the container terminal and for repairing containers and RO-RO machinery.

8. Information

along with installation of the modern central unit and 25 video terminals and the respective organizational chart for the OOUR's and various services (financial and commercial) for recordkeeping, management and partial automation of the production process.

9. Accelerated development also calls for larger investments in development of personnel as an element in operating efficiency and in development of the social standard of living of the labor force.

Over the 1981-1985 period a total of 2,875,166,000 dinars (1978 prices) will be invested in the development projects enumerated above.

Financing is envisaged from capital of the economy pooled through the Self-Managed Community for Rail and Port Traffic, bank credit and pooling resources of the OOUR's, the port's own resources and credit from suppliers

of equipment. In the present situation the pooling of labor and capital on a basis of interest will have a great influence on accomplishment of the various key projects and the accompanying projects which have not been mentioned here.

Another important matter in the context of development will still be the possibility of building the gas terminal, and the basis has been laid for a power and industrial zone, which will certainly tend to speed up the port's development.

7045
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17 November 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2063

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17 November 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2063

CONTENTS

INTERNATIONAL AFFAIRS

Indebtedness of CEMA Countries Reported
(Jerzy Kleer; POLITYKA, 18 Oct 80) 1

Shortcomings in Transferable Ruble Accounting Viewed
(Mihaly Patai; MAGYAR NEMZET, 18 Sep 80) 5

ALBANIA

Plans for Development of Energy Resources Stressed
(Llazar Papjorgji; BASHKIMI, 13 Aug 80) 8

BULGARIA

Efforts To Increase Consumer Goods Production Emphasized
(Georgi Stoyanov; OTECHESTVEN FRONT, 2 Oct 80)..... 13

Industrial Production During January-August 1980 Period
(IKONOMICHESKI ZHIVOT, 17 Sep 80) 15

CZECHOSLOVAKIA

Worker 'Participation in Management' Under Set of Measures Explained
(Ladislaw Jasik; HOSPODARSKE NOVINY, 3 Oct 80)..... 18

August 1980 Economic Results Summarized
(HOSPODARSKE NOVINY, 26 Sep 80) 24

GERMAN DEMOCRATIC REPUBLIC

GDR Seen Needing FRG Aid for Energy Problems
(Peter Jochen Winters; FRANKFURTER ALLGEMEINE, 11 Aug 80)... 28

'Important Trade Agreements' Announced From Leipzig Fair
(DDR-AUSSENWIRTSCHAFT/MESSEBULLETIN, 4 Sep 80)..... 31

Need for Greater Exports Defended
(Juergen Hamann; SCHWERINER VOLKSZEITUNG, 19 Sep 80)..... 35

HUNGARY

Shortcomings in Manpower Regrouping Measures Viewed
(Csaba Vertes; MAGYAR HIRLAP, 7 Oct 80)..... 39

POLAND

Worker-Supervisor Relations Discussed
(Zofia Krzyzanowska; TRYBUNA LUDU, 15 Aug 80)..... 42

ROMANIA

Oltenia Coal Basin Operations: Problems, Solutions Viewed
(Vasile Boescu, P. Bogdan; REVISTA ECONOMICA, 12, 26 Sep 80).. 45

INDEBTEDNESS OF CEMA COUNTRIES REPORTED

Warsaw POLITYKA in Polish No 42, 18 Oct 80 Supplement p 18

[Article by Jerzy Kleer: "Indebtedness of CEMA Countries"]

[Text] A special feature of the world economy in the 1970s has been the extremely rapid rise in foreign trade between the developed capitalist countries and the CEMA countries. The relaxation of political relations and the rapid strengthening and expansion of economic contacts have been accompanied by new aspects of economic policy such as the abandonment of certain previously mandatory theoretical canons. In the 1950s and early 1960s it was a fairly common thesis that getting loans (at least on a large scale) from the capitalist world was not in accord with the concept of socialism. This doctrinal statement had in reality conflicted with the broader and more fundamental concept of the peaceful coexistence of different social systems, but it could apply in a situation in which economic and technological contacts were limited.

This statement became subject to a reassessment once economic cooperation among countries with different social systems became expanded. It then turned out that there exists a rather basic disharmony in the structure of foreign trade among such countries, along with, in many cases, the absence of the necessary institutional solutions. This soil, among other things, gave birth to the concept of combined companies, of cooperation between enterprises belonging not only to different countries but different social systems. Practice proved to be ahead of theory, but this could not be otherwise in a situation in which changes in the share of foreign trade by one party occurred quite rapidly while the other party was forced by the existing trade barriers, e.g. the lack of convertible currency in the CEMA countries, to resort to new unprecedented solutions on a day-by-day basis, so to speak.

Fundamental changes in the orientations of foreign trade of the CEMA countries took place in the first half of the 1970s. They were reflected chiefly in the extremely rapid rise of the share of imports from developed capitalist countries and the much slower rise in exports to these countries. This is clearly illustrated by Table 1.

Table 1. Share of Developed Capitalist Countries in the Imports and Exports of CEMA Countries

		1970	1975	1976	1977	1978	1979
Bulgaria	I	19.1	23.6	22.9	20.0	15.0	15.4
	E	14.2	9.3	10.5	9.6	9.8	14.4
Czechoslovak SSR	I	24.5	24.6	24.9	23.6	23.2	24.1
	E	20.4	19.8	18.2	18.6	18.0	19.9
GDR	I	26.7	33.4	36.5	31.4	38.1	35.6
	E	21.9	22.4	24.3	20.6	19.7	20.8
Poland	I	25.8	49.3	48.4	43.3	40.5	37.9
	E	28.4	31.5	32.0	31.2	31.3	31.1
Romania	I	39.5	43.4	36.2	36.7	39.3	35.7
	E	31.9	34.7	34.7	30.3	32.8	36.1
Hungary	I	28.8	27.0	36.0	36.9	39.0	37.9
	E	28.0	21.4	30.8	29.0	29.8	32.3
USSR	I	24.0	36.4	37.7	33.0	31.8	35.0
	E	18.7	25.5	28.0	26.5	31.8	35.0

First of all, it should be pointed out that foreign trade with the developed capitalist countries has increased in share in nearly every CEMA country. At the same time, it has been extremely differentiated depending on the individual country. Among the CEMA countries the highest increase in the share of imports from the capitalist countries in the overall imports took place in Poland in 1974 (50.8 percent). For the CEMA countries as a whole, imports from the capitalist countries reached their peak in 1974-1976--with the exception of Hungary in 1979. An important aspect of this trade is its marked fluctuations from one year to another; that is, the share of both imports and exports increases or falls from one year to another, and it must be said that such fluctuations adversely affect efficient management of production capital and the market supply.

The most important conclusion ensuing from this table, however, is that the share of imports from the developed capitalist countries has consistently exceeded the share of exports to these countries. If it is moreover considered that imports by the CEMA countries usually exceed their exports or at most balance them, it is obvious that part of the imports from the developed capitalist countries was obtained on the basis of credits. The state of the indebtedness of the individual CEMA countries is presented in Table 2.

Table 2. Aggregate Net Indebtedness of 7 CEMA Countries and Banks to the Capitalist Countries During 1970-1978 at Year End, in US$ Billion

Country	1970	1974	1975	1976	1977	1978	1979
Bulgaria	0.7	1.2	1.8	2.3	2.9	3.4	3.4
Czechoslovak SSR	0.3	1.1	1.5	2.1	2.5	2.0 (2.9)	3.5
GDR	1.0	2.8	3.8	5.0	6.6	8.2 (7.7)	9.2
Poland	0.8	3.9	6.9	10.2	14.1	16.8 (16.7)	18.7
Romania	1.2	2.6	3.0	3.3	3.0	4.4 (4.2)	5.8
Hungary	0.6	1.5	2.1	2.8	4.3	5.7 (6.4)	7.1
USSR	1.9	5.0	10.0	14.0	13.7	17.2 (11.6)	17.5
CEMA banks	0.6	0.9	3.1	4.0	5.1	3.0 (5.3)	
	7.1	19.0	32.2	43.7	52.2	60.7 (58.4)	65.0

The parentheses include another source's estimate.

It should be noted that these figures are tentative, since they do not represent official data published by the CEMA countries. These figures are taken from two sources: materials of an office dealing with East-West foreign trade at the American Department of Commerce, provided to the United Nations European Economic Commission, and the publication OST-WESTHANDEL 1979 UND AUSSICHTEN FUER 1980, by J. Stankovsky, Wiener Institut fuer Internationale Wirtschaftsvergleiche.

It is estimated that by the end of 1980 the overall indebtedness will be, according to Stankovsky, US$ 70 billion or, according to the Department of Commerce, US$ 76 billion. Servicing this debt will cost (according to the different estimates) US$ 4.9-5.9 (in 1980). One-third of the loans comes from commercial banks and two-thirds from government credit and other special credits. The structure of the bank credit is more or less as follows: short-term (up to 1 year), about 43 percent; for from 1 to 2 years, about 18 percent; and for more than 2 years, about 38 percent. Thus this is not a favorable bank credit structure--neither as regards the schedule for repayment nor as regards the interest charges.

The most important questions, however, concern two other aspects: what were the loans received for, and is the indebtedness large? The answer to the first question is relatively simple. In general, it can be said that, as a rule, the imports pertained to capital goods and were intended to modernize the national

economy and acquire up-to-date technology. If these purchases are expedient (and as we know from Polish experience at least, they have not always been so), they will undoubtedly result in new sought-after means of production and consumption and thus contribute to the further development of the CEMA countries.

The answer to the second question is more complex. A partial answer can be obtaine obtained by comparing indebtedness with annual exports to the loan-granting countries. On thus taking, on the one hand, the volume of exports by individual CEMA countries to the markets of the developed capitalist countries and, on the other, the size of indebtedness (exclusive of debt servicing) for 1979, we obtain the following figures (showing the ratio of indebtedness to annual exports): Bulgaria, 2.78; Czechoslovakia, 1.31; GDR, 2.74; Poland, 3.7; Romania, 1.71; Hungary, 2.77; and the USSR, 0.97.

The situation differs for the individual countries, ranging from a relatively low ratio for the Soviet Union to a sizable ratio for Poland. Despite this marked differentiation, however, a vigorous intensification of exports to the markets of the developed capitalist countries is among the paramount economic tasks for an overwhelming majority of the European member countries of CEMA.

1386
CSO: 2600

SHORTCOMINGS IN TRANSFERABLE RUBLE ACCOUNTING VIEWED

Budapest MAGYAR NEMZET in Hungarian 18 Sep 80 p 5

[Report by Dr Mihaly Patai, Financial Research Institute: "The Transferable Ruble"]

[Text] Reviewing the experiences in socialist international labor division, the first secretaries and heads of government of the CEMA countries approved in 1962-63 the proposals to change to a multilateral accounting system in the trade between the member states. The new multilateral accounting system was created to promote the development and expansion of socialist international labor division and to strengthen the economic and trade relations between CEMA's member states. In talking about the problems of the accounting system, we must premise: the multilateral accounting system, introduced on 1 January 1964, has indeed helped the development of the socialist economic community.

In accordance with the Complex Program, specialists of the CEMA's member states are overviewing and evaluating during these weeks and days the functioning of the transferable ruble--one of the key elements of CEMA's mechanism of cooperation--and are determining the next steps to be taken. This is an excellent opportunity for us to show what the various views of Hungarian specialists are with regard to this important means of accounting.

The Hungarian CEMA research of the 1970's unequivocally and unanimously pointed out the deficiencies of the accounting system based on the transferable ruble. The introduction of the system of multilateral accounting meant a step forward only in a formal sense, as foreign trade relations are still bilateral. There is a sharp contradiction in CEMA's accounting system between the multilateral institutional framework and bilateral practice. The member states' delivery agreements are controlled, specified and balanced bilaterally. Accordingly, financial accounts are also balanced bilaterally. The fact that the purchase of goods above the quotas is practically impossible, has a fundamental effect on currency relations. The transferable ruble moves in a closed accounting circle, having no meaningful relations either with currencies outside the circle or with those within the circle.

The transferable ruble does not actually fully perform monetary functions. The CEMA states account their barter in transferable rubles, determining the prices of individual goods in a collective currency. Because of unrealistic price relations and rates of exchange, the ruble cannot be a standard of value or prices. The same goods are priced differently in various relations and it is only an accident if one relation's unit corresponds with another relation's unit.

We cannot speak of a medium of circulation function in bilateral relations. The balance surplus, the given credit, and the interest acquired in transferable rubles cannot be used as a medium in the exchange of goods.

The possessor of transferable rubles has no interest in accumulating reserves because rubles cannot be used as a means of circulation payment. Since the collective currency does not even fully perform the four monetary functions, it does not (cannot) function as a world currency; so much the less, as it is used only within CEMA. The socialist collective currency does not adequately perform monetary functions and, consequently, has a very limited exchange value.

There are, of course, other views on the transferable ruble as well. According to some socialist economists, the present CEMA cooperation meets the objective requirements and the mechanism functions adequately. Consequently, any new element would only cause disturbances in its operation.

The overwhelming majority of publications dealing with the CEMA's currency and financial questions emphasizes the results achieved and touches upon the problems only in passing. According to most specialists, the experience gained since the establishment of the transferable ruble 15 years ago is favorable and meets the expectations toward the system. The transferable ruble—as the key currency of the accounting system—has all the necessary attributes (international and collective character, standard of value, means of payment function) which qualify it for the role of a full-value currency. At the same time, these same people also point out that "the possibilities inherent in the mechanism are not always being exploited to their full extent."

There are views according to which the present accounting system, as far as its institutional possibilities are concerned, exceeds the demands of the present foreign exchange of goods. (Namely, with regard to the institutional possibilities of the accounting system.) The present foreign trade relations, which are mostly bilateral, do not necessarily require a multilateral accounting system.

The 1970s also saw some attempts to eliminate the deficiencies of the accounting system. One of the problems most frequently discussed in economic circles is that balance surpluses are not being used in the accounting system. Economists have been dealing for a long time with the use of claims (balance surpluses) emerging in transferable rubles.

To create a use for claims in transferable rubles is an important but not an absolutely imperative task. In the present stage of CEMA cooperation, the familiar problems which encompass the entire economy (e.g., beyond the actual economic problems, CEMA's parallel production capacities, resulting in an uncoordinated stand on the capitalist market; deficiencies of the internal economic management system or the question of labor discipline) require complex solutions. The transferable ruble is only one of the difficulties emerging in CEMA cooperation: its solution is a function of decisions concerning overall socialist integration, including the national mechanisms of economic management.

The necessary changes in CEMA will undoubtedly affect the sphere of currency and finance and its key element, the transferable ruble. With reference to this, two strong views emerged in the CEMA literature concerning the future role of the transferable ruble. Studies have been published in the Hungarian, Czechoslovak and Romanian economic literature which foresee a larger role for CEMA's national currencies. According to this conception, the national currencies would take over certain functions of the means of accounting and payment; the transferable ruble's primary function would be an SDR-type surplus means, to quote a bad example. This does not mean disregarding the transferable ruble. On the contrary, it would mean progress: a decrease of the number of functions to be carried out (in a quantitative sense) could result in a qualitative change in carrying out individual tasks. Several economists, opposing the above view, consider an increase of the transferable ruble's role as a fundamental requisite for the development of the CEMA's system of currencies and finances. It would be a mistake to substantiate the differences of opinion, so much the more as the key question is not the future role of the transferable ruble but the development of socialist integration. This is the main goal for which we must select the appropriate system of means.

9414
CSO: 2500

PLANS FOR DEVELOPMENT OF ENERGY RESOURCES STRESSED

Tirana BASHKIMI in Albanian 13 Aug 80 pp 1-3

[Article by Llazar Papajorgji, director of energy directorate in the Ministry of Industry and Mines: "Development of Energy Resources and Aims of the Technical and Scientific Revolution in this Field"]

[Text] The Eighth Plenum of the Central Committee of the Albanian Workers Party, which analyzed the improvement of the level of scientific work and of its effectiveness for the present and future development of the country and the programmatic and very important speech of Comrade Enver "The Progress of the Country Is Inseparable From the Development of Sciences and Technology" are a great source of inspiration and a great work program for the energy workers. Comrade Enver, in a particular manner, advised us, the workers of the energy system, to give importance to the prognostic studies for new energy resources for the expansion and invigoration of the single energy system and for the utilization of this system at a higher scientific level so that the level of the assurance of the supplying of consumers electric energy and the economic indicators will be improved, for a broader introduction of electric power in production and in the automation of the various work processes. Likewise, the studies, designs and experiments in regard to problems of thermoelectric power resources must be elevated to a higher scientific level.

In accordance with the concrete conditions of the country, the party worked out the program of development of the energy system, having in mind that it should progress at a more rapid pace in order that it may lead in implementing the ever increasing demands of the economy, aiming at rationally utilizing the hydropower resources of a national and local character, as well as thermal power resources. Priority has been given to the construction of hydroelectric power stations and to the assurance of the simultaneous work of all energy producing resources and of distribution and transforming equipment in the single power system of the country, in order to improve the level of the guaranteed supplying of consumers and the economic effectiveness of the resources.

The hydropower reserves of our country constitute one of the most profitable riches of the economy. The climate factors that are characterized by abundant rainfalls, the mountain relief of our country and the geological and topographic conditions of our valleys, have created a rich and developed hydrologic network. About 65 percent of the annual stream waters flow into the main rivers of the country which is important from the point of view of hydropower resources. Of

the approximately 31 million cubic meters of water, that our rivers carry during the year, about 50 percent are carried by the Drin and Vjosa rivers. From the point of view of hydropower reserves, our country is considered as being among the richest countries in Europe, for its area. So far, about 20 percent of the hydropower reserves have been utilized; therefore, the possibilities exist for supplying the needs of the country with hydropower for some decades to come and, even, to export the surplus.

The studies made by our specialists have brought into the open the fact that foreign scholars deliberately reduced the data about the hydropower reserves in our country, because, they wanted to create the erroneous idea that our country was poor in this field. The Chinese revisionists were also involved in this hostile and anti-Albanian activity; they did everything possible to sabotage the construction of the Vau i Dejes and Fierze hydroelectric power stations. But, their plans failed shamefully thanks to the consistent and revolutionary attitude of our party which, relying on the efficiency of our specialists, educated in the love for the country, courageously rejected their vile assertions. The studies made in the hydroelectric power field have proven that not only the utilization of the main rivers on which projects of a national character are being constructed, but also the utilization of the local hydropower resources in which it is possible to produce a quantity of electric power equal to about three times that what is produced now by the "Karl Marx" hydroelectric power station in Ulze are of economic interest.

Of particular importance also is the utilization of thermoelectric power reserves, especially the production of electric and thermal power by the rational use of coal.

The party guideline to replace liquid fuel with solid fuel is one of the main directions of our work. As a result of the measures, that have been taken, it has been possible to replace, every year, by means of the power system of our country alone, about 200,000 tons of liquid fuel with gas and solid fuel. Decision No 166 of the Council of Ministers is a great work program for the workers of the energy sphere in all sectors of the economy.

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In the conditions of such rapid development, great and complicated technical and scientific problems have continually confronted the workers of the power sector; these problems were faced and successfully solved by our specialists. Our power workers have struggled and have been capable of liquidating the relative backwardness that had existed, on the one hand, between the high scientific level of technology in the power sphere, that responds to the most advanced science, and the technical capacities insufficient to respond to this qualitative development at very rapid rates. This was made possible by having always in mind the recommendation of the party regarding the necessity of deeper analysis of the problems of the technical and scientific revolution by all specialists at the base and in the center. We have always begun with the thought that the problems of the power system are our own problems, that they are specific and that they are increasing and continually dynamic; therefore, only reliance on our own forces, as the party recommands us, makes it possible to successfully solve many qualitative technical problems without which the power system cannot function normally as a live organism.

Starting from and based on these teachings, many important technical problems have been successfully solved. Thus, at the Fier thermoelectric power station, technical measures were studied, designed and implemented, leading to the increase of the production capacity of boilers; rational methods were applied to reduce the effectiveness of corrosion in the thermoelectric power equipment; and the reasons for the damage to the electric insulation of equipment in the 6 kilovolt feeders from the ferroresonance effect were established; and, in the area of the industrial zone, the operation of the 25 megawatt turbogenerator, as a compensator, was studied and implemented, and the T G E was repaired and so forth. At the Vau i Dejes hydroelectric power station, workers studied and successfully solved the most suitable scheme for the 220 kilovolt "zbarave", and the protection and automation, which assure the guaranteed supplying of the system with electric power, in the conditions of supplying energy for export by some aggregates of this hydroelectric power station; while, at the Fierze "Light of the Party" hydroelectric power station, the power workers studied and successfully solved the possibility for exporting energy without reducing the guaranteed supply of electricity to consumers in the country; the problem of removing the consequences of corrosion in the working wheels of hydroturbines was solved; and many pieces, equipment and spare parts for the aggregates, which in the past were imported from abroad (now about 92 percent of them are produced in the country), are produced on the spot and so forth. Likewise, in the other power projects, such as in Korce, Maliq, Cerrik, Vlore, Bistrice, "Stalin" City and so forth, many technical problems were solved, making possible the normal functioning of the aggregates, improving the assurance of the power supply and increasing the economic effectiveness.

Good work was done in replacing liquid fuel with solid fuel at the thermoelectric power stations in Vlore and Tirana; and the conversion of the thermoelectric power stations in Ballsh and Cerrik into gas was studied, designed and carried out with success and so forth.

Putting into operation important consumers of electric power, such as the "Steel of the Party" metallurgical plant, the polyvinyl chloride plant in Vlore, the petroleum processing plant in Ballsh and so forth, has placed before the power system special qualitative requirements for providing power, because, these consumers not only do not allow interruptions of power, but also they do not permit prolonged reductions of tension. These special requirements for supplying consumers with power, the putting into operation of powerful energy resources and the great expansion of the power system, which covers the entire territory of the country with more than 2,500 kilometers of 35, 110 and 220 kilovolt tensionlines, have placed before power workers and specialists great tasks and responsibilities. To respond to these requirements, 466 workers and specialists from the grassroots and the center have been activated and are working on 181 scientific study themes.

To solve important technical problems, we are working for the broad introduction and utilization of rational scientific methods through close cooperation with the Mathematical Computation Center of the Academy of Sciences and the university departments. Thus, important problems have been solved, such as: the designing of the best blueprint for the power system that assures the most rational distribution of power fluxes both in the direction of reducing losses in the network and in the direction of increasing the assurance of the guaranteed supplying of consumers; the problem of parametric oscillations in the 35 kilovolt system in Tirana and Ballsh, which in the past was causing disturbances in the system, was solved with

the assistance of Bardhul Golemi, doctor of technical sciences; problems concerning the level of tension in various points of the power system have been studied, in normal conditions and in conditions of breakdowns; and the study for determining the level of insulation of the 220 kilovolt line, which connects the Vau i Dejes hydroelectric power station with Tirana, was terminated, making it possible to draw the important conclusion that, from the atmospheric discharges that lead to outages in the lines, in about 15 percent of the cases, the 2 circuits of these lines, attached to the same pole, are switched off. Likewise, in the Fierze-Vau i Dejes line, the currents of short connections in the various points of the power system for determining the duties of protection and automation, the problems of the discharge of loads in the conditions of the lowering of frequency in the power system, the necessary technical minimum of work in the electric power stations in the conditions when the rivers carry too much water and the situation of the loading of lines and of special main lines in the conditions of breakdowns that are accompanied by disturbances in the important lines--all are studied and established by the means of electronic apparatuses. Studies have also been carried out on chemical problems, especially on the reduction of the consequences of corrosion through the utilization of rational methods, such as the use of ammoniac and the use of centralization and preservation of boilers and turbines and so forth; while, in regard to thermal problems, attention has been concentrated in the area of reducing the consumption of fuel per production unit and of burning coal with lower calorific power and so forth.

In the conditions of the invigoration of the power system, as a result of the introduction of new powerful energy resources, especially of the "Light of the Party" hydroelectric power station in Fierze which will double the established power of the system when the hydroelectric power station will work with full capacity and will raise more than 20 times the hydroelectric power reserves, that will be gathered in the great lake which has begun to take shape, other and even greater and more complicated problems will confront power workers so that they will respond to the great requirements imposed on the power system for supplying power to all consumers in general and to those consumers of great importance in particular.

Special attention is being given to the scientific processing of the hydroelectric power basins in order to assure the best utilization of hydropower reserves. For this, a group of power specialists and of mathematicians are working together with the Mathematical Computation Center of the Academy of Sciences, the University, the Institute of Hydrometereology and so forth. The conclusion of this study will make it possible, in accordance with the quantity of water carried by the rivers, that is calculated at 75 percent with certainty, to determine the optimal quantities that should be kept in the lake in the different periods of the year, especially in summer.

The increase of the static and dynamic stability of the power system in conditions of extreme regimens, in winter and summer, especially in the minimal regimen with electric power stations; the closing up of the 220 kilovolt-rings with the commissioning of the first Fierze-Burrel-Elbasan line; the determining of the best scheme of the configuration of the power system in order to assure a guaranteed supply of energy and a minimal loss in the network; the determining of the degree of insulation of the special lines, especially of the 220 kilovolt lines; the use of rational scientific methods for the rapid and precise discovery of defects in the aerial cables, especially the transitory cables; the determining of parametric

oscillations in the 220 kilovolt lines and the finding of the ways to eliminate them and so forth, all are important problems concerning the technical and scientific revolution, problems that demand special attention and concern from us, the workers of the power sector.

The reduction of the various losses because of the domestic needs of the power stations, especially in the thermoelectric power units, the reduction of norms for the consumption of fuel through the improvement of different schemes and reconstructions, the replacement of liquid fuel with solid fuel, the discovery of the causes of corrosion and of cavitation and the determining of the measures for reducing their negative effect and other machine, chemical and thermoelectric power problems, also are important tasks concerning the technical and scientific revolution in the field of energy resources. The successful solution of these problems, and of other problems, sets forth before us important tasks for the continual improvement of the technical and vocational training of workers so that the close specialization in some key problems will be achieved, such as, automatic regulators of the tension and of the speed of automation of tele-measurements and so forth. This requires the further improvement of cooperation with specialized institutions such as the Academy of Sciences, the university, Studies and Design Institute No 3 of the Ministry of Construction and so forth. This requires, among other things, the perfection of work organization and the invigoration of the research nucleus in the center of the system so that the acute problems assigned to the power sector will be solved on the best scientific level in accordance with the ever-increasing quantitative and qualitative demands on the power system.

The power workers, relying on the party teachings, have all the opportunities to respond to the very important and responsible tasks assigned to the power system.

9150
CSO: 2100

EFFORTS TO INCREASE CONSUMER GOODS PRODUCTION EMPHASIZED

Sofia OTECHESTVEN FRONT in Bulgarian 2 Oct 80 p 2

[Article by Georgi Stoyanov: "More Goods on the Market"]

[Text] The great concern of the people about an ever better supply of consumer goods found a new and bold expression in Comrade Todor Zhivkov's report this May at the meeting of the Secretariat of the BCP Central Committee with the first secretaries of the okrug party committees and ministers. At present all attention is concentrated on the consumer goods producers, not only the economic enterprises in the system of the Ministry of Light Industry, the National Agroindustrial Union and the TsKS [Central Cooperative Union], but also on the labor collectives of the enterprises of all branches of the national economy.

All practical and organizational work done on the basis of consistent application of the economic approach must be aimed at uncovering all additional sources for production of more goods and of better quality and wider selection as well. First of all it is necessary to fulfill the counterplan in order to ensure regular deliveries of the contractual production.

The main task should be to increase production of goods which are in greatest demand on the market. This requires a flexible structure of production so that it might better adapt to the needs of the people. The trade system needs products that satisfy the sophisticated taste of the people and not such that remain unsold.

Due to the higher purchasing power of the workers in our country there is a greater demand for new, stylish and luxury goods and delicatessen products. The contemporary socialist worker looks for fine fabrics and stylish clothes and shoes. Delicatessen products are now also found more often on his table. Our production must meet these daily needs of the people.

At the same time, production by the enterprises manufacturing goods for widespread use should be expanded, particularly production of haberdashery items, which has still not been developed according to existing conditions and capacities. And in this case as well, all attention should be focused on production of goods which are in demand by the population but not provided by the main production system, including also different types of small articles.

Internal Trade could play a very important role in this line. It should supervise most strictly the fulfillment of the contracts concluded with the producers. Direct ties of producers with the market should be encouraged. They have every right to offer their goods to the trade organizations without any middleman. In this manner the chain of shops will continue to expand.

At present the management of each town or village system must directly keep track of all product assortments on the market and act in time to have them in stock. It has the responsibility of supplying goods produced at enterprises in its own territory, primarily by the system of self-sufficiency. The town or village management also takes care of all improvement of trade services, and at the cooperative markets as well.

Consumer goods supply has become the most important goal for each Fatherland Front organization. They are in position to signal first which goods have not been supplied by the town or village system, and to criticize publicly the managements of the enterprises in their district which do not regularly supply the earmarked production.

Furthermore, the expansion and consolidation of the system for self-sufficiency in the town or village systems, the development of more auxiliary farms for better supply of foods, and the reduction of food prices in public cafeterias, etc. depend greatly on the initiative of the Fatherland Front committees and organizations.

The Fatherland Front organizations should also increase public control on trade services. One should never consider it normal for the managers of some stores to justify the absence of one or another product from the stand by the words "It has not been delivered." They should not rely on others but should most earnestly try to find the goods in the storehouses or at the producers. The Fatherland Front in the neighborhood or in the town and village system should not budge from this position.

More goods of better quality and assortment must become a national goal and its fulfillment depends at present on the Fatherland Front organizations.

1010
CSO: 2200

INDUSTRIAL PRODUCTION DURING JANUARY-AUGUST 1980 PERIOD

Sofia IKONOMICHESKI ZHIVOT in Bulgaria 17 Sep 80 p 4

[Report submitted by the Committee for Unified Social Information System: "Bulgarian Industrial Production for January-August 1980"]

[Text] The commodity marketing plan for the first 8 months of the year was fulfilled 100.2 percent. Units which scored the highest over fulfillment included the Committee for Heavy Investment Machine Building, the Metal Cutting Machines Plant DSO [State Economic Trust], the Shipbuilding DSO, the Elprom DSO, the Cables and Wires Economic Combine in Burgas, the Farmakhim DSO, the Petrochemical Combine in Burgas, the Rila and Pamukoteks Economic Combines, and the Vinprom DSO.

Compared with the January-August 1979 period the volume of overall industrial output rose 4.2 percent.

The fulfillment of the commodity output marketing plan by ministry and the rate of growth of output were as follows:

Ministry	January - August 1980	
	Fulfillment of the plan for the marketing of the commodity output, January - August in %	Overall Industrial output in % of January - August 1979
Ministry of Power Supply	102.2	109.0
Ministry of Chemical Industry	101.3	110.9
Ministry of Machine Building	102.2	104.5
Ministry of Electronics and Electrical Engineering	102.0	109.4
Ministry of Light Industry	102.8	104.1
National Agroindustrial Union	97.6	99.4
Ministry of Construction and Construction Materials	95.1	101.7
Ministry of Metallurgy and Mineral Resources	101.0	104.0
Ministry of Transportation	96.8	104.0
Ministry of Forests and Forest Industry	96.5	103.1
Ministry of Internal Trade and Public Services	101.6	98.9

The production of basic industrial commodities rose as follows:

	Measure	Output Aug	Output Jan-Aug	Jan-Aug 1980 in % of Jan-August 1979
Electric power	million kw hours	2598	22602	106.7
Coal	thousand tons	2723	20587	106.4
Briquettes	" "	121	927	109.3
Rolled ferrous metals	" "	264	2030	103.0
Hot rolled steel sheets	" "	114	856	114.2
Plastic lined steel sheets	" "	1.3	10.6	119.7
Steel pipes	" "	20	160	103.0
Electrical instruments	thousands	23	187	110.4
Lathes	pieces	734	6062	129.1
Electric hoists	"	9528	76628	104.4
Forklift trucks	"	3800	29799	92.0
Gas operated lift trucks	"	1684	14547	106.1
Nitrogen fertilizers	thousand tons	58	492	110.9
Polyethylene fabric	" "	1.7	12.7	124.1
Chemical staples and fabrics	" "	8.6	65.5	108.3
Cement	" "	457	3477	93.7
Tiles	thousands	8009	52134	104.4
Pressed wood and other wood tiles	thousand cubic meters	22	204	103.3
Paper	thousand tons	28	203	97.1
Household glassware	thousand leva	1570	16569	112.7
Porcelain tiles	thousands	19392	163992	155.9
Household porcelain-ware	thousand leva	2865	23738	105.2
Woolen fabrics	million meters	3.0	25.1	108.4
Silk fabrics	" "	2.7	22.2	107.8
Knit outerwear	million pieces	3.2	26.6	109.7
Meat	thousand tons	39.9	290.4	97.6
Vegetal cooking oils	" "	1.4	91.7	126.9
Tobacco products	" "	6.5	50.8	102.7

Commentary

The August results indicate that the labor collectives in industry took an important step toward the implementation of the task set at the July BCP Central Committee Plenum on the fulfillment of the 1980 counterplan. The considerable overfulfillment of the goods marketing plan is particularly indicative. The August output was six percent above the planned figure while the January-August plan was overfulfilled by 0.2 percent. Most of the branches and economic organizations fulfilled their plans for this indicator.

The commodity output plan was overfulfilled as well by 0.6 percent for the first 8 months of the year. The plan for a number of particularly important items is continuing to be fulfilled rhythmically: for electric power, coal, calcinated soda, nitrogen fertilizers, machine units, cranes, electric hoists, forklift

trucks, gas operated lift trucks, household glassware, porcelain tiles, household porcelain ware, fabrics, knitted goods, and many others.

It must be pointed out, however, that existing preserves for greater output with lesser outlays were not fully used everywhere. A number of units continue to fail in the fulfillment of their plans. The main reasons for their lagging are of a subjective nature or the delayed implementation of contractual obligations for the delivery of raw materials, materials, and cooperated items.

A number of units, particularly within the light industry system and the National Agroindustrial Union achieved a lower rate of growth of output in August. This adversely affected the overall growth rate of industry which declined by 0.4 percent compared with the first 7 months of the year.

A total of 44 economic organizations lagged in the fulfillment of their marketing plans. This adversely affected their industrial and consumer funds. A number of units failed to create the necessary organization and conditions for the implementation of the plan for important items such as lathes, electrical instruments, cement, paper, corrugated cardboard packaging, meat, meat products, and some others.

The higher production results achieved by most units and economic organizations in August are a major prerequisite for the successful implementation of the annual plan. However, the weaknesses allowed in the past months indicate that we must work as stipulated by the July BCP Central Committee Plenum: maintaining a tireless pace everywhere for the discovery and timely and fullest possible utilization of all available resources and reserves for the fulfillment of the unified plan by all labor collectives and for all indicators.

5003
CSO: 2200

WORKER 'PARTICIPATION IN MANAGEMENT' UNDER SET OF MEASURES EXPLAINED

Prague HOSPODARSKE NOVINY in Slovak 3 Oct 80 p 3

[Article by Ladislaw Jasik, secretary of the Central Union Council: "Worker Participation in Management"]

[Text] "An inseparable part of this improvement of the system of planned management," it is stated in the Set of Measures for Improving the Planned Management System of the National Economy After 1980, "must be a deepening and raising of the quality of worker participation in the management of enterprises and economic production units, in the improvement of work organization, in the strengthening of material interest, and in the utilization of resources committed to the economic, social and cultural development of collectives. This presupposes a systematic improvement in the principles of democratic worker participation in management."

Worker participation in the management of production and the economy fulfills several functions. It is one of the paths to a realization of ownership rights, and through this also to the employment of the individual in the fulfillment of the socioeconomic plan of the CPCZ under the conditions of each workplace. It is one of the paths to the creation of a joint ownership interest on the part of the workers in discovering unused potential and achieving better economic performance. It has an effect on the improvement of management and work organization, especially through the utilization of the collective experiences of workers. It is one of the forms for overcoming the nonantagonistic differences between management personnel and those being managed. The implementation of these functions is constantly creating and deepening the consciousness of workers as economic participants in a socialist state.

Where is the Unused Potential?

The results which have been achieved will not suffice to fulfill the targets of the Sixth Five-Year Plan. The Set of Measures is a call primarily to federal and economic agencies, and to the Revolutionary Trade Union Movement, as the bearers and organizers of democratic worker participation in management, to seek out and utilize unused potential for deepening and increasing the quality of economic performance. This potential rests, above all, in the elimination of the following errors and shortcomings:

1. The underestimation of worker participation in management. While most economic managers fully recognize and are creating the conditions for worker participation in management, there are still sufficient managers to whom it mistakenly seems that this is a formality decreed from "above" and that therefore it must be taken into consideration, but who in reality say that it contributes nothing, complicates management, holds up decisionmaking, and intrudes on the competence of management personnel. And, a onesided comprehension of the scientific technical revolution is leading several top managers to the illusion that the technical side of this revolution will resolve, by itself, social relationships in production;

2. A formal approach to the development of individual forms of worker participation in management, where "participation" in socialist competition is understood formalistically, as assuming a mere advisory role, as passive participation, as giving approval; as is, for example, "the right to be informed"--at production consultations, the right to attend member meetings and conferences of the Revolutionary Trade Union Movement, etc. Worker participation in management is, then, not being implemented as the exercise of the rights and resposibilities of every worker; to participate directly or indirectly, in accordance with his knowledge and abilities, in the most varied groupings for the most efficient utilization of social resources, for their constant development in the interest of meeting plan targets and the satisfaction of the needs of the entire society;

3. Prevention of the separation of responsibility for the development of individual forms of worker initiative from economic management and the overall activity of union agencies and organizations. This is evident, for instance, in the insufficient focusing of commitments on increasing the efficiency and quality of production, in the contradictory effects of several economic instruments, in the failure to fulfill rationalization programs, in the slow implementation of suggestions for improvements and inventions, in the overlooking of progressive experience, in the fact that pressing production problems are not resolved at production consultations, that collective agreements do not contain measures for the elimination of equality in compensation, for the strengthening of technological and labor discipline, etc.;

4. Refusal to permit the neglect of the creation of the economic, technological, and organizational conditions for the development of the exercise of individual initiative. For instance, integrated indicators such as the lowering of material costs, profit, final product quality, and others, are not being worked out at collectives in such a way that each worker has a role in their assurance according to which he would receive his wage, premiums and compensation. This applies also to incomplete construction projects, production for which technology and materials are lacking, as well as electrical energy sectors, and insufficient supplies of railroad cars, spare parts, equipment, etc.;

5. Refusal to be satisfied with the reality that the ideological-educational, propaganda, and agitational work of the Revolutionary Trade Union Movement has little effect and is undifferentiated. Many enterprise, factory, and workshop committees of the Revolutionary Trade Union Movement, and its sectoral agents, do not connect the signing, inspection, fulfillment and evaluation of socialist commitments, the resolution of thematic tasks, the implementation of rationalization

measures, suggestions for improvement and inventions, the exchange and spread of progressive experiences, with the improvement of educational, propaganda, and agitational resources, with an increase in their influence and effect.

Implementation Counterplanning

An important task stems from the Set of Measures for party, state, economic, and union agencies: achieving a fundamental turnabout in the organization of worker participation in the preparation of five-year and yearly implementation plans, especially with the aid of implementation counterplanning. This is important form of active worker participation in the discovery and utilization of internal unused potential, so that the established goals are reached more rapidly and with less consumption of all kinds of resources.

Implementation counterplanning originates from the five-year plan targets for an organization for a given year, including the directions established for the organization by its supervisory agency during the preparation of the yearly plan, and from the established connections among the decisive qualitative objectives and norms of material incentives. These connections are a component of the five-year plan, determine the basic direction of implementation counterplanning, and are the starting point for its material incentives.

It is important that the economic production units assure, in time, for their subordinate enterprises, a comprehensive, differentiated, balanced breakdown of guideline numbers in the five-year plan proposal and yearly implementation plans which has been coordinated with supervisory organizations in terms of volume, time, and quality. The enterprise management will then assure the elaboration, down to the workshop level, of the breakdown of guideline numbers in the plan proposal, which express requirements for the growth of labor productivity, the conservation and higher valuation of fuel and energy, raw materials and stock, increased final product quality, lower production of defective goods and less waste in production, the better utilization of production capacity, and increased health and safety regulations at the workplace.

The unions, in conjunction with management, have as their task at production consultations the familiarization of workers with the guideline figures of the proposed plan for the enterprise, factory, and workshop, with the incentive conditions of its formulation and implementation, and with the causes of lags in the qualitative aspects of production. Another task is to discuss ways of mobilizing internal potential. At the same time it is essential that inventors and those who improve operations, the exemplary and best workers, the comprehensive rationalization brigades and the socialist work brigades establish concrete objectives directed at the uncovering and utilization of unused potential in the consumption of labor value added and labor content, the strengthening of qualitative plan indicators, labor productivity growth, an increased share of top-quality products, the utilization of capital stock and increased use of shift work, an increased tempo of scientific technical development, a decrease in the term of capital investment, increased production of products in short supply for the domestic market, a greater fulfillment of export deliveries, etc.

In the event that the strengthening of objectives through implementation counterplanning will create higher consumption of energy, raw materials, stock, and intermediate

products, the proposing organization and its supervisory agency should resolve the coverage of these needs with the supplier within the framework of the negotiation of supplier-consumer relations during the process of plan formulation. At the same time, the supplier may not weaken the material fulfillment of the targets of his remaining consumers.

The enterprise management must establish, given the existence of intraenterprise khozraschot, and on the basis of incentive relationships, concretely differentiated objectives for the individual intraenterprise units (collectives). It focuses above all on those areas which represent a crucial contribution to the achievement of objectives, particularly qualitative ones. In conjunction with agencies of the Revolutionary Trade Union Movement, management must simultaneously establish rules, according to which a given intraenterprise unit will share in the utilization of incentive resources which it has helped to create, and under what conditions material penalties will be applied.

Implementing the Plan

The Set of Measures directs state and economic agencies, in close conjunction with the organs of the Revolutionary Trade Union Movement, to organize informal socialist competitions for greater production efficiency and the quality of all kinds of work, to conclude with more rigor and responsibility united socialist commitments, to develop international competitions for the assurance of the comprehensive program of the CEMA countries, to develop all aspects of the socialist work brigade movement, as well as of comprehensive rationalization brigades, of inventors and those who would improve operations, and to study, generalize from, and expand progressive experiences and work techniques, improve the organization of production consultations, increase the role of collective agreements, and other steps as well.

The Set of Measures does an incomparably better job than previously of creating the conditions for the development and implementation of the above, as well as additional forms of worker participation in management. From the very first day, however, it is necessary to set ourselves resolutely against chasing after numbers and percentages, against all manifestations of formalism and bureaucracy. Party and union agencies must also vigorously require the creation of the necessary conditions.

Some comrades, for instance, mistakenly think that formal socialist commitments of the type "we will raise quality," "we will conserve," are the outcome of worker superficiality of poor union work. The problem lies elsewhere. Many workers and work collectives are not aware of precise plan targets every day and hour, or even for weeks at a time. They are not assured of regular material and energy inputs, nor are they aware ahead of time of possibilities for receiving premiums, etc. This situation then leads them to the conclusion of formal commitments. And several relevant Revolutionary Trade Union Movement organs put up with this condition in silence. An improved management system categorically requires that everyone recognize precisely his role in plan implementation, which he expresses in a socialist commitment. To enable us to achieve these targets managers, and especially foremen, are responsible for assuring, ahead of time and with the help of the unions, an optimal division of labor, a plan breakdown by workplace and, as much as possible, by individual, the orderly organization of production and work, and a system of material and moral incentives for achieved performance. Only then

should they, and they are required to do so, together convince, win over, and assist workers in the conclusion and fulfillment of "personal (collective) commitments, plans, or socialist accounts," in the fulfillment and overfulfillment of the specified targets for performance, quality, fuel and energy conservation, savings in raw material and stock inputs, and of targets for improving operations and inventiveness, in comprehensive socialist rationalization in the application of new work methods and an increase in professional qualifications. It is impossible to avoid the requirement of comprehensiveness in concluding of socialist commitments.

Under conditions in which we must lower the extent of investment and limit imports, further progress in economic development depends on the more decisive utilization of scientific and technical findings, which must represent higher utility values, a lower consumption of time, a significantly lower consumption of energy and inputs, and higher quality. The political ideological work of party and union organizations, of the SZM (Slovak Union of Youth) and the Czechoslovak Scientific and Technological Society is aimed at rallying support for such positions as the choice and fulfillment of high goals, using world standards as a guide, the achievement without exception of economic and technical specifications, the utilization of the experiences of the best workers, and the rapid implementation of inventions and suggestions for improvements.

Improving the management and planning system will enable us to apply, in developing worker initiative, not only comprehensiveness, but also long-range considerations. We will be able to seek out and apply forms of work with comprehensive rationalization brigades, with inventors and improvers, with socialist work brigades, so that their creative efforts can be focused on new technology, and technologically longer-range solutions, which will result in the saving of work space, the freeing up of labor, a reduction in average consumption of fuels and energy, raw materials and other production inputs, and an increase in the quality of final production.

It is necessary to devote extraordinary attention to the content of personal (collective) commitments, plans, socialist accounts, and creative plans, and in every case be sure that their total assures the minimum fulfillment of the plan for the workshop, operations, and factory for all indicators. In this way we can achieve a fundamental turnaround in the quality and effectiveness of socialist competition, in the inventor and improver movement.

Inspection and Evaluation of Performance

The formal inspection of target fulfillment and equality in labor compensation are in many instances a major reason that the level of efficiency of the work of people in increasing productivity, efficiency and quality with the aid of science and technology, a more rational organization of work, and conscious discipline has been insufficient. The Set of Measures provides a number of suggestions for improvements in this area.

In many enterprises, for instance, it is already proving useful for managers, not only at party meetings, but also at production consultations and Revolutionary Trade Union Movement conferences, to inform the workers of the reasons for the underfulfillment of parts of the plan, about the ways that the conclusions of comprehensive economic analyses are being used, etc. so that the workers can evaluate them, form an opinion, and present their suggestions.

Management personnel, in conjunction with the unions, are also creating additional conditions for the broad participation of workers in the inspection of plan fulfillment, and an increase in their role in the elimination of the determined shortcomings. The issue is, above all, public inspection of the fulfillment of collective agreements, rationalization programs, socialist commitments, and the implementation of suggestions for improvement and of inventions. Public viewings are beginning to be organized of new technology, of the organization of production and of work, and of capital stock utilization, at which workers are led to the uncovering of unused capacity for increasing productivity, efficiency, and quality. The upholding of socialist legality, labor and technological discipline, the quality of factory food and social amenities, and the fulfillment of measures increasing the health and safety of the workplace are all inspected publicly. Workers are provided with information necessary for evaluating production technological, and economic targets and problems. The party and unions protect the initiators of justified criticisms and suggestions from possible discrimination on the part of those criticized or defenders of outmoded techniques and work methods. They see to it that the accountability of managers increases for the flexible utilization of comments and suggestions of the workers and their implementation.

All of this helps. Therefore it is necessary to apply, on a mass basis, similar measures. Management, in conjunction with the unions, should at the same time consider those measures from the Set of Measures which lead to the broad participation of workers in the practical application of the socialist principle of "Each according to his ability, to each according to the results of his work." It is necessary to explain to the workers, in time, the consequences of the fulfillment or underfulfillment of plan targets on their personal and collective stake in the operation. It is also necessary to organize appropriate forms for their participation in the preparation and implementation of all measures related to principles, wages, and politics. The effect of material and moral incentives should be publicly evaluated. The application of wage practice must be controlled in a consistent manner. Conclusions must be drawn regarding responsible managers who violate wage-political guidelines, put up with irregularities in performance norms or condone egalitarianism, and who neglect to make work standards and specifications more precise. The demands of the workers must be respected regarding an increase in rigor in the awarding of moral evaluations to individuals, collectives, and others.

9276
CSO: 2400

AUGUST 1980 ECONOMIC RESULTS SUMMARIZED

Prague HOSPODARSKE NOVINY in Czech 26 Sep 80 p 2

[Summary by the Federal Statistical Office: "August 1980"]

[Text] The results achieved in the economic development in August as well as from the beginning of 1980 were affected by the fact that there were 2 working days less than in the same period of last year. This led to a considerable slowdown of dynamism, particularly in August, of a number of volume indicators.

The fundamental features of development of the national economy during the first 8 months of the year can be summarized as follows:

--in industry, the plan targets were generally surpassed in all directions of sales as well as in industrial production;

--in agriculture, the increase in the number and gross live weight of domestic animals was reflected in the better fulfillment of tasks in the purchase of animal products;

--in the building industry, the production plan was not fulfilled and the structure of construction work diverged from the plan estimates. Particularly small was the volume of construction work in comprehensive housing construction;

--in public freight transportation, the plan targets were surpassed in all branches of freight transportation;

--in foreign trade, the total exports increased more rapidly than the total imports. The more rapid increase in import prices than export prices led to the deterioration of exchange relations;

--in domestic trade, the sum of enterprise plans of retail turnover was surpassed in the main trade systems. Some shortcomings were reflected in the assortment of goods sold.

In the centrally planned industry, the growth rates were higher than anticipated by the annual plan in all main directions of sales (with the exception of domestic trade deliveries at retail prices) during the entire January-August 1980 period in comparison with the same period of last year. The enterprise plans also were surpassed in all directions of sales. The enterprise plans were most significantly

surpassed in the deliveries for export to nonsocialist countries at "all charges paid" (franko) prices—by 7 percent (by 3.5 percent at wholesale prices—the increase in deliveries to nonsocialist countries at franko prices was affected by the price increases). The deliveries for export to socialist countries at franko prices were surpassed by 6.4 percent (by 6.3 percent at wholesale prices). Domestic trade deliveries at retail prices were fulfilled by industrial enterprises 101.2 percent, and other sales for manufacturing consumption and operation 100.3 percent.

The fulfillment of planned tasks by industry continued to be inadequate. Only 50 percent of organizations met all indicators specified for the regular evaluation of plan fulfillment during the January-July period of 1980. A ratio of organizations complying with all indicators was particularly low in the sectors supervised by the SSR Ministry of Industry, the CSR Ministry of Agriculture and Food and the Federal Ministry of Electrotechnical Industry. More than one-third of organizations did not fulfill the plan of deliveries of machinery and equipment for selected construction projects; more than 25 percent of organizations did not fulfill the deliveries for export to nonsocialist countries at wholesale prices. The nonfulfillment of the plan in regard to specified indicators and compensation for the shortfall by other organizations adversely affected supplier-consumer relations.

In agriculture, the crop was harvested in August later than in the previous years. In animal production, the purchase of slaughter pigs in August 1980 increased by 2 percent, of milk by 3.7 percent, and of eggs by 3.7 percent over the same month of last year. On the other hand, the purchase of slaughter cattle and poultry for slaughter was below the August 1979 level. The rising trend in the purchase of animal products continued in August. In regard to slaughter animals generally, the plan was fulfilled 99.8 percent, while for poultry, milk and eggs it was surpassed from the beginning of the year.

In the building industry, construction enterprises completed construction work with internal resources in the value of Kcs 7.2 billion in August. The enterprise production plans as detailed for August were fulfilled 98.7 percent. The volume of construction work completed in August 1980 was 1.4 percent below the August 1979 level, but the average daily production increased by 8.0 percent. Both the number of workers and labor productivity remained 0.7 percent below the August 1979 level. Contracting construction enterprises completed 4,619 housing units which was 207 less than in August 1979. Although the enterprise construction production plans were generally fulfilled 99.1 percent, 139 construction enterprises or 59.9 percent of the total number failed to do so. All indicators specified for the regular evaluation of the plan fulfillment by the construction enterprises were complied with by 45 construction enterprises or 19.7 percent of the total number during the January-July period. A low fulfillment of the annual state plan occurred primarily on the construction projects planned for completion this year.

In capital investment (excluding project "Z" and private construction), despite the higher dynamism of completed capital investment projects and deliveries at current prices than the annual state plan provided for, their material structure deviated from the plan intentions. Deliveries of machinery and equipment outstripped construction work. In accordance with the state plan, delivery capacities

were primarily directed to the construction projects specified as mandatory tasks in capital investment. The annual state plan of investment work and deliveries was fulfilled 54.5 percent during the January-July period.

Public freight transportation carried 53.4 million tons of goods in August. The transportation volumes planned for the month were generally met 99.7 percent: 100.2 percent by railroad transportation and 99.0 percent by CSAD [Czechoslovak State Automobile Transportation]. River transportation substantially surpassed the monthly target—107.5 percent. The volume of transported goods, however, was 4.1 percent below the August 1979 level. In comparison with the same period of last year, the quantity of goods transported by public freight transportation increased by 2.7 percent during the January-August 1980 period. The goods transported during the first 8 months of this year, amounting to 418.2 million tons, represents 66.3 percent of the annual state target.

In foreign trade at current prices, the turnover with the nonsocialist countries slowed down in August. The planned annual growth rates were surpassed both for total imports and total exports from the beginning of the year. In comparison with the same period of last year, total imports increased by 14.2 percent during the January-August 1980 period. Prices continued to increase more rapidly. Moreover, import prices increased more rapidly than export prices in trade both with the socialist and nonsocialist countries.

During the first 8 months, exports to the socialist countries reached 62.7 percent, and imports from them totaled 61.1 percent of the plan target. In relation to the nonsocialist countries the corresponding figures were 59.6 percent for exports and 59.4 percent for imports.

In domestic trade at current prices the population bought goods amounting to Kcs 17.8 billion in August, which was 6.9 percent less than in August 1979. Purchases in the organizations of the Ministry of Trade amounted to 90.9 percent and in the organizations of consumer cooperatives to 95.0 percent of the August 1979 level. The retail turnover in the main trade systems amounted to Kcs 136.7 billion, in the trade network to Kcs 119.3 billion, and in the public catering sector to Kcs 17.4 billion during the January-August period. In comparison with the identical period of last year, the retail trade turnover in the main trade systems increased by 3.1 percent, while the enterprise growth plans were fulfilled 101.1 percent during the first 8 months of this year.

The balances on personal savings accounts decreased Kcs 62 million from 15 July to 15 August. All deposits amounted to Kcs 151.3 billion as of 15 August 1980, which was Kcs 3.7 billion more than a year ago.

Money supply reached Kcs 42.9 billion on 31 August 1980.

10501
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Basic Indicators of Development of National Economy in April 1980
Increments Over Comparable 1979 Period (in percent)

	August	January-August	State Plan[1]
Sales:			
Deliveries for Investment at wholesale prices	-	1.1	-4.5
Domestic trade deliveries at retail prices	-	3.2	4.8
Deliveries for export to socialist countries			
--at wholesale prices	-	7.1	3.5
--at all charges paid [franko] prices	-	10.1	8.0
Deliveries for export to nonsocialist countries			
--at wholesale prices	-	6.8	3.9
--at all charges paid [franko] prices	-	22.9	14.5
Other sales for manufacturing consumption and operations at wholesale prices	-	3.9	-
Industry:			
Volume of industrial production	-3.3	3.3	3.7
Average number of employees	0.6	0.7	0.7
Labor productivity	-3.9	2.5	2.8
Construction:			
Construction work completed with internal resources	-1.4	2.1	4.5
Average number of workers	-0.7	0.1	0.4
Labor productivity	-0.7	2.0	4.1
Housing units delivered by contracting enterprises	-4.3	-1.9	16.8
Procurement:			
Slaughter animals (including poultry)	-1.3	-0.1	0.4
Milk	3.7	6.9	1.8
Eggs	3.7	5.4	3.2
Retail trade:			
of the main trade systems	6.9	3.1	2.2[2]
Foreign Trade:[3]			
Exports to socialist countries	3.8	12.8	8.0
Exports to nonsocialist countries	-1.4	29.0	16.5
Imports from socialist countries	0.3	8.9	8.9
Imports from nonsocialist countries	-7.1	23.8	8.0

1. Increments compared to actual 1979 results with exception of industrial work indicators.
2. All trade systems.
3. Data on actual results refer to actual transactions and the state plan does not include unplanned actions in the framework of cooperation,

GDR SEEN NEEDING FRG AID FOR ENERGY PROBLEMS

Frankfurt/Main FRANKFURTER ALLGEMEINE in German 11 Aug 80 p 8

[Article by Peter Jochen Winters, datelined Berlin, in August: "Honecker Hopes for Schmidt's Help—The GDR Urgently Needs Support To Remedy Its Energy Needs"]

[Text] After its national economy plans with the USSR for the years 1981 to 1985 are approved, the GDR will know for certain that it is facing an energy crisis unless it succeeds in closing the gap between crude oil shipments from the USSR and the GDR economy's demand for crude oil. In the coming 5 years, the GDR will receive from the Soviet Union 19 million tons of crude oil annually, and not a drop more. This is the same amount as in 1979. The growing demands for energy in the GDR must thus be covered by opening up new energy sources, by shifting to other energy supplies, and by the most economical use of energy. About 15 percent of all the consumed energy in the GDR is, at the present time, used for transportation. The precarious energy situation thus hits the GDR transportation system especially hard. "How can you transport more people and goods with less energy?" The answer to this question will help to determine the future economic development of the GDR.

State Secretary Schmidt of the GDR Transportation Ministry recently stated in an interview with NEUES DEUTSCHLAND that approximately two-thirds of the total diesel oil supply in the GDR is used by the transportation system, including company traffic. Computed on a scale of 100, this means that about 53 percent is used up by automotive traffic, 35 percent by the railroads, and 12 percent by maritime traffic. These rates point out clearly where a start must be made to lower energy consumption absolutely and still take care of all the transportation needs of the national economy. In his speech on 25 January to the first kreis secretaries in East Berlin, SED General Secretary Honecker pointed in the right direction when he said: "The introduction of more efficient transportation technology and the improvement of transportation methods will noticeably lower the consumption of diesel and other combustion fuel. For this purpose, transportation must be increasingly shifted from roads to rails. The railroad network must increasingly be changed over to electric power."

As urgently needed, from the point of view of energy economics, as the changeover of transportation from road to rail and the increasing use of electricity for the railroad network might be—railroad transportation uses approximately one-third of the energy used by truck transportation, on electric railroad tracks even only one-eighth—the realization of these demands raises problems which the GDR will not be

able to solve alone. More transportation by rail requires greater usability of the railroad network than is presently available in the GDR where the effects of the war have not yet been eliminated by any means: after 1945 the victorious Soviets had dismantled in their occupation zone all second tracks on dual track lines and had them sent to the USSR. Even today, most railroad tracks in the GDR are one-line tracks because it is only since 1971 that there has been a determined effort to reconstruct dual track lines. But this reconstruction can be accomplished only in a limited way each year. Last year, 132 kilometers were rebuilt and this year 150 kilometers are planned for reconstruction to dual tracks.

The changeover to electricity is also proceeding much too slowly. Of the total of 14,000 kilometers of railroad tracks in the GDR only about 1,600 are presently equipped for electric power. Between 1976 and 1980, an average of 40 kilometers per year was changed to electric power, that is 200 kilometers for the current five-year plan period. Now, the speed of changing over to electric power is to be intensified. Preparations for the 1981-1985 Five-Year Plan mention an additional 700 kilometers to be prepared for electric power, and thereby approximately 20 percent could be saved in energy by the GDR railroad. However, the exact amount of kilometers planned for the next 5 years does not depend solely on plans made by railroad officials. Secretary Schmidt points out that for the changeover to electric power concrete foundations and new bridge constructions, steel poles and electric guide wires, electric power supply plants and useable locomotives are required. These additional items have to be incorporated in construction plannings as well as plans for metal processing, electrotechnology and electronics.

GDR economy planners are already certain that they will not be able to equip 700 kilometers of railroad tracks with electric power over the next 5 years. So they look to the West for help. After all, between the FRG and West Berlin there are stretches of railroad transit traffic for which the FRG Government and the Berlin Senat have been demanding improvements for years. These railroad lines include five railroad transit lines for passenger traffic which, at the same time, are important lines for the GDR railroad inland service: 1. From West Berlin to Hamburg via Staaken and Schwanheide, across 225 kilometers of GDR territory, 75 kilometers of it single track. This line is not equipped with electric power. 2. From West Berlin to Hanover via Potsdam, Magdeburg, Marienborn, across 161 kilometers of GDR territory, 153 kilometers not equipped with electric power. According to the agreement of 30 April 1980, the 12 kilometers with single track will have a second track added by 1984 so that then dual track operations will be possible all the way from Berlin to Helmstedt. 3. From West Berlin to Frankfurt via Bitterfeld, Halle, Naumburg, Erfurt, Gerstungen, across 349 kilometers of GDR territory, 50 kilometers single track and about 175 kilometers not equipped with electric power. 4. From West Berlin to Nuernberg and Munich via Bitterfeld, Naumburg, Probstzella. 5. From West Berlin to Regensburg and Munich via Bitterfeld, Leipzig, Plauen, Gutenfuerst. The last two transit lines run on the same track as the line to Frankfurt, from Berlin to Naumburg or Bitterfeld, respectively. Of the Naumburg to Probstzella line 25 kilometers are single track and 92 kilometers not equipped with electric power, of the line Bitterfeld to Gutenfuerst 40 kilometers are single track and 61 kilometers not equipped with electric power.

Several months ago the GDR made an offer to the FRG to convert these five lines to dual tracks and equip them with electric power, if Bonn would carry the lion's share of the cost--four-fifths, according to rumors. This would mean the construction

of 190 kilometers of second tracks and electric power equipment for about 700 kilometers--a long-range project costing billions. The first reaction of the federal chancellor to the GDR proposal was to wipe it off the table. The reason: there is no money for this project. This reaction is understandable because, after all, the reconstruction of the railroad transit line between Berlin and the FRG, which would make possible the addition of Berlin to the intercity network of the federal railroads, is on the one hand desirable but, on the other, not unconditionally necessary for the life of Berlin. More modest projects would be sufficient, for instance the change-over to electric power on the line Berlin-Helmstedt.

In the Baltic Sea town of Dierhagen at the end of this month, Honecker and Politbureau member Mittag will certainly present this proposal to the federal chancelor and the federal minister of economics. This time, the Bonn representatives should not react negatively right away. This would be the first time, after all, that the GDR is interested in negotiations with the FRG because it wants something from the FRG. The GDR needs Bonn's help in overcoming its energy problems. Up to now, it was the other way around. Bonn always wanted something from the GDR. Therefore, Bonn was always ready to pay a "political price" for agreements with the GDR. This time, Bonn has the advantage and can demand a "political price" from the GDR. In practice this means: Bonn could declare its readiness to negotiate with the GDR on the railroad project if the GDR on its part is ready to make life easier in human terms.

8889
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'IMPORTANT TRADE AGREEMENTS' ANNOUNCED FROM LEIPZIG FAIR

East Berlin DDR-AUSSENWIRTSCHAFT/MESSEBULLETIN in German No 36/3, 4 Sep 80 p 4

[Report by Information and Public Relations Department, GDR Ministry for Foreign Trade: "Important Trade Agreements"]

[Text] As a result of brisk negotiations and business activities, already during the first few days of the fair significant exports and imports were agreed upon.

Among them is a large number of agreements that were concluded between foreign trade organizations of the GDR and the USSR. They are an expression of a continuing expansion of economic relations between the two countries.

During the course of the first few days, the foreign trade organizations had already signed much more extensive agreements with representatives of approximately 30 USSR foreign trade organizations present in Leipzig than was the case at the same time last year.

This brisk business activity with the USSR, which started with the beginning of the Leipzig Fair, is a remarkable expression of the realization of decisive economic agreements between the governments of both countries, such as the GDR/USSR program of specialization and cooperation until 1990, which was signed to mark the occasion of the 30th anniversary of the GDR, the protocol of the planning organs on the coordination of the 1981-1985 economic plans which was issued in February 1980, as well as a large number of accords and agreements on specialization and cooperation between the ministers.

Of special significance for the continually growing export during the next few years are comprehensive agreements which have already been concluded and cover products that require a long startup time before production can begin, for instance, ships and rail cars, as well as complete installations for the chemical industry, metallurgy, energy production and the construction industry. In the area of ferrous metallurgy, for instance, import agreements were concluded for the first half of 1981 between the foreign trade enterprise Metallurgiehandel and the foreign trade enterprise Promsyrioimport. Accordingly, in addition to pig iron the GDR will import 280,000 tons of milling material, such as round bar steel, semifinished products, milling wire and rails as well as 725,000 tons of insulation belts. In the area of nonferrous metals, important agreements were made with the foreign trade enterprise Raznoimport for the import of important nonferrous metals, among them are now more than 8,000 tons of copper as well as zinc, nickel and lead.

The shipments are very important for the stable supply of the GDR economy.

As a result of the talks and negotiations that took place during the international exhibit on shipbuilding and the fishing industry, INRYBPROM 80, which has just been concluded, the foreign trade enterprise Schiffscommerz and the foreign trade enterprise Sudoimport signed export and import agreements in the amount of approximately 145 million rubles, covering the shipment of ships and ship equipment during the years of 1981 and 1982. New projects that are affected are, among other things, cold-storage motorboats as well as bulk-goods freighters. Among other things, the USSR will ship to the GDR large engines from the Fryansk engine factory, producing 15,880 kilowatts (21,400 horsepower), as well as additional ship equipment.

The concluded agreements constitute an essential contribution to the realization of the pact which was signed in June 1980 during the 26th meeting of the Parity Commission of the GDR/USSR governments and which concerns reciprocal shipments of ships and ship equipment as well as scientific-technical cooperation during the 5 years of the 1981-1985 plan.

Shipments of medical technology were agreed upon by the foreign trade enterprise intermed-export-import and the foreign trade enterprise Medexport. During the current international exhibit "Health Care" in Moscow, in which the GDR is the largest participant among socialist foreign countries, displaying a comprehensive collective exhibit, important talks and negotiations have been taking place between the participating foreign trade partners. Among other things, the USSR will receive medical X-ray technology, sterilizers, ultrasound instruments, syringes and cannulas in the amount of approximately 16 million rubles. In addition, the GDR will export laboratory technology. It will import from the USSR a mobile X-ray laboratory and geophysical equipment.

Export agreements with USSR partners were concluded by the foreign trade enterprises Fortschritt-Landmaschinen Export-Import and WMW-Export-Import. They form the basis of imports from Soviet plants of packaging machines and restaurant equipment in the amount of 20 million rubles and machine tools valued at 25 million rubles.

An agreement on the import of an experimental rolling mill was signed between the GDR foreign trade enterprise Industrienlagen-Import and the Soviet foreign trade organization Wneshtechnika. The installation is intended for continuous cold milling of steel tubes in the Rohrkombinat Riesa VEB.

Upon the successful conclusion of the test of this cold milling plant, productivity will increase approximately 10-fold when compared to the presently used cold conversion procedure.

The USSR will purchase from the GDR numerous electronic measuring technology products at a cost of apporximately 25 million rubles. Appropriate agreements were made by the enterprises Heim-Electric Export-Import and Mashpriborintorg.

Reciprocal shipments of goods amounting to 17 million rubles were contractually arranged by the foreign trade enterprise Technocommerz GmbH and the Soviet foreign trade organization Mashinoimport. In accordance, the GDR industry will export, among other things, air and cooling technology products, pump and compressor aggregates as well as fixtures and will purchase from the USSR pumps, compressors and fixtures.

GDR apartment builders will receive from the USSR cast radiators in large numbers.

Within the framework of specialization in production between the GDR and the USSR, the GDR will export to the USSR also in 1981 teletype machines as well as accessories valued at 13 million rubles. Appropriate shipping agreements were signed by the Electrotechnik Export-Import and Mashpriborintorg.

In addition, agreements on reciprocal shipments of cables and wires at a value of 45 million rubles were concluded by Elektrotechnik Export-Import and the foreign trade enterprise Raznoimport. They are especially intended for the supply of the Soviet economy and important integration objects. At the present time intensive negotiations are in progress between representatives from industry and foreign trade organs of both sides concerning agreements on reciprocal shipments of products from the chemical industry, the consumer goods industry and additional areas in machine construction.

An agreement was signed between representatives of the foreign trade enterprise Elektrotechnik Export-Import and the Hungarian foreign trade enterprise Transelektro, providing for shipments to the GDR industry of electroceramics.

The GDR is also importing leather and nonleather shoes from the Hungarian People's Republic.

Agreements for 1981 were concluded between the foreign trade enterprise Chemie Export-Import and the Cuban foreign trade enterprise Quinimport, providing for the export to Cuba of plant protection and pest control products in the amount of 13.9 million marks. The shipments will consist primarily of insecticides for citrus plants. In 1981, Cuba will for the first time buy from the GDR herbicides for feed production and for the application on sugar cane plantations.

Traditional business relations between the GDR and the Socialist Republic of Vietnam will continue, among other things, through shipments of automatic rotating cranes and other hoisting equipment. Appropriate agreements were signed at the fair by representatives of the foreign trade enterprises Maschinen-Export and Machino-Import.

In agreement with the annual protocol concerning reciprocal shipments of goods, the GDR will buy in 1980 a large number of Zastava automobiles from the Socialist Federative Republic of Yugoslavia.

In cooperation with the Energiebau Radebeul VEB, the Otto Buchwitz Starkstrom-Anlagenbau Dresden VEB will erect in the People's Republic of Angola 110-kilovolt and 220-kilovolt overhead lines and transformer stations. Appropriate agreements were made between the foreign trade enterprise Elektrotechnik Export-Import and the state energy authority SONEFE.

The foreign trade enterprise Interpelz Export-Import sold synthetic leather to a Lebanese firm.

In the presence of Otfried Steger, minister for electrical engineering and electronics, an economic treaty was signed by Dr Roland Winckler, director of the GDR foreign trade enterprise Elektrotechnik Export-Import and Pierre Alarousse, director of the

French concern Creusot Loire Entreprise. The pact contains an agreement making the GDR responsible for the projection, shipment, assembly and startup operation of power-engineering equipment and measuring, control and regulation technology for a fertilizer factory which will be erected by the French concern. Plants of the Combinat Automatisierungsanlagenbau VEB will complete the project by 1983.

During the first few days of the fair, GDR foreign trade enterprises sold a turret lathe and a trestle crane to the Austrian enterprise Voest-Alpine. In accordance with two fair agreements, the GDR foreign trade enterprise Demusa will ship pianos and grand pianos valued at 1.4 billion marks to the Italian firms Ricordi and Furcht.

A 5-year agreement on the export of special chemicals by the foreign trade enterprise Chemi-Export-Import to the Degussa AG in Frankfurt/Main was concluded on the first day of the fair. The shipments, which will total 5 million valuta marks, are based on an agreement between the two enterprises which has been in existence for 5 years.

Ready-to-wear furs and fur pelts and synthetic leather will be shipped to the FRG by the foreign trade enterprise Interpelz Export-Import in accordance with fair agreements.

Exports of synthetic leather to the Netherlands were also contractually established by the foreign trade enterprise Interpelz.

8991
CSO: 2300

NEED FOR GREATER EXPORTS DEFENDED

Schwerin SCHWERINER VOLKSZEITUNG in German 19 Sep 80 p 4

[Article by Juergen Hamann: "Do We Export Too Much? International Transactions —A Plus Many Times Over; Things That Can't Be Paid For With Machines; Top Values Are Demanded"]

[Text] Do we have to export so much? This is a question that is sometimes asked, especially--in fact almost always--at times when the things we ask for are not available. For instance, sewing machines from Wittenberge, tiles from Boizenburg or furniture from Guestrow. Nobody denies the fact that many of these items that are now sold not in smaller but in increasingly greater quantity could very well be used on the domestic market. A contradiction?

Nobody Does Everything by Himself

First: the tendency to export, if possible at an increasing rate, is not specifically restricted to the GDR. Almost everywhere, export, which is a known precondition for international trade is considered a source of additional earnings. If transactions are made to mutual advantage, the seller sells at a higher rate than he would get in his own country while, on the other hand, the buyer buys more cheaply than if he could produce the items himself.

This is possible because in different countries different production costs are required for certain products. An example: even though the GDR is in a technological and economic position to build nuclear power plants, it imports them from the USSR. These imports--especially under conditions as favorable as those possible among socialist states--offer essential advantages to our national economy. No specialized plants have to be built, no workers have to be trained for production, and no special domestic scientific-technical potential has to be developed. As counter offer, we supply chemical plants for which we have many years of construction experience and which we can produce at advantageous cost. So there are advantages for both sides. Besides: modern plants and technologies, including industrial robots, can be used effectively only when large series productions are undertaken.

Especially in the present situation, where aggressive imperialist circles would like to revive the cold war era, reasonable voices are heard that plead for trade with socialist countries. Not of course because their hearts are suddenly

beating for socialism, but because from increasing trade they can expect high profits and, in fact, have already realized them. Conclusion: international transactions between countries of different social systems are more and more becoming a factor in our peace keeping efforts. The world trade center Leipzig, where many capitalist firms participate in the annual fairs, offers the best opportunities for world trade and technical progress, in keeping with the motto of the Leipzig Fair. This shows very clearly the close connection between economics and politics.

So That We Can Enjoy Our Daily Cup of Coffee

The GDR with its long tradition in machine construction exports primarily machines, equipment and transportation components. But in commerce it has for decades been the custom to grant credits for large transactions--and this is the kind we are dealing with in machine sales. This means that one has to wait a considerable time for payment or instead has to buy machines or equipment. For this purpose, we have long-range agreements which in principle and practice are very advantageous for us and even of vital importance. We shall come back to this topic when we talk about our raw materials situation.

This is one aspect. The other: consumer goods--for example the tiles mentioned above--and agricultural products bring in money immediately. This too is one of our needs because we want to be "liquid" in order to be able to buy certain items like coffee, citrus and other fruit, spices or cocoa. We cannot change the fact that coffee is not grown in the GDR and that, in spite of this fact, nobody in the GDR will and shall forego the enjoyment of his daily cup of coffee. At the same time, foreign currency is needed in order to react quickly to international market changes and price developments.

All this must be taken into consideration. It is clear that everything is directed toward utilizing exports as an important factor in continuing our good policies that can be felt by every citizen. An interesting aspect of this policy is that the foreign trade of our country succeeds in paying for the coffee, citrus and other fruit, spices or cocoa that have to be imported, with machines and equipment instead of money, and that in turn widens our possibilities. In 1960 the GDR imported approximately 23,245 tons of coffee beans, but in 1978 it was 52,083 tons. In the same time period, cocoa bean imports rose from 12,348 tons to 23,734 tons. Citrus and other fruit imports tripled and reached 288,200 tons in 1978. This amounts to 35 pounds of oranges and bananas annually for each GDR citizen.

Raw Materials--A Problem With Consequences

This raises one questions that is very important for the consumer. We must realize, above all: approximately 60 percent of all the raw materials needed by the national economy of the GDR are imported. This fact has its consequences.

Copper, aluminum, rubber, polyethylene, dyes, different kinds of steel and tin, materials and also spare parts which we import from abroad are important production bases in such enterprises as the Schwerin Cable Works, the VEB Plastics

Processing Works, The Boizenburg Tiles Works or the VEB Upholstered Furniture Works Guestrow. Several GDR enterprises have succeeded, especially through better utilization of science and technology, in replacing certain expensive imports, and in the future, too, this problem will have to be solved to even greater extent within the scope of our policies and in the interest of the people's well-being.

At the same time, the following is very clear: the strength of our exports will be in constantly growing demand. The facts are well known: in the past 10 years, prices have risen by 260 percent for raw materials, iron, steel, non-ferrous metals, rubber and wood--to name but a few examples. Costs are increasing enormously for the exploration and development of raw materials. In the USSR, for instance, oil drilling costs per meter have tripled since 1959, and the medium drilling depth has more than doubled. For ores there is the additional problem that their metal contents have decreased considerably. Not to be forgotten are the expensive and long transport distances. It is of great advantage to us that the USSR supplies us with long-range, stable supplies from which, as is clear to everybody, result obligations for high production increases in our own national economy, including export.

In spite of all this, we must also face the fact of galloping prices on the capitalist world market. It is well known that prices for finished products, which are our own "star exports," have not risen at the same rate. In practice, we must today supply on the capitalist world market three times as many machines as in 1970 for the same amount of crude oil, for coffee twice as much W 50 and for skins and furs twice as many electric motors.

And in all this one has to realize that no customer asks the GDR what it would like to sell him, but rather what it can supply in goods which he would like to have. And W 50 and tractors, for instance, rate much higher on the international market than open-pit mining equipment.

Our Own Labor Determines Profits

How are we going to face these problems? Answers will be given only by production growth that will surpass traditional limits and is part of the competition for the 10th party congress. A decisive factor will be whether or not we produce enough products that represent top values on the world market and can be sold with profit even under increasingly harder competitive conditions. A good example is set by the leather workers in Neustadt-Glewe, whose top quality products dominate the market with almost no competition. In the total picture we must not overlook the fact that reserves still exist, especially in regard to exports to capitalist countries. Our party has pointed out emphatically that production waste must be reduced considerably through new construction methods and technologies. This policy will have comprehensive advantages: we will need to import fewer raw materials and, at the same time, will have the opportunity to export with greater profit. Our economy will thus have adequate means and opportunities to adjust to changed conditions. A central role will be played by the degree of quality in material production. There is a difference, for instance, whether window panes or optical equipment is produced from glass. It is obvious which one of these products will bring higher profits.

Are we exporting too much? Facts show that the question should be asked differently: are we exporting in a way that is necessary in order to continue the unity of economic and social policies? The answer is clear in the sense of the policies of our party, which are directed toward the well-being of the people. It is also clear that the only road toward future progress is the one by way of an increase in the production level of the national economy of our country. Here the decision will fall on what our total strength will be not only in the overall view but also in the individual and totally concrete perspective.

8889
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SHORTCOMINGS IN MANPOWER REGROUPING MEASURES VIEWED

Budapest MAGYAR HIRLAP in Hungarian 7 Oct 80 p 7

[Article by Csaba Vertes: "The Costs of Personnel Turnover"]

[Text] Even without specialized experience in employment affairs, we are aware that practically no one anywhere has dedicated himself to "the regrouping of manpower necessary for the desirable structural modification of production." It is true that in certain specific cases--on a temporary basis and adapted to the circumstances of the moment--employers "maneuvered" manpower with surprising inventiveness and undeniable determination. We are only referring to constraint stiuations which arise in the everyday tasks of production, such as, the end of the month or end of quarter rush, or perhaps--to mention an entire branch--the measures taken in the redevelopment of coal mining which, of course, also had employment consequences.

The "maneuvering", or if you like, the redeployment of manpower--because of these kinds of considerations--however, may hardly be included under the concept of "planned and organized" manpower mobilization. Labor experts are reserving this category for permanent manpower redistribution connected with the formation of a more modern production structure, the steady development of efficiency, or rather, the utilization of new techniques or technology. We do not yet have a notable example of this.

Loss of a Half Billion

According to the records of ten years ago, one quarter of those then employed in state industry changed their place of employment. In some plants, half of the worker population changed within one year. According to calculations performed then, one employment change--that is, one employee leaving and another replacing him--cost at least 6,000 forints (taking into account considerably lower than average work performance during the training period).

Through this method of calculation, it thus became apparent that in the motor vehicle industry, for example, personnel turnover caused a loss of 430 million forints in 1969. If we wish to consider individual plants, there was a 43 million forint loss at the Ganz-MAVAG. It also became apparent that nine-tenths of the personnel turnover was initiated by the employees.

At the time, no one was expecting such a large-scale turnover, or that, above all, the laws of the manpower market mobility would be determined by the employees themselves. Granted that at every opportunity, the experts emphasized the fact that fluctuation and personnel turnover were entirely different matters. In practice, however, it was easier to promote stability in numbers and to strengthen ties to the place of employment.

The fluctuation did not decrease despite indentification of the "migrating birds", despite attempts to broaden and to solidify the cadre system, despite the fact that at one time everyone was concentrating on investigating the fluctuation, and despite strongly administrative toned measures which were intended to be very strict.

The economy's concrete effects can hardly be altered through artificial means. Our problems related to fluctuation have eased since people discovered that there is little sense to changing places of employment, because it makes little difference where and in what kind of place they are working. The mentality of employers--from which the concept and practice of manpower redeployment is remaining as foreign as it was a decade ago--was not affected at all by this discovery. In 1978, for example, enterprises left the central wage appropriation serving internal transfers virtually untouched because they had no use for it...

The Enterprise at the Focal Point

In the interest of completeness, it is worth mentioning that in the years past there have been measures undertaken as a result of which phenomena similar to redeployment were discernible. The directive dealing with hiring freeze and numerical increase prohibition for administrative and management personnel is an example. Although the number of enterprise employees and the intensity of the fluctuation are decreasing, these are insufficient for accelerating internal enterprise manpower mobility. This indicates, among other things, that the structural alteration of the economy has slowed down, or more exactly, has never accelerated.

To illustrate how complicated the situation is, we can state that what was a problem before is now, if possible, a greater problem. Previously, the primary reason for personnel stabilization efforts was the large scale fluctuation. Today, the decreasing intensity of personnel turnover which is accompanying the decreasing worker population is motivating enterprises toward stabilizing the employee population.

Thus the labor situation and economic life are set...

In principle, manpower conserving investments, the formation of wage and income proportions, retraining and continuing training systems and the formulation and manipulation of the social prestige of various occupations and skills, etc. were intended to be useful for manpower redistribution. But the labor freeing investments exerted and are still hardly exerting any influence, if for no other reason, than that during the resolution, planning and implementation of the investments employment matters are the very last to be considered.

It is difficult to determine to whom and to what the outlined measure system fundamentally pertains--enterprises, the individual or to both. The position of the researchers is that the most important juncture of the measures which affect

manpower redistribution is the enterprise. In other words, the planned and organized redistribution of manpower can be achieved basically by the regulation of enterprise manpower needs, or rather, by the hiring possibilities, and not by restriction of the individual's desires and rights to accept work, or rather, to select his place of employment.

It should also be noted that during the operation, or rather, the actuation of the measure system which promotes planned redeployment, certain of its elements did just the opposite--instead of redistributing and organizing manpower mobilization they are strengthening the undesirable manpower stabilization. The wage and income proportion measures--which otherwise are ranging between tolerably narrow limits--and the system used for retraining and further training are similarly having the reverse effect. In other words, the measure system which affects manpower mobility is in fact selectively guiding to a manpower redeployment which has been found to be unsuitable in practice. This was due as much to the rather low development of the measure system as to the enterprises.

Increasing the number of workers in the service industry branches--which is indispensable for their operation--through redeployment is among our most important tasks. Especially in the processing industry, the conditions for manpower redeployment which go hand in hand with the urgent modernizaiton of the production structure, must be created. It would be worthwhile to direct some of the unattached labor force resources which may be found throughout the country--such still do exist--into the Budapest agglomeration, and the resources to fund the employee population of the capital area's emphasized investments must be created.

Practical Tasks

Greater and more explicit selection must be exercised in interenterprise redeployment. The redeployments must serve to modernize the production structure more effectively. The proportion of planned and organized labor redistribution must be increased. This also means that it is necessary to increase the number of within the enterprise redeployments and those initiated by the employer. Most importantly, all of this must increase manpower's adaptability capacities and the personnel structure's flexibility.

Thus, for the most part, the tasks are of a practical nature. In order to achieve the desired results, we must determine what the roles and tasks of individual measures, offices and organizations in manpower redistribution are. It must be ascertained how and through what methods can the ministries and councils promote personnel redistribution, what must the social organizations do, and perhaps, how they must alter their concepts and behavior, what tasks await enterprises, and how best, through what methods and through what principles and requirements can their efforts be coordinated. Without identity of interests and harmony of action--as the events of recent years are indicate--the practical implementation of manpower redistribution principles can hardly be expected.

9093
CSO: 2500

WORKER-SUPERVISOR RELATIONS DISCUSSED

Warsaw TRYBUNA LUDU in Polish 15 Aug 80 p 3

[Article by Zofia Krzyzanowska: "The Manager and Subordinates"]

[Text] In a complex administrative system, management positions are the links uniting the individual's aims with those of the group and the group's aims with those of the society in general. Every supervisor has a supervisor to whom he must give an account of tasks fulfilled by workers subordinate to him. If relations with these workers are not good, the manager's efforts bring limited or unfavorable results. Furthermore, the manager, like everyone else, has negative feelings about an atmosphere of ill will, stress, and conflict.

But while the manager is indirectly affected by his subordinates, they are directly affected by him. The manager assigns tasks and enforces their implementation. The workers' wages, rewards, bonuses, and prospects for advancement depend on him. The manager forms an opinion about a worker and expresses this opinion daily through praise or reprimands. He can help, or he can hinder; he can strengthen ambition or destroy it.

Both sides are concerned that mutual relations turn out to be good. However, they often turn out to be bad.

We are a society which is very sensitive to a person's dependence on another person. People working in the service area remind us at every opportunity that, while they can serve us, they do not have to do so. Obviously, this oversensitivity does not bypass other areas of work. Sociological studies carried out in the sixties by Prof. Stefan Nowak and Dr. Zbigniew Sufin demonstrated that the division into managers and the managed, and directors and subordinates, is felt to be the fundamental source of stresses and ill will. Sensitivity to dependence did not decrease with the passage of time.

This does not make the manager's situation easier, the more so since we are still a long way from a widespread habit of conscientious and disciplined work and honest self-evaluation. Daily collaboration also forces the manager to express disapproval and to use pressure. It is unlikely that a conflict can be avoided in this situation. The important point is to prevent these incidents from hardening into permanent conflicts. And whether or not they do is determined by the manager's attitude, by how he understands his function, how effectively he fulfills it, and what right things he represents.

Studies conducted recently among young workers at the Moszczenica mine showed that every third one of them had left his previous employment as a result of conflicts with superiors. An analysis of personnel turnover at the Szczecin Transport Enterprise (from 1975 to 1977) showed that there also one of the principal causes of personnel fluctuations was a poor worker-manager relationship which was manifested by workers' earnings and the elimination of advancement possibilities. Someone angered the manager, someone "slipped," and there was a parting of the ways.

Conflicts with superiors are a fundamental reason for personnel turnover. More often than not, however, matters do not result in a parting, and an atmosphere full of reproaches remains, with all its negative results. These conflicts are usually accompanied by complaints of the superior's unfairness. It is often said about managers that they apply different standards to different people, underestimate workers' achievements and good will, and react tolerantly or harshly to the same offense, depending on personal liking and mood.

Not every such complaint is objective. People have a tendency to overestimate their merits and underestimate their faults. Unfortunately, however, it is a proven fact that in many work places fair evaluation is not guaranteed.

In comparing groups of workers considered to be the best with groups considered to be the worst, the Work and Wage Institute determined that the differences were not confirmed by either personal actions or by work results, which were analyzed overall and in depth. There is not too much knowledge available about a worker's personal actions, and individual work results are also not followed carefully on a daily basis. A worker's reputation is often based on incidents which stick in the memory.

Keeping evaluation charts on workers has been proposed for a long time, but has not caught on with management because it is laborious, bothersome, and time-consuming. It is obvious to every manager that he must know the tasks for which he is responsible and the materials needed to fulfill these tasks. The need for understanding people is accepted rather theoretically.

A young man confided in me: "I don't demand daily cordiality or discussions about family from my superior. I understand that, like everyone else, he may give in to feelings and make a mistake. But I cannot accept rudeness and behavior which shows that there is no need for consideration of subordinates. The 'modern' manager is so busy with problems and business that he has no time for subordinates. The style is to replace talking with shouting. As a result, the personnel's subordinate position becomes humiliating, and the atmosphere tense."

An exaggeration? No doubt. But it contains several rational premises. Not only where personal actions are concerned does punishment exceed rewards. Supervisors are not liberal with praise. Their attention often becomes concentrated on the subordinate only when he gives cause for dissatisfaction. A manner far from what is socially required is adopted, and it takes on particular importance because of the employee's dependent position.

What emerges from numerous surveys of factory workers is that the only requirements a manager must fulfill are those of basic work and cooperation values. A good manager need not be on the level of an expert in professional knowledge, nor must he be a "good guy" when fulfillment of duties is to be accounted for.

But he must have the organizational knowledge and abilities needed for effective implementation of tasks, must exhibit a kindly interest in his subordinates, and observe the principles of fairness.

He must be, so to speak, "human," and "human" includes treating his subordinate as an equal partner with whom he can and must have mutual understanding. This understanding is of fundamental importance in interpersonal relationships and work effectiveness.

9461
CSO: 2600

OLTENIA COAL BASIN OPERATIONS: PROBLEMS, SOLUTIONS VIEWED

Bucharest REVISTA ECONOMICA in Romanian No 37, 12 Sep 80, and No 39, 26 Sep 80

[Article by Vasile Boescu and P. Bogdan: "The Raising of Coal Production to the Level of the Economy's Needs" (Parts III and IV)—for Parts I and II see JPRS 76515, 29 Sep 1980 pp 79-88]

[12 September 1980, pp 6-7]

[Text] A marked increase in coal production constitutes one of the highly topical imperatives, since the fuel needed both for producing electric power and for obtaining the coke used in the iron and steel industry is to be furnished on this basis. Both the provisions for this year and especially those for the 1981-1985 five-year period make it necessary that in the mining industry special efforts be made to exemplarily fulfill the continually growing tasks, in order to help to reduce the country's effort in coal importation.

Special tasks in this regard devolve upon the mines in Valea Jiului, which, as is known, extract most coal with a high caloric power. These operations, with an old tradition in our country, have undergone vast changes. Today, for the most part, the coal is extracted underground with mechanized means, the old settlements, which have been transformed into modern cities, have been rebuilt from the ground up, a polytechic institute for engineers and subengineers has been organized, and so on. All these things are causing at present the activity of the miners in Valea Jiului to be more economical and the production of coking and power coal to register spectacular increases.

A High Degree of Mechanization--Increased Production

According to the provisions of the sole plan for economic and social development of Romania, the mining units in Valea Jiului are to extract 11.1 million tons of coking and power coal this year. It is significant to point out that the output planned for 1980 represents the biggest annual increase known thus far in this basin. For the next five-year period, the attainment of a level of at least 15-16 million tons of extracted coal in 1985 is expected.

In the first half of the year, the activity performed along the line of fulfilling the plan targets ended in remarkable results. The commodity output was overfulfilled by 0.8 percent, the net output of coal by 0.1 percent, the output of sorted coal by 2.6 percent and the output in terms of net value by 2.7 percent. The indicators of the technical plan were overfulfilled by 3.4 percent for mechanical loading of coal and deads and for gallery headings, by 5.3 percent for metal support in faces and by 7.7 percent for mechanical cutting and loading of coal in longwall working faces. The stipulated consumptions of materials were 3.6 percent lower for pit props, 3.9 percent lower for coniferous timber and 3.2 percent lower for electric power. The plan for preparatory work in the whole basin in Valea Jiului was fulfilled at the level of 100 percent, but with the targets for opening work and building-assembly work not being completely fulfilled.

The Lupeni, Paroseni and Barbateni operations, where persevering action was taken to fully use the technical equipment and the worktime, made a special contribution to the results obtained. At Lupeni, for instance, which overfulfilled the plan by 21,200 tons of coal in the 1st half of the year, attention was devoted to using the mechanized complexes at high parameters, to keeping the equipment in good condition and repairing it at the proper time, and to strengthening order and discipline, which led to the obtaining of high productivity (between 10,766 t/p and 14,264 t/p at the Hemschidz complexes and between 10,973 and 12,030 t/p at the SMA [expansion unknown] complexes). At Paroseni, where the plan for the 1st half of the year was overfulfilled by 6,800 tons of coal, productivities higher than the stipulated indicators were obtained with the Fazos complex (11,253 t/p on the average as compared with the 9,853 planned, attaining 16,672 t/p at seam 13, block 6, panel IV-V). Good results were also obtained with the SDP-240 [expansion unknown] complexes at Petrila, with the stipulated levels being exceeded by 3.4 tons per post.

The achievement of coal extraction at the planned level this year and in future years has caused and is causing further the development of the production capacities, the utilization of new mining fields, of new geologic reserves. For ensuring the growth of the production capacities, the achievement of a volume of investments 37.5 percent higher than in 1979 is provided for this year. New mining fields are in the process of being opened, the capacities of all the existing mines are being developed and a big volume of vertical and horizontal opening work is being done,

especially at the Uricani, Lupeni, Lonea and Aninoasa mines. Concomitant with these concerns, greater attention is being devoted to the better utilization of the mining mass by introducing new, modern solutions into the coal-preparation process, by increasing the degree of technicality in processing and washing, in order to recover as large an amount of output as possible and clear out the residual water.

This year, as a result of the actions taken to mechanize the work of heading and coal extraction, results much better than in the earlier periods have been obtained. The output extracted with mechanized support rose from 789,000 tons in 1977 to 2 million tons in 1979 and amounts to 4 million tons in 1980. At the same time, the degree of mechanization in the cutting of coal in normal faces equipped with complexes and individual support has risen from 2.8 million tons in 1979 to 4.5 million tons in 1980. The number of mechanized complexes in the inventory has risen from 30 in 1979 to 59 in 1980, and the number of those in operation has risen from 19 to 38, which means practically the doubling of the faces at which these underground plants work.

The concern for sensibly utilizing the work force constitutes another decisive factor in obtaining better results, with an accent being put on increasing the number of posts placed in directly productive work. Thus, in the majority of the months that have passed this year, an increase of 500 posts placed in the coal-extraction faces was achieved at Paroseni, 300 at Lupeni and 200 at Barbateni. The highest percentage of placed posts is found in the preparatory work for coal extraction.

The Labor Productivity at Each Post

Pointing out the positive results obtained and the better and better conditions for underground work, we have to state that the mining units in Valea Jiului continue to be confronted with a number of drawbacks and shortcomings that are making themselves felt in the general activity. At the level of the combine, a lag of 287,000 tons in the production of raw bituminous coal, of which the biggest shortfalls come from the Livezeni, Dilja, Lonea, Aninoasa and Vulcan operations, was registered in the 1st half of the year. The failure to fulfill the plan at the respective operations is due, above all, to shortcomings of an organizational nature. Thus, the poor concern for organizing the activity at the working faces equipped with all-around mechanization caused the obtaining of low productivity at Lonea, Livezeni, Vulcan, Aninoasa and Uricani, which also influenced negatively the physical labor productivity at the level of the combine. Besides these lags, it is also relevant that the deviations from the quality indicators of gross output led to bearing in the production costs price reductions amounting to 65.6 million lei in connection with an output of 262,000 tons, which is practically equivalent to the gross output not achieved.

All these shortcomings also constitute the main cause of the failure to achieve the planned labor productivity at the level of the combine, as

regards both the value indicator and the physical indicator (97.2 percent and 90.4 percent, respectively), which caused an excess of 61.8 lei in the expenses per 1,000 lei of commodity output and of 18.4 lei in the material production expenses.

The failure of the units of the machine building industry to provide equipment and mechanisms at the proper time also contributed to the failure to fulfill the plan targets at the coal mines in Valea Jiului. Thus, the Petrosani Mining Equipment Enterprise is behind in deliveries by 13 SMA-2 complexes, 2 SMA-1 complexes and 16 CA-2 coal face combines, and the Filipestii de Padure Mining Equipment Enterprise by 20 AH-78/350 hydraulic aggregates. In addition, regarding the equipment provided for the investment objectives for 1980, the delivery dates for many pieces of equipment were overshot by the Bucharest "23 August" supplying enterprise, the Baia Mare IMUM /Metallurgical Tool and Machine Industries/ and so on, to which is added the failure of the Industrial-Export-Import firm to provide a number of pieces of imported equipment.

Close Collaboration Between the Mining Specialists and Those Who Make the Equipment

Unfortunately, there are disputes between suppliers and customers in connection with providing the mining equipment. On the one hand, the customers (the mining enterprises) cite the failure of the suppliers (the machine building enterprises) to make equipment perfectly adapted to the specific character of their work and on the dates stipulated by the contracts. In their turn, however, the suppliers assert that this situation is due to the attitude of the mining units, which do not approve in due time the equipment provided for testing, that the requests are very often changed both quantitatively and in terms of assortments, that the customers still have not clarified in detail all their demands, and so on.

The problem in itself--regardless of who is right--merits a more thorough analysis. It is known, for instance, that about 2 years ago, on the instructions of the higher party leadership, a plan for mechanizing the mines in Valea Jiului was drawn up, a plan in which responsibilities and dates for assimilating and achieving in series equipment, machines and installations were stipulated. Unfortunately, thus far, for many planned facilities, the dates of achievement have been overshot by far. Why is there such a state of affairs?

It is true that, as a result of the stipulated measures, the specialization of units in the manufacture of mining equipment has been undertaken in the machine building industry, that they have assimilated some new types of equipment, that a part of those planned have been delivered. But the activity is going on with great slowness, which is putting its imprint on the failure to achieve on schedule a number of pieces of equipment, mechanisms and spare parts. The list of the failures is quite long and includes a variety of equipment (SMA-1 complexes, SMA-2 complexes, coal face combines,

AA-78/B50 [expansion unknown] hydraulic aggregates, dump trucks, motor cranes, S-1,500 tractors with bulldozer equipment, hydraulic excavators and so on).

But it must be said that it is just as true that the specialists of the Mining Combine in Valea Jiului and of the subordinate mines decide with great difficulty in precisely establishing the needs. Naturally, the specific character of the operations calls for mechanisms of different types, which do not always correspond to the conditions under which they are put to work. However, from this to the situation of not deciding--although years have passed--about the equipment received for approval is a very long way. Unfortunately, the tendency to request as much imported equipment as possible continues to prevail among the mining specialists, although that assimilated by our machine building industry is not inferior in any way.

One measure that would be necessary in order to eliminate subjectivity would be that of organizing joint staffs of specialists from the machine building industry and from the mines, which would analyze on the spot (in the mines) the conditions, the behavior of the equipment furnished, the real needs, and together would establish in detail the new complexes and machines that must be achieved. The measure would also lead to the improvement of the equipment furnished thus far and, at the same time, the hastening of the execution of equipment of undoubted necessity.

Naturally, other actions must also be taken--of which the vocational training of those who operate the mechanized means must be put first and foremost. The fact that a number of pieces of equipment are not utilized at the prescribed parameters, that some mechanized complexes are not used for the stipulated duration because they broke down in operation, that there are differing results between crews of miners that work on the same equipment and under the same conditions, shows by itself that it is necessary to act more intensely in the direction of training the personnel. Moreover, it must be said that under the conditions in which the mechanization in mines is increasing, the trade proper of miner is being transformed into that of fitter. Consequently, it is a question of a new profession, for which personnel must be trained, to the extent to which this "void" will be filled, the equipment being used better, and the results of the work will be better than the current ones.

In the light of the tasks resulting from the speeches given by Comrade Nicolae Ceausescu at the work session of the RCP Central Committee and the expanded plenum of the National Council of Working People, the working people's council at the Valea Jiului Mining Combine recently analyzed the stage of fulfillment of the plan and the measures that are required for fulfilling it for the whole year and creating the conditions needed for 1981. The program of measures adopted involves in particular the increasing of the production capacities by about 4,000 tons per day by putting into operation new faces equipped with complex support and mechanized cutting and the execution of the work connected with putting into operation the Cimpul lui Neag zone A mining field.

In addition, the measures involve the better organization of production and labor, mainly the daily placement of an additional 300 workers in the activity of coal extraction, by means of which a production increase of 1,200 tons per day will be provided; the additional introduction of 7 combines into the coal heading work; the providing of technical assistance on all shifts; the improvement of the activity of overhauls and repairs; the exploitation of the outcrops at Lupeni and Uricani; the better utilization of the combustible mass by improving the activity of coal preparation; the putting of manual sorting into operation at Lupeni; and the sorting of the visible deads in faces.

For carrying out the investments, the timetables with the scheduling of the work of putting into operation the new capacities with dates falling due in 1980 have been updated and the matter of analyzing on a 10-day basis with the responsible factors at the mining enterprises the manner of achievement of the mining work of preparation and opening, the use of the technological equipment in the inventory, and the pursuit of the implementation of the equipment-purchase contracts in conformity with the provisions of the mechanization and equipment program have been established.

Clearly, all the proposed actions will have the anticipated efficiency to the extent to which all the factors involved--miners, geologists, designers, machine builders--will act in close collaboration, will promptly solve all the problems that arise, creating favorable conditions for a well-organized activity in providing the working faces, the necessary mechanized means, in continually improving the work technologies.

/26 September 1980, pp 5-6/

/Text/ Under the conditions of the high rates of development of the economy, the providing of the planned quantities of fuel and, respectively, electric power represents a vital matter for properly carrying out production in all sectors of activity. On the occasion of the recent work visit made to Oltenia's coal basin, the secretary general of the party, Comrade Nicolae Ceausescu, directed to the miners--in the speech given at the people's assembly in the city of Motru--the appeal to do everything to increase coal production, so that in ensuing years our country would be able to become as independent as possible from the importation of petroleum and coal, meeting its need for energy and fuel from its own resources.

In the light of these tasks of special importance to the whole national economy, we continue the investigation undertaken by our periodical in the big coal basins in Oltenia and Valea Jiului, presenting a synthesis of the opinions of the specialists within all the units

involved--mining units, suppliers of technological equipment, customer thermoelectric power stations and so on--regarding the methods of more actively involving the main factors capable of leading as soon as possible to the recovery of the arrears and the fulfillment of the planned tasks, for preparing as well as possible to fulfill the tasks in the next five-year period.

The Hastening of the Putting of New Extraction Capacities Into Operation

The concentration of the efforts to make up the delays in putting the stipulated new production capacities into operation at the planned parameters, to prepare new working faces, constitutes, along with the better organization of labor at all the work points, a priority objective on the basis of which the specialists feel that it will be possible to raise the level of the physical output in each quarry and mine in Oltenia's coal basin in such a way as to achieve daily 95,000 tons of lignite in the 2d half of September and about 100,000 tons in the 4th quarter of the year. Moreover, the problem is valid for both coal basins, where a number of openings of new mines have long since overshot the stipulated date for going into operation at the projected parameters. It is mainly a question of some production capacities in Valea Jiului (the mine in zone A of Cimpul lui Neag, new faces at Lupeni, Vulcan, Uricani and so on) and those in Oltenia's basin (the small quarries and the new mines at Zegujani, Motru Vest, Plostina II, Rosinta, Tismana, Farcasesti, Somanesti and others). Greater attention in establishing the order in which the work is tackled, in organizing and balancing the whole activity of providing the coal and working faces in such a way that the urgent work is done in coordination with the tackling of the future work, seems necessary in order to avoid the appearance of such problems. We are referring particularly to the performance of the work of draining the marshes and the land with high humidity in Oltenia's zone before the time of turning to uncovering, the early execution of the access and traffic roads and so on.

At the same time, it is necessary that, by increasing the efforts, the geologic specialists prepare--on the basis of much more thorough, more rigorously substantiated studies and research--geologic maps, diagrams and estimates closer to reality. And this is because there still have been cases when significant investment funds have been spent on the organization of sites, and a significant volume of manpower and equipment has been tied up in the performance of uncovering work, so that, ultimately, the seam of coal and its quality have been far below the estimates.

Improvement of the Making, Operation and Maintenance of Equipment

The equipping of the mining units with coal-extraction and -transport aggregates at the level of the rational, well-substantiated need and the operation of them at higher indices constitute a decisive premise for the extraction of coal at the level of the plan targets. In order to achieve it, the concerns of the factors involved must have in view in particular:

1. The priority concentration of the efforts in the supplying units to make and send immediately to the mines in Oltenia and Valea Jiului all the equipment contracted for: excavators, coal face combines, mechanized complexes, dumping machines and so on, including that whose dates are now expired;

2. The elimination--at the producer--of the discrepancies that still appear occasionally in certain equipment (mechanized complexes, bulldozers, excavators, dumping machines, stations for driving the belt conveyors, and so on) between the performances of the equipment furnished and those required by the concrete operating conditions in the quarries and mines. It is above all a question of making and furnishing bucket excavators that would replace, in the hilly zones (Tismana I, Rovinari Est and so on), the rotor excavators, which cannot have high outputs in work on a slope. But also of the fact that types of dump trucks with transmission and hydraulic systems of greater dimensions and sturdiness than those furnished thus far are necessary for the requirements specific to the operations in Oltenia's basin. In addition, the opinion regarding the necessity of perfecting improved technologies and equipment that would permit the selective extraction of coal, the reduction of the volume of deads transported, and the better utilization of thin seams of useful material is also interesting to have in the discussion of the specialists.

For fulfilling these requirements, it is felt that it is necessary for the researchers and designers at the producing units within the MICM /Ministry of the Machine Building Industry/ to study more thoroughly, on the spot, the specific working conditions and, on this basis, to devise coal-extraction and -transport equipment more adapted to the specific character of the work in the quarry or mine. However, it is no less true that since the producing units are obliged to stay within the provisions put in the design it seems advisable that, on ordering the technological equipment, not just the ideal working conditions be put--by the customer--in the working designs but that the real and complex difficulties that the exploitation of coal actually presupposes and the probability of the appearance of more difficult operating conditions in the interim also be taken into account;

3. The increasing of the promptness of the activity of installing the technological extraction aggregates, through the delivery of ready-to-install subassemblies by the supplier and through the intensification of the customer's help in the general installation of new production equipment. It is a question, at Rovinari, for instance, of finalizing the putting of four excavators and dump line three into operation at Rosia, of finishing the work on the Jilt coal line and excavator number two, of putting into operation the Tismana II coal trunkline, a new excavator and a dump line at Lupoaia, and so on;

4. The speedup of the process of assimilating the new technological equipment with high performances. In the regard, it seems necessary, on the one hand, for the suppliers within the CIUTPM /Industrial Central for

Technological, Petroleum and Mining Equipment/ to increase their efforts to make up the arrears with regard to the provisions of the technical plan for renovation of production and, on the other hand, for the customers to substantiate better and sooner their need for new equipment, avoiding a much too frequent quantitative and qualitative change (even during the plan year) in the choices made. At the same time, it is necessary for the mining units to collaborate more actively with the producing enterprises on more promptly approving the new aggregates assimilated by the enterprises in the country;

5. The increasing of the concern for continually improving the operation and maintenance of the technological installations in the inventory, so that for all the equipment, and especially that in the quarries, the use indices rise to more than 80 percent in a short time. A much bigger contribution is expected both from the suppliers (especially the Braila "Progresul" Enterprise) and from the customers, through the providing of normal operating conditions to a greater extent--the building of suitable roads and the elimination of improvisations in making them, the improvement of maintenance and the continual modernization of the existing ones--and through the prompt and complete assimilation of the nearly 30 percent that devolves upon them for their own manufacture out of the total of the spare parts required, the making of repairs at the proper time and with high quality, and so on. The mining units will also have to show more concern for properly storing the subassemblies and the technological equipment coming from the suppliers, in order to protect them from irreparable damage as time passes.

The Providing of Manpower in Suitable Numbers and With Suitable Qualifications

One essential matter for increasing the volume of extracted coal consists of meeting the need for manpower in suitable numbers and with suitable qualifications, an objective for attaining which the efforts must be oriented with priority in the following directions:

The stimulating of the concern--in the operations in both Oltenia's basin and Valea Jiului's basin--for training and for increasing the vocational training of the personnel who perform work of preparing the new capacities and those who extract coal from faces and quarries. To this end, various forms of training must be used--in vocational schools, on the job, through sharing of experience and so on--so that those who will utilize the mechanized means can obtain high outputs on each piece of equipment, can operate them rationally so that their operating life is as long as possible. At the same time, it is necessary to also provide, by means of the high level of training of the personnel, the possibility of making the possible overhauls for repairing accidental damage, thus avoiding the losses of time needed for utilizing such work by other personnel. At the same time, it would also be extremely useful to set up on the Rovinari platform--in Gorj County--an institute for quarry mining subengineers, which would help to

increase the stability of the work force and to train specialists for the specific character of the operations in Oltenia's zone;

The continuation of the action of increasing the degree of mechanization of not only the basic work but also the auxiliary work. In Valea Jiului, for instance, a number of slightly mechanized elements--cranes, winches and so on--for installing the big mechanized complexes and for transporting them to the faces have sometimes not been provided, which causes such work to be clumsily and with big delays at certain operations. It is necessary for both the suppliers of such equipment and the operations' own shops to make greater efforts to provide such tools and equipment sooner. In addition, it may be very necessary--especially for the quarries in Oltenia--for the "Castor" excavators of 0.6 cm to be equipped with a mechanized system of shovels right in the factory. Especially because such a system has been achieved, from our own ideas, for 20 aggregates within the mining combine. For this, however, the producer of the excavators--the Braila "Progresul" Enterprise--would have to exhibit more receptivity and promptness in assimilation. The problem is also posed likewise with regard to the winding installation for recovering the conveyor belt of reusable rubber in the quarry, in the assimilation and making of which the machine building units do not exhibit sufficient mobility.

Improvement of the Organizational Framework for the Activity of Extraction and Utilization

Besides the above-mentioned aspects, it is important to note the fact that, during the investigation made, there were brought out a number of possibilities of coal extraction and utilization that are worth pointing out since they can contribute without additional investments, or with a minimum of allocated financial resources, to the substantial quantitative and qualitative growth of mining production.

A good measure, and one that must be continued, is that of building warehouses for storing the coal both at the suppliers and at the customers, since the advantages are substantial if it is considered that in this way conditions are created for drying the coal better and for increasing its quality, its content in calories, by means of sorting and mixing. On this basis, it is possible to create a reserve supply of coal (which will have to rise far over 1.5-2 million tons) capable of providing to the thermoelectric power stations a certain independence from the suppliers, avoiding critical situations in the supply and providing continuity to the coal supply in the winter period.

In view of the unsuitable maintenance of the auxiliary equipment (bulldozers, bucket excavators, motor graders, cranes and so on), on the one hand, and the fact that the enterprises that now have it in the inventory (the IUTCCR [expansion unknown]) do not manage to provide it at the level of the requirements, one possible organizational solution for eliminating these shortcomings would be for the auxiliary equipment for extraction and

transportation to be put in the inventory of the mining units, which would obviously lead to more concern for maintaining it, the reduction of the TESA [technical, economic, other specialized, and administrative] and auxiliary personnel by about 30 percent.

Of special importance is the matter of taking under study the proposal that the production units of the Oltenia Mining Combine and the customer thermoelectric power stations in Rovinari and Turceni, which are on the same industrial platform, be unified--from an organizational viewpoint--into a single central for coal extraction and utilization, as in fact this complex mining and power-producing activity is also organized in other countries of the world. The proposal deserves all the attention of the factors involved, in view of the significant advantages that it has: the economization of a significant number of TESA personnel who are now occupied with separate records and accounts of the coal at the producer and the utilization as a final product and, respectively, a raw material, the concentration of the efforts in the fields of both the extraction and the processing of coal toward an essential objective of the economy: the production of electric power. Also to this end, it is necessary to examine more closely the proposal that the basic physical indicator for judging the activity done in the mining sector be a certain quantity of gigacalories (and not as at present the ton of extracted coal to high-grade washed and sorted coal) and that at the level of the combine for coal extraction and utilization the kilowatt-hour of power produced be institutionalized as an indicator.

In this context, it is clearly seen that the Ministry of Mines, Petroleum and Geology, the Ministry of Machine Building, the Ministry of Transportation and Telecommunications, the Ministry of Industrial Construction, the State Planning Committee, the Ministry of Labor and the local party and state bodies are called upon to give substantial help in attaining the great objectives that devolve upon the country's coal mines. Especially with regard to more promptly providing mechanized means of a high level, to setting the quotas for material consumptions and for labor in relation to the actual and real needs of the operations, to steadily making means of transportation available, to intensifying the activity of putting new deposits into operation, for speeding up the rate of construction of the new urban mining centers--Rovinari, Matasari and Trestioara--for continually improving the working and living conditions of the miners.

The premises needed for establishing and maintaining a high rate in the extraction of ocal and the delivery of it to the iron and steel industry, to thermoelectric power stations and for the population's needs are being created through the increase in the miners' own efforts and with the benefit of this multilateral help.

12105
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END

JPRS 76786

7 November 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2064

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7 November 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2064

CONTENTS

INTERNATIONAL AFFAIRS

Yugoslav-Albanian Border Agreement
(Veselin Djuranovic; MEDJUNARODNI UGOVORI, 22 Sep 80) ... 1

Yugoslav-Albanian Trade Protocol for 1979
(Veselin Djuranovic; MEDJUNARODNI UGOVORI, 22 Sep 80) ... 10

Yugoslav-Mongolian Trade, 1978, 1979
(Veselin Djuranovic; MEDJUNARODNI UGOVORI, 22 Sep 80) ... 14

Trade Protocol for 1978
Trade Protocol for 1979

ALBANIA

Importance of State Control in Economic Sphere
(Osman Murati; RRUGA E PARTISE, Jul 80) 17

BULGARIA

Scientist Discusses Poor Quality of Grain
(Dimitur Dimitrov; RABOTNICHESKO DELO, 4 Oct 80) 25

HUNGARY

Employment Policy, Manpower Management Problems Discussed
(Ferenc Trethon; MUNKAUGYI SZEMLE, Jun 80) 28

ROMANIA

Development of Economic Ties With Balkan Countries Examined
(A. Constantinescu; REVISTA ECONOMICA, 12 Sep 80) 49

Experiences With New Economic Mechanism Discussed
(Ion Chirculescu; ERA SOCIALISTA, 5 Aug 80) 54

Improvements in Investments Sector Necessary for Growth
(I. Capanu, P. Wagner; REVISTA ECONOMICA, 12 Sep 80) ... 69

Implications, Advantages of Overall Contract System Use
(Alecu Busnita, Adrian Neacsu; REVISTA ECONOMICA, 19 Sep 80) 73

YUGOSLAVIA

Foreign Indebtedness, Trade Balance Analyzed
(Mirko Djekic; NEDELJNE INFORMATIVNE NOVINE, 14 Sep 80). 80

Ambiguities of Dinar Devaluation, Exchange Explored
(Mirko Djekic; NEDELJNE INFORMATIVNE NOVINE, 28 Sep 80). 86

Survey, Outlook to 1985 for Small Business Sector
(Milka Vranes; KOMUNA, Sep 80) 92

Development of 380-KV Transmission Network—1980-2000
(Lazar Ljubisa, et al.; ELEKTROPRIVREDA, May-Jun 80) ... 99

YUGOSLAV-ALBANIAN BORDER AGREEMENT

Belgrade MEDJUNARODNI UGOVORI supplement to SLUZBENI LIST SFRJ in Serbo-Croatian No 10, 22 Sep 80 pp 456-459

[Agreement signed between Yugoslavia and Albania on 27 June 1978, ratified by the Federal Executive Council and signed by its chairman Veselin Djuranovic on 14 September 1978 and took effect on 4 July 1979]

[Excerpts] Agreement Between the Government of the Socialist Federal Republic of Yugoslavia and the Government of the People's Socialist Republic of Albania on Measures to Prevent and Resolve Incidents on the Yugoslav-Albanian State Border

Whereas it is in the interest of both countries to prevent and properly resolve incidents that might possibly occur in future on the Yugoslav-Albanian state border and so as to preserve security on the border and to aid the competent government agencies in resolving border incidents, the Government of the Socialist Federal Republic of Yugoslavia and the Government of the People's Socialist Republic of Albania have agreed to combine in a single agreement the Agreement Between the Government of the Federal People's Republic of Yugoslavia and the Government of the People's Republic of Albania on Measures To Prevent or Resolve Incidents Which Might Possibly Occur in the Future on the Boundary of the Yugoslav-Albanian State Border, concluded in Ohrid 11 December 1953, and its amendments and supplements drawn up in Belgrade on 12 June 1971.

Article 1

The two parties to the agreement shall take all necessary, effective and lasting steps so as to eliminate all causes which might result in border incidents and to achieve security on the border.

Article 2

The term "border incident" used in Article 1 of this agreement refers to the following:

a) the opening of fire from weapons of any kind or the casting of an object by the force of explosives from the territory of one to the territory of the other party,

b) violation of the other party's air space,

c) violation of the boundary waters of the other party,

d) unauthorized passage of persons over the national border,

e) movement, damage or destruction of boundary markers,

f) the starting of fires on the territory of the other party or the spread of a fire to that territory,

g) the aiming of a firearm at persons located on the territory of the other party,

h) illumination of the territory of the other party with spotlights or signal flares,

i) insults or provocation in words, writing or gesture toward the territory of the other party,

j) other actions of persons which could result in physical injury or property damage on the other side.

Article 3

The following actions shall not be regarded as border incidents:

a) the passage of persons to the territory of the other party in order to avoid a hazard caused by force majeure,

b) the passage of persons to the territory of the other party in order to aid a person in danger for his life, if such aid has been requested,

c) navigation in the boundary waters of the other party resulting from a force majeure, a breakdown of the vessel or in order to render assistance under the conditions stated under Subparagraph b of this article,

d) the flight of an aircraft with crew in the air space of the other party or landing on the territory of the other party caused by force majeure, when this is established by both parties,

e) illumination of the territory of the other party by the headlights of vehicles and incidental to the operation of equipment.

Article 4

If the vessel of one party has in the judgment of a patrol of the other party violated the territorial waters of that other party, at the request of the captain of the patrol the master of the vessel must stop so that they can jointly ascertain the position and write up a joint report on the situation as established.

If the patrol and the master of the vessel cannot reach agreement or do not agree on the position of the vessel, they are required to anchor floats (buoys) and to leave the place of the event and immediately notify their section of the LMK [local joint commission].

Article 5

Each party shall make the provisions of Articles 2, 3 and 4 of this agreement known to border personnel within 10 days from the date when this agreement takes effect and shall post them prominently in border watchtowers and other buildings of border units.

Article 6

The two parties to the agreement, for purposes of investigation and resolution of possible border incidents and for performance of other tasks under this agreement, shall establish the Head Joint Yugoslav-Albanian Commission for Border Incidents (hereafter referred to as the "Head Joint Commission") and seven local joint commissions for border incidents (hereafter referred to as "local joint commissions [LKM]"), for the seven border sections as defined in Annex 1.

Article 7

The Head Joint Commission shall consist of three members from each party, which shall be appointed by the governments. Aside from the members, specialists and auxiliary personnel may also participate in the work of the commission, up to five persons on each side. The parties shall communicate to one another the names of the chairmen and members of the commission through diplomatic channels within a period of 10 days after this agreement takes effect. Should there be a change in the chairman and members of the Head Commission, each government shall inform the other of this fact through diplomatic channels.

Article 8

Each local joint commission shall consist of three members and up to five specialists and auxiliary personnel on each side.

Each local joint commission shall have its specific border section as defined in Annex 1.

The names of the members of each local joint commission shall be communicated in good time at the meeting places (as indicated in Annex 2) when the commissions are founded and when changes occur.

Article 9

The Head Joint Commission shall have the following tasks:

a) to propose practical steps to preserve the inviolability of the boundary of the Yugoslav-Albanian state border,

b) to oversee the work of the local joint commissions and to decide and resolve the unresolved issues which they submit to it,

c) to propose to the two governments steps they should take to implement this agreement,

d) to draft rules and procedure governing its own work and the work of the local joint commissions,

e) to propose to the government compensation for damage caused in the border region by a border incident or in some other manner.

Article 10

The Head Joint Commission shall sit regularly once a year, alternately in Yugoslavia and Albania. The meetings shall be chaired alternately by the chairmen of the two sections of the Head Joint Commission. Identical minutes shall be drawn up in two equally valid copies in one of the languages of the nationalities of Yugoslavia and in the Albanian language concerning the decisions taken and the measures proposed.

Issues which may have remained unresolved shall also be entered in the minutes along with each side's separate viewpoint.

The place and date of the next regular meeting shall be stated in the minutes. The two parties shall exchange copies of the minutes after they have been signed by the chairmen and certified by the stamp as indicated in Annex 3.

Decisions taken unanimously shall become binding after approval by the governments which are parties to the agreement.

The Head Joint Commission may resolve individual issues by exchange of letters between the chairmen or in a special meeting.

Article 11

In exceptional cases and at the request of one of the parties the Head Joint Commission must visit the scene of an event in order to establish [the facts] and resolve the incidents.

Proceedings at the scene of the event shall be directed by the chairman of that side on whose territory the incident has occurred. The commission must commence proceedings within 5 days from receipt of the summons of the other side. The chairman of the Head Joint Commission of the other side must respond within 48 hours after receiving the summons. The summons sent to the chairman of the Head Joint Commission of the other side should be signed by the chairman sending it and should be stamped. Minutes shall be written on the proceedings and decisions in accordance with the provisions of Article 10 of this agreement.

Article 12

The tasks of local joint commissions are as follows:

a) to take steps to enforce the agreement and carry out decisions of the Head Joint Commission,

b) to take steps to combat occurrences and causes which could cause border incidents,

c) to investigate and solve border incidents and for that purpose to guard clues and other physical evidence and if necessary conduct an on-the-spot inquiry into the event and organize expert testimony,

d) in the shortest time, but not longer than 48 hours, to perform the official delivery, with receipts, of persons who have crossed the border because of force majeure and persons who have lost their way as well as the delivery of property,

e) to ascertain and assess damage caused by a border incident or in some other manner and to submit a report to the Head Joint Commission.

That section of the local joint commission on whose territory an incident has been committed must notify the other section in good time, but no later than within 10 days. That section of the local joint commission which has been summoned to go to the scene of the event or to come to a meeting must respond to the summons.

Local joint commissions shall resolve border incidents in meetings or by exchange of letters.

Local joint commissions shall if necessary meet and conduct proceedings on the scene where a border incident occurred. Identical minutes shall be

drawn up in two equally valid copies on unanimous decisions, and the copies shall be signed and stamped by the chairmen, they shall exchange copies, and they shall report to the Head Joint Commission.

Should the local joint commissions not agree, each section shall state its viewpoint in the joint minutes and they shall report to the Head Joint Commission.

The local joint commissions shall draw up official papers and correspond in one of the languages of the Yugoslav nationalities and the Albanian language.

In principle the local joint commissions shall not debate a large number of issues in one meeting.

Each section of the local joint commission shall have the appropriate stamp in accordance with Annex 4.

Article 13

The authorities of the party on whose territory an incident has occurred shall take all measures to preserve clues and evidence which might help clear up the incident until the arrival of the two sections of the local joint commission at the scene where the border incident occurred.

Local joint commissions shall work from sunup to sundown, and then each section shall return to its own territory unless bad weather conditions and the nature of terrain make this impossible. If they do not complete their work in 1 day, they shall resume it the next day.

Article 14

Members of local joint commissions shall cross the border on the basis of the summons of the other side, and on the basis of the pass whose form and content are defined in Annex 5.

The pass shall be issued and signed by the chairman of the Head Joint Commission of each side and shall be verified by the stamp of the commission.

Specialists and auxiliary personnel of local joint commissions shall cross the border on the basis of the list certified by the chairman of the respective section of the commission.

Article 15

Members of the Head Joint Commission shall cross the border on the basis of a diplomatic travel document, and specialists and auxiliary personnel on the basis of an official travel document.

Article 16

Members of the Head Joint Commission and of local joint commissions and their specialists and auxiliary personnel shall enjoy personal inviolability, inviolability of official papers and diplomatic status on the territory of the other party.

Personal effects, equipment necessary for work and vehicles shall be exempted of duty and all other charges provided they are returned.

Military and other uniformed persons participating in the work of the Head Commission and local joint commissions, including specialists and auxiliary personnel, may wear their uniform on the territory of the other party, but may not bear weapons.

The persons mentioned in this article shall be furnished the necessary conveniences to perform their official duties within the scope of the tasks defined in the agreement.

On the Basis of Authorization
of the Government of the
Socialist Federal Republic
of Yugoslavia,
Joze Strumbelj (signed)

On the Basis of Authorization
of the Government of the
People's Socialist Republic
of Albania,
Skender Alikaj (signed)

Annex 1

The following border sections are defined on the Yugoslav-Albanian state border:

1. from the limit of territorial waters in the Adriatic Sea to Ckla, to the A1-10 boundary stone--section 1,

2. from Ckla, from boundary stone A1-10, to boundary stone A2-22--section 2,

3. from boundary stone A2-22 to Bogicevica, to boundary stone B-28--section 3,

4. from Bogicevica, from boundary stone B-28, to Cafa Prusit, to boundary stone C-14--section 4,

5. from Cafa Prusit, from boundary stone C-14, to Serup (elevation 2105), to boundary stone D-24--section 5,

6. from Serup (elevation 2105) to Trebisht, to boundary stone E-24--section 6,

7. from Trebisht, from boundary stone E-24, to the intersection of the three borders on Lake Prespa--section 7.

Annex 2

The following meeting places are designated on the Yugoslav-Albanian state border, and the manner of delivery of summons and reports is defined as follows:

a) Place for notification of the Head Joint Commission: Bozaj--Hani i Hotit.

b) Place for notification of local joint commissions:

1. Sukobin--Dodaj,

2. Bozaj--Hani i Hotit,

3. Vrmoska Reka (pyramid B-14),

4. Cafa Prusit (pyramid C-14),

5. Vrbnica--Morina,

6. Blato (pyramid E-15),

7. Cafa San,

8. Sveti Naum (pyramid F-1),

9. Stenje (pyramid F-14).

c) Each party to the agreement shall send to the other party a summons through border authorities between sunup and sundown in the following manner:

The person designated to deliver the summons shall use the signal for summoning: a white flag about 100 cm long and 50 cm wide, placed on a staff 2 meters long.

The summons shall be delivered and received only at the points designated for notification on the border as given under Subparagraphs a and b. A summons may not be delivered nor received at other points.

The summons shall be written in the language of that party which is sending it--in the Latin script, typed if possible, or in legible handwriting.

The summons should state the precise time and place where the incident occurred and should briefly describe it, and then it should state the precise place for crossing the border and the place where the local joint commission is to meet. The summons shall be signed by the chairman of the local joint commission of that party which is sending it and shall be verified by the stamp.

3. This ratification order shall take effect immediately.

7045
CSO: 2800

YUGOSLAV-ALBANIAN TRADE PROTOCOL FOR 1979

Belgrade MEDJUNARODNI UGOVORI supplement to SLUZBENI LIST SFRJ in Serbo-Croatian No 10, 22 Sep 80 pp 473-475

[Protocol signed in Tirana 2 November 1978 and ratified in Belgrade 8 March 1979 by the Federal Executive Council and signed by its chairman Veselin Djuranovic]

[Excerpts] Protocol on Commodity Trade Between the Government of the Socialist Federal Republic of Yugoslavia and the Government of the Socialist People's Republic of Albania for 1979

The Government of the Socialist Federal Republic of Yugoslavia and the Government of the Socialist People's Republic of Albania have agreed on commodity trade in 1979 as follows:

Article 1

Goods shall be exchanged between the Socialist Federal Republic of Yugoslavia and the Socialist People's Republic of Albania from 1 January 1979 to 31 December 1979 on the basis of the commodity lists A/1979--Exports From the Socialist People's Republic of Albania--and B/1979--Exports From the Socialist Federal Republic of Yugoslavia, which shall constitute an integral part of this protocol.

These lists are not restrictive.

The Yugoslav and Albanian goods not covered by the lists appended here may be an object of trade if the parties so agree.

List A/1979. Exports of Goods From the Socialist People's Republic of Albania to the Socialist Federal Republic of Yugoslavia

No 1	Commodity Designation 2	Unit of Measurement 3	Amount or Value 4
1	Chromium ore	000 tons	170
	Kamtropoe ore alone	"	50
2	Petroleum asphalt	"	15
3	Natural asphalt	"	2
4	Copper wire	000 dollars	300
5	Electric power	"	3,000
6	Sea salt	000 tons	20
7	Sulfur	000 dollars	200
8	Marble in blocks (red) and slabs	"	200
9	Miscellaneous chemical products	"	200
10	Essential oils	"	300
11	Rosin	Tons	600
12	Medicinal herbs	000 dollars	1,000
13	Gasoline	"	1,500
14	Naphthenic acid	Tons	100
15	Textiles	000 dollars	800
16	Cotton fabrics and knitwear	"	1,000
17	Cotton yarn	Tons	400
18	Cardboard	"	300
19	Tomato paste	000 dollars	50
20	Canned mussels	Tons	50
21	Dried fruit and vegetables	000 dollars	150
22	Tropical fruit	"	200
23	Alcoholic beverages	"	500
24	Tobacco	Tons	2,000
25	Consumer goods and handicrafts	000 dollars	300
26	Miscellaneous wood products	"	250
27	Building materials	"	200
28	Cement	000 tons	10
29	School supplies, phonograph records, etc.	000 dollars	100
30	Services	"	100
31	Miscellaneous	"	200

List B/1979. Exports of Goods From the Socialist Federal Republic of Yugoslavia to the Socialist People's Republic of Albania

No 1	Commodity Designation 2	Unit of Measurement 3	Amount or Value 4
1	Reinforcing iron	Tons	8,000
2	Steel shapes	"	2,000
3	Miscellaneous sheet	"	740
4	Steel strip	"	200
5	Steel wire	"	250
6	Steel cable	"	320
7	Miscellaneous steel pipe	"	1,000
8	Cast pipe	"	340
9	Petroleum pipe (casing)	"	1,000
10	"Silpeps" balls	"	350
11	Silver in strips	Kilograms	540
12	Refractory brick	Tons	11,000
13	Asbestos	"	1,470
14	Aluminum shapes	"	100
15	Zinc shapes	"	120
16	Nonferrous metals and alloys	"	200
17	Ferromanganese	"	2,700
18	Ferrosilicon	"	1,700
19	Ferrochromium	"	580
20	Chain	000 dollars	47
21	Steel gas cylinders	Units	2,100
22	Molding sand	Tons	900
23	Valves	Units	3,700
24	Formalin	Tons	2,000
25	Paraffin	"	300
26	Muriatic acid	"	1,000
27	Adhesive (sintelan)	000 dollars	100
28	Bone glue	Tons	87
29	Asbestos products	000 dollars	240
30	Butyl xanthate	Tons	45
31	Ethyl xanthate	"	30
32	Metal drums	Units	2,800
33	Heavy hemp rope	Tons	300
34	Hemp twine	"	100
35	Miscellaneous raw hides	"	300
36	Cotton	"	2,000
37	Nails for shoeing horses	"	20
38	Inserts for packing eggs	000 dollars	11
39	Explosives, including gunpowder	Tons	1,500
40	Scythes and sickles	000 dollars	160
41	Laboratory glass for the pharmaceutical industry	000 pieces	500

List B/1979 (continued)

1	2	3	4
42	Zippers	000 pieces	500
43	Rubber hose	000 dollars	200
44	Fleece (coarse)	Tons	200
45	Synthetic fibers	000 dollars	140
46	Brushes	Units	400
47	Printing inks	Tubes	6,000
48	Snap fasteners	000 pieces	150
49	Screws, bolts and plates	000 dollars	52
50	Cigarette paper	Tons	50
51	Aluminum foils	"	100
52	Cellophane	"	100
53	Offset paper	"	100
54	Cigarette filter paper	"	56
55	Filter wrapper paper	"	30
56	CFU glue for cigarettes	"	61
57	AK glue	"	6
58	Miscellaneous seeds	000 dollars	20
59	Young poultry	"	15
60	Breeding hogs	"	40
61	Vegetable oil	Tons	4,000
62	Technical greases	000 dollars	600
63	Household refrigerators	Units	2,000
64	Unassembled television sets	000 dollars	1,300
65	Parts for radio and other communications equipment	"	160
66	Laboratory equipment and measuring devices	"	75
67	Spare parts for vehicles and ferode [(?) brake shoes]	"	150
68	Spare parts for cement trucks	"	10
69	Spare parts for tractors (ferode, etc.)	"	120
70	Spare parts for refrigerators	"	35
71	Other spare parts	"	30
72	Firefighting equipment	"	80
73	Miscellaneous machines and equipment	"	750
74	Services	"	400
75	Miscellaneous	"	200

3. This ratification order shall take effect on the eighth day after publication in SLUZBENI LIST SFRJ.

7045
CSO: 2800

YUGOSLAV-MONGOLIAN TRADE, 1978, 1979

Trade Protocol for 1978

Belgrade MEDJUNARODNI UGOVORI supplement to SLUZBENI LIST SFRJ in Serbo-Croatian No 10, 22 Sep 80 pp 482-483

[Trade protocol signed in Ulaan Battar 9 June 1978 and ratified by the Federal Executive Council on 12 April 1979 and signed by its chairman Veselin Djuranovic]

[Excerpt] List A. Exports From the Mongolian People's Republic to the Socialist Federal Republic of Yugoslavia in 1978

No 1	Commodity Designation 2	Unit of Measurement 3	Amount or Value 4
1	Natural sausage casings	000 bundles	105.00
2	Wild boar meat	Tons	10.00
3	Frozen rabbit meat	"	20.00
4	Venison	"	35.00
5	Meat of wild fowl	000 birds	100.00
6	Marmot skins	000 pieces	12.00
7	Souvenirs and jewelry	000 accounting dollars	45.00
8	Goat hair	Tons	15.00
9	Dry salted horsehides	000 pieces	3.00
10	Dry raw camel hides	"	20.00
11	Sheep's and goats' hides, unsheared, sheared and close-clipped	"	70.00
12	Hides from heads of cattle	"	150.00
13	Fine yak hair	Tons	20.00
14	Scrap paper	"	700.00
15	Marmot teeth--canines	000 sets	25.00
16	Tourism	000 accounting dollars	40.00
17	Miscellaneous goods (vodka, horsemeat, etc.)	"	50.00

List B. Exports From the Socialist Federal Republic of Yugoslavia to the Mongolian People's Republic in 1978

No 1	Commodity Designation 2	Unit of Measurement 3	Amount or Value 4
1	Finished garments	000 accounting dollars	132.00
2	Knitwear	"	58.00
3	Agar-agar	Tons	2.00
4	Cigarettes	000 accounting dollars	15.00
5	Medicines	"	78.00
6	Camp showers	000 units	20.00
7	Bay leaves	Tons	5.00
8	Chocolate glaze	"	60.00
9	Miscellaneous goods (housewares, soup concentrates, baby food and other foodstuffs)	000 accounting dollars	250.00

3. This ratification order shall take effect on the eighth day after publication in SLUZBENI LIST SFRJ.

Trade Protocol for 1979

Belgrade MEDJUNARODNI UGOVORI (supplement to SLUZBENI LIST SFRJ) in Serbo-Croatian No 10, 22 Sep 80 pp 523-524

[Trade protocol signed in Belgrade 16 March 1979 and ratified 28 June 1979 by the Federal Executive Council and signed by its chairman Veselin Djuranovic]

[Excerpt] List A. Exports From the People's Republic of Mongolia to the Socialist Federal Republic of Yugoslavia in 1979

No 1	Commodity Designation 2	Unit of Measurement 3	Amount or Value 4
1	Natural sausage casings	000 bundles	115.00
2	Wild boar meat	Tons	15.00
3	Rabbit meat (fresh frozen)	"	18.00
4	Venison	"	36.00
5	Meat of wild fowl	000 birds	90.00
6	Marmot hides	000 pieces	13.00
7	Sheep hides	"	18.00
8	Camel hides	"	30.00
9	Goat hair	Tons	17.00

List A (continued)

1	2	3	4
10	Souvenirs and jewelry	000 accounting dollars	65.0
11	Miscellaneous goods (by-products of cattle and small livestock, scrap paper, etc.)	"	30.00

List B. Exports From the Socialist Federal Republic of Yugoslavia to the People's Republic of Mongolia in 1979

No	Commodity Designation	Unit of Measurement	Amount or Value
1	2	3	4
1	Sewn garments	000 accounting dollars	241.00
2	Knitwear	"	112.00
3	Leather footwear	000 pairs	10.00
4	Bay leaves	Tons	5.00
5	Agar-agar	"	0.50
6	Medicines	000 accounting dollars	60.00
7	Miscellaneous goods (lining for footwear and gloves, pipe fittings, cigarettes, toiletries, etc.)	"	400.00

3. This ratification order shall take effect on the eighth day after publication in SLUZBENI LIST SFRJ.

7045
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IMPORTANCE OF STATE CONTROL IN ECONOMIC SPHERE

Tirana RRUGA E PARTISE in Albanian No 7, Jul 80 pp 63-71

[Article by Osman Murati: "Strengthening of State Control—an Important Factor in Perfecting Economic Management and Organization"]

[Text] Within the framework of the tasks assigned by the party for revolutionizing the method and style of work of the state and economic organs, the strengthening of state control plays an important role.

During the entire period of socialist construction, state control as a whole, and control in the field of the economy in particular, has played an important role in fulfilling the plan tasks, in exposing and eliminating shortcomings and weaknesses in work, in exposing violations of socialist legality, by waging an active struggle against manifestations of liberalism and bureaucracy. State control has served as a powerful means in the hands of our state of the dictatorship of the proletariat in implementing the party guidelines and directives, the laws, the decisions and tasks, by relying on the Marxist-Leninist principle "trust and control" in the work of the people.

For a Broader Understanding and Treatment of Control in the Field of the Economy

In our system of the dictatorship of the proletariat, state control acts as an important function of the socialist state, as a component part of its entire organizational and management work. And facts show that the broader, the more organized, the more systematized and the more profound this control, the better and the more punctually have the guidelines, the directives and the decisions been carried out, and the tasks, fulfilled. "Without control of the implementation of decisions, directives, decrees, rules and regulations—it was stressed at the Seventh Plenum of the party Central Committee—"there can be no management, discipline and fulfillment of tasks, consequently there can be no implementation of the party line."

Comrade Enver Hoxha stresses that the strengthening of state control is, among other things, one of the very important ways to expose and to oppose the manifestations of the pressure of bourgeois and revisionist alien ideology, of the pressure of bourgeois and revisionist alien ideology, of the pressure which they exert on our economic and social activity; if they are not combatted, these manifestations will lead to a weakening of work discipline, to an inclination toward globalism in the fulfillment of plan tasks, to excess

expenditures, to the harming and squandering of socialist wealth, and so forth. Its strengthening is one of the principal ways to expose on time and thoroughly the shortcomings and mistakes, in the field of the economy, like everywhere else, to prevent mistakes, violations and distortions of laws and, through thorough analyses, to determine responsibility and to assign measures and tasks so as to remedy the situation. Regarding this question we are guided by the Leninist teaching that: "Accountability and control everywhere, general and universal--accountability and control over the quantity of work and the distribution of products--this is the essence of socialist transformation now that the political rule of the proletariat has been established and insured." (V.I. Lenin, Works, vol 26, p 454.) Since this is the case, the strengthening and increase of the effectiveness of control in general, hence state control too, constitutes an objective necessity and an important link for the perfecting of management and for the accurate implementation of tasks.

Some problems arise in the field of strengthening and increasing the effectiveness of state control, including the need for this control to be better understood and treated, not as a function only of some specialized organs, but as an inseparable component of the functional tasks of every worker of our state and economic apparatuses at the center and the base, because without a daily, detailed, continuous and systematic control in every link of the economy and in every place of work, the fulfillment of the set tasks cannot be evaluated properly and on time. We stress this since precisely because of the gaps which exist in the exercise of this type of control, comprehensive and by all, the demand for accountability is, in many cases, poor and manifestations of liberalism are allowed in pursuing and implementing tasks; personal and collective responsibility leave much to be desired and, as a consequence, quite often there is lack of a proper attitude, and shortcomings and weaknesses continue to exist. And occurrences of this kind are not infrequent.

Thus, for example, in planning methodology it has been decided to plan and monitor production expenses for each unit of production, with the exception of some special cases, after approval by the competent organs. But what happens actually? Due to lack of a systematic control, which must be carried out starting with the basic unit of production by the workers themselves of the grassroots state and economic apparatuses, this exception in quite a few cases becomes routine, in a number of enterprises this artificial plan indicator is planned and is applied in a global manner, in terms of expenses and not according to the cost per unit of production, without concrete tasks for each unit of cost, for every brigade, sector and up to the enterprise level. How can we say that complete analyses have been made, based on a thorough control, by the agricultural units themselves and by the executive committee of the people's council of Kukes District, when the average cost for one kilogram of cow's milk in 1979 was exceeded by an average of 122 percent, and for one kilogram of sheep's milk by 78 percent? The controls which were made were superficial, and there has been a shallow treatment of the factors which affect cost reduction, the problems of increasing the yields of dairy production, the increase of the number of livestock, the securing of different types of fodder and at the lowest cost possible.

It is a fact that during the past year and during the first 6 months of the current year, a number of important successes were achieved in the fulfillment of the plan tasks, something which shows, among other things, the exercise of effective control by the state and economic organs. But in some economic enterprises and agricultural cooperatives, deficits have also occurred which reflect the weaknesses of controls which have been carried out. For example, some teams have gone to the agricultural enterprises of Gjirokaster District, Kruje District and Lushnje District to inspect and to help them overcome backwardness. Nevertheless, these enterprises closed the year with considerable deficits in the fulfillment of the plan. Many controls were carried out also in the fishing enterprises, in the Fieri food enterprise, and so forth, but they still continue to lag behind because, among other things, the control and the help of the state and economic organs have not been at the required level, thorough and dealing with urgent problems.

The practice of our socialist construction has fully proven the effectiveness of the control which is carried out extensively, by all the workers, through self-control, parallel control, from above to below and from below to above. The proper coordination of these forms of control in the process of their execution, increases ever more the active force of control in the implementation of the directives and of decisions, in the fulfillment of the plan tasks as a whole.

It is important that these forms of control, carried out by the party organs and organizations, by the state organs and directly by the working class and cooperative peasantry, stimulate, shake out of their routine work and lethargy the various state and economic links and all the cadres and workers for the fulfillment of tasks in the field of the economy. For this reason, the Seventh Plenum of the party Central Committee, by stressing that all these forms of control must be strengthened and coordinated and must supplement each other, stressed that: "If one of them is lacking or weak, the control of the implementation of decisions and of tasks will suffer."

Viewing the issue from this angle, the damaging aspect of the concepts and practices of those cadres and workers who consider control in the field of the economy as a task solely of the specialized organisms will become apparent. The strengthening of state control over the implementation of decisions and of directives broadly understood according to the party's guidelines, requires in the first place, a better coordinated work between the ministries and the districts, between the directorates in the ministries and the sections in the executive committees of the district people's councils and the branches in the economic enterprises and agricultural cooperatives. We stress this, because in this direction, despite the good work done, there continue to be shortcomings, weaknesses and deficiencies. The coordination of the work of cadres and of specialists in exercising direct and thorough controls, becomes necessary for the perfection of the work method and style, which requires special attention and treatment, otherwise the effective force of state control in the economy would be inadequate.

The increase of the effective force of control cannot reach the expected level without also achieving a close harmony between state control and worker-peasant control. The party Central Committee has set concrete tasks concerning this question.

Practice shows that the respective organs have made efforts in this field and that their effectiveness has gradually increased. Thus, for example, in the control which the State Inspectorate carried out in Gjirokaster District regarding agricultural problems, its activity was well coordinated with that of the worker-peasant control concerning the problems of work discipline, the application of agrotechnical measures, the maintenance and readiness of the farm machinery, and so forth. As a result of this cooperation, the effective force of control increased intensively and extensively, in tackling more problems in many economic units, in disclosing shortcomings and weaknesses and in activating all the levers in the agricultural units inspected for the elimination of the problems. At the same time, the worker control group was helped from the methodical point of view to tackle and treat the problems.

These types of work practices have also been carried out by other control organs, therefore it is necessary to draw lessons and make generalizations because much remains to be done in the field of the perfection of work coordination in these forms of control and of the concrete help which the specialized organs must provide to improve the level of worker control.

The soliciting of the thoughts of the masses, which has its source in our socialist democracy in action, is a necessary demand for the strengthening of state control and one of the main ways to fight manifestations of bureaucracy and liberalism. In practice, however, there are instances when this task is not properly carried out. One-sided and narrow-minded attitudes which restrict the control groups in the administrative-management apparatuses, which limit their contact and their consultation with the workers and the cooperativists in the section and in the brigade, where the production process takes place, as well as the concepts which nourish attitudes like "we know the problems," or "what more can the workers tell us than what has been told us by the workers in administration," or that allegedly "the cooperativists are afraid to express their thoughts," and so on, are harmful and the control becomes bureaucratized and formalized, therefore a sharp and continual struggle must be waged against them.

Let Us Further Increase the Effectiveness of State Control

Quite a few management links of the ministries and of the executive committees of the district people's councils, of economic enterprises and of agricultural cooperatives have organized and carried out complex economic-financial controls, subject controls and recontrols, calls for accountability, analyses and sessions, by coordinating the tasks between branches and establishing a continuous working bond between internal and external control. This rich experience constitutes a healthy basis to generalize and to expand control work in the field of the economy, to perfect the methods and the methodology necessary for a most effective control.

Practice shows that control becomes effective when the practical activity of every cell of the economy during the process of control is confronted with the demands of the directives, of the guidelines and of decisions, with the economic policy of the party, and on this basis, through the analysis of the facts and of phenomena, conclusions are drawn about accomplishments and non-accomplishments, by explaining the situation and by establishing the directions of the measures to be taken which guarantee the fulfillment of tasks. We stress this because there are instances when the necessary attention is not given to this confrontation. And this happens especially in those cases when controls are undertaken without proper prior preparations regarding problems scheduled for control, in order to know in detail the guidelines, laws and the decisions whose framework these problems are being treated. To improve the work in this field, it is necessary first of all to fight the mistaken concepts which exist among some cadres who say that "control is an easy job," that "we know the problems, we deal with them daily," therefore, "it is not necessary to make serious preparations for controls," and so forth. It equally is necessary to fight every manifestation of superficial knowledge of the work situation in the economic enterprise, agricultural cooperative or institution where control is waged, every manifestation of superficiality in revealing the causes of shortcomings, weaknesses and legal violations, in establishing the responsibilities and the concrete measures for the improvement of work, by thinking that "someone else will be found who will solve the problems." Every manifestation of favoritism and false friendship, which lead some inspectors, especially those who conduct internal controls, to liberal attitudes, to "talking around" shortcomings, to justifications such as "difficulties of growth," to softening criticism and the demand for accountability, to failure to take measures, must also be fought.

Special attention to the increase of the effectiveness of state control in the economy requires the strengthening and perfecting of internal control in the economic sectors, where the concrete activity for the fulfillment of plan tasks takes place directly, by considering it the basic control in the organization and the monitoring of the execution of tasks. As experience shows, this type of control, when continually carried out during all the stages of the production process, of the distribution and of the management of socialist property, when it is carried out without delay following every economic activity, reveals in time the positive tendencies as well as the weaknesses and shortcomings. Moreover, the correct functions of internal control in all the respective links of the economy, enable the expansion of control work, the coordination of the various forms of control, the placement of the working masses, as the party stresses, in the forefront of the struggle for the fulfillment of the plan and the defense of socialist legality.

Practice shows that internal control has not stood still. It has been continually perfected in accordance with the rapid development of our economy and under situations in which this development takes place. Nevertheless, it must be said that state control is still not playing the role which it should. Practice so far shows that its weaknesses are explained by the fact that it often does not act as a single control for the entire apparatus. Control is concentrated on small issues without seriously dealing with important problems,

with the causes behind the nonfulfillment of plan indicators, with the gaps in recordkeeping and management of material and monetary assets, with the problems of the harmony between economic and financial indicators, with the use of the wage fund and the volume of work carried out in the sections, factories, sectors and so forth.

The organization and the carrying out in a systematic and effective manner of the internal control in the economic enterprises and in agricultural cooperatives, cannot be achieved without first being evaluated by the cadres and the communists themselves, by the state and economic organs, from the grassroots up to the central ministries. The question here is to create, in the first place, just concepts, because it is not only the auditors or the financial workers who concern themselves with internal control, but all the workers according to place of work, by considering it as part of the functions of every cadre and worker.

For a More Careful Treatment of the Financial Control-Auditing Process

The financial control-auditing organs, which are a component part of the general state control, led by the party directives and the teachings of Comrade Enver Hoxha, have increased their efforts to carry out the assigned. tasks. In general, their method of work has continually been perfected, and auditing of their activities has been carried out annually in the economic enterprises, agricultural cooperatives and institutions. Nevertheless, there are still problems requiring special attention in order to further raise the level of this economic-financial control.

Practice shows that the control of the financial side of the expanded socialist reproduction, which covers a very broad field of complicated relations, cannot be complete and effective if it is limited only to the control of the technical aspect of financial activities and is not applied also to some fundamental economic problems, such as that of production, distribution, productivity, cost, effectiveness of investments and so forth. This is the reason why the Seventh Plenum of the party Central Committee stressed, among other things, the need to strengthen control through the lek over production and distribution, over every process of work, by calculating with pencil in hand, by comparing the material values in weight, piece and value, by seeking the differences and the origins of their causes.

Of course, this control is not the duty only of the inspector or of the auditor, as some think. It is the duty of all those who are charged with organizing and managing production in the brigade, section, sector, factory, enterprise and cooperative, as well as of all of those who carry out the processes of work. The party recommends that anyone who produces and manages must also control. The specialized control-auditing organs have, of course, special and very responsible tasks in this field, which in order to carry out their tasks as correctly as possible, must apply their activity as close as possible to production, where the economic-financial activities are directly carried out. Thus, because in order to observe the way which the economic and financial discipline is carried out, it is necessary to accurately verify the movement

of products in the sector where they are produced up to their storage, as well as during transportation in the sphere of circulation, it must be closely verified to see how justified the expenditures from the wage fund and the material expenses on the basis of the approved norms are and how the production capacities are used and so forth.

The extension of control-auditing down to the grassroots level through a broader program and according to fixed objectives, can be achieved through a coordinated work between the apparatus of the central ministries, of the executive committees of the district people's councils and of the branches in the economic enterprises and agricultural cooperatives, and by the ever greater and better activization in these controls of the broad working masses.

A broad field of activity for the control and auditing organs is to control and help in the full application of socialist legality for the protection and proper management of public property, to discover cases of mismanagement, of damaging and of misappropriation of this property. It is a fact that during the past few years, these organs have improved their work in this sector. Nevertheless, it is still apparent that their detection work, and in particular their study and generalizing force to make fuller conclusions and to take more effective measures in order to prevent harmful activities in this field, is not at the required level. This is one of the reasons why despite the work done, there continue to be violations of financial discipline, property damage, especially in agriculture, in light industry and the food industry and in trade. In trade there are phenomena of the nonimplementation of the rules for weighing and measuring products, and full measures are still not being taken in adjusting of weights in wrapping and packaging of goods, in coordinating some warehouses, and so forth. In the collection enterprises, too, there continue to exist cases of remnants, which are a result of mistaken calculations of rejected goods, the result of incorrect assessment of the quality of the products by some collectors, by taking advantage also of carelessness and laxness on the part of the distributors of goods.

Also disturbing is the fact that often no corrective measures whatever are taken, or such measures take on a simply symbolic character, so no one can say that no measures were taken, thus infringing upon the general interests of the society. There are also cases when the control and auditing organs reconcile themselves with these attitudes. The party stresses that the struggle against offenders of socialist property cannot be carried out without taking coercive, disciplinary and administrative measures. The control and auditing organs should not be allowed to make any compromises on this matter, on the contrary, they must demand the full execution of the laws of the dictatorship of the proletariat, by fighting every manifestation of liberalism or sentimentality, which would lead to the weakening of the class struggle in the economic front.

The effectiveness of the control and auditing work increases greatly when the state and economic organs, the ministries, the executive committees, the enterprise directorates, the leaderships of agricultural cooperatives, assess the conclusions of the control, examine them in depth and take concrete measures

to rectify things and prevent harmful activities. Such is the task of every state and economic organ, and the opposite should not occur. When the examination of the conclusions of control by the respective organs is sometimes carried out with delay, entire months are wasted through foot-dragging, and as a consequence, control becomes stale, criticism is softened regarding shortcomings and weaknesses, and its preventive effect loses much of its impact. Totally inexcusable are, especially, those cases when some state or economic management organ, instead of considering the conclusions and the proposals of the control and auditing activity helpful, and dealing with them in depth, opposes and tries to introduce all sorts of justifications, out of petit-bourgeois fear that one might get a bad reputation, and so on.

By now, as in every other field, in that of control and auditing too, a rich experience has been gathered. Quite a few inspectors and auditors, sections and directorates which deal with economic-financial control and auditing, have steadily expanded and have improved their activity, by finding a solution to many problems which have to do with the elimination of the proven shortcomings and weaknesses. In order to expand this experience, sessions, seminars and consultations have also been organized. Nevertheless, these meetings for the expansion of progressive experience must better deal with the examination of the assimilation of the most effective methods which are used during the conduct of control and auditing process. Moreover, every management state and economic organ can organize model control and auditing processes which can serve as schools for the training of the inspector-auditors in all the links. Positive results have been obtained also through meetings and special sessions at the economic branch and district level or between districts to exchange ideas, to discuss methodology, and so forth.

The strengthening of state control in the economic and financial field constitutes an important aspect of the perfection of management and of the revolutionizing of the entire work method and style. As such, it must be perfected and upgraded in order to become as effective as possible in the general struggle for the fulfillment of tasks, for the execution of the party guidelines and directives.

5112
CSO: 2100

SCIENTIST DISCUSSES POOR QUALITY OF GRAIN

Sofia RABOTNICHESKO DELO in Bulgarian 4 Oct 80 pp 1,4

[Article by Dimitur Dimitrov, senior scientific associate and Ph D in agriculture: "More but Also Better-Quality Grain"]

> [Text] With each year that goes by the problem of producing sufficient quantities of high-quality grain moves ever more to the foreground and its successful solution becomes an ever more important task facing agricultural science and practice.

While the results regarding produced quantities in most cases have been satisfactory, the grain quality still leaves plenty to be desired. Due to subjective reasons, i.e. lack of exercised responsibility, insufficient know-how and ineffective supervision, grain quality in many locations has not reached the natural and scientific potentials. A slack attitude toward the problems of quality of production has led in practice to irrational utilization of grain varieties, of material and labor resources, and to poor supply of the food and fodder industries with high-quality raw materials.

The production of high-quality grain at high and stable yield levels depends on many factors, and requires not only suitable varieties and hybrids but also strict adherence to existing technologies according to soil and climate conditions in the different regions. Violation of the technological discipline, even in a single link, usually leads to irreversible lowering of the quality indicators and to smaller yields.

One of the main ways of obtaining better quality grain is to create and use in practice varieties and hybrids with high genetic potential as to quality. The results so far have proved the effectiveness of this method. The created wheat varieties and leguminous crops with high technological indicators, the high-protein and high-evsine wheat and corn represent an obvious proof of the possibilities of the selection to actively participate in the improvement of the raw material basis in grain production. However, there are still a few hybrid corn crops with about and even less than 10-percent protein contents which considerably decreases the biological value of the grain. In some of the past years there has been a wide difference in the qualitiative indicators of many of the domestic soft wheat varieties. There has been a lack of hard wheat varities suitable for the needs of production. These are some of the questions concerning the genetically based qualitative indicators of the varieties and hybrids which will have to be resolved by selection and application.

However, the genetic qualities of the varieties can develop only under suitable conditions. Decreased protein content in the grain of the intensive varieties and hybrids can result from poor seeds, insufficient nitrogen in the soil or use of unbalanced mineral fertilizer, damages from disease and pests and from unforeseen meteorological circumstances. This year, for example, the lower quality of sturdy wheat in some regions resulted from insufficient nitrogen in the soil, too many fertile stems, no measures taken against the wheat bug, etc. Even the best variety would not have high quality yields if suitable conditions could not be assured for the development of its genetic potential. Therefore, when planning one should always consider and guarantee the necessary optimal conditions for producing high-quality grain.

Quite often the grain quality deteriorates due to late gathering of the crop, breaking or injuring of the crop, drying under high temperature, storing in unsuitable premises and piling the grain in thick layers. In many cases considerable quantities of the late hybrid corn is ruined because of humid and unsuitable storehouses.

The production of sufficient quantities of high-quality grain for the needs of the national economy should be a national concern. Mandatory standards should be set and observed, comprising well-defined requirements as to selection, introduction, seed production and mass application. The quality of the production should be determined precisely by departmental and higher supervisory authorities, who should also bear some responsibility for their proceedings. The followed practice so far, to talk in general about the quality of the crops, to pass the guilt for the existing shortcomings in this case from industry to the buying organizations and from them to the producers and from there on to the selection, etc. makes the problem more vague and hinders any solution.

Our country is endowed with great soil varieties and meteorological conditions, which results in considerable fluctuation in the grain quality. Therefore, all studies in the country concerning this problem should be coordinated, supervised and summarized nationally. Only in this manner could one achieve unity and consistency in the scientific studies as well as effectiveness in their practical application. Most natural coordinator of this undertaking should be the Institute for Grain and Fodder Industry, which should take a leading place in dealing with the basic problems of the quality of the raw material sources of grain production.

An important premise in this instance is to work out protein charts for wheat, barley and corn, based on precise and uniform research methods. Such charts are necessary in planning the raw material sources, the territorial distribution of the crops, the economic layouts in the okrugs, etc. This major and responsible task could be fulfilled successfully and in shortest possible time by creating collectives of highly qualified scientific workers and specialists, working under the leadership of the State Committee for Science and Technical Progress.

The origin of the test probes is of great importance in establishing qualitative indicators of the grain. We are of the opinion that the practice so far of establishing qualitative indicators based only on material from specific samples cultivated under optimal conditions for the individual cultures, does not give a real picture of their development in mass practice. As a result there are discrepancies quite often between the expected and the real results. Mandatory analyses of the qualitative indicators of all domestic and foreign varieties allotted for distribution should be made not only of test samples but also of mass crops and in different districts

of the country. In this manner one would know with greater certainty and proof what fluctuations to expect and how much to depend on a certain variety or hybrid.

We must tackle and resolve the questions raised and at the same time improve the material-technical basis of grain production, as well as utilize to the maximum the natural, material and labor resources for obtaining during the 8th 5-year period greater quantity and better quality grain.

1010
CSO: 2200

EMPLOYMENT POLICY, MANPOWER MANAGEMENT PROBLEMS DISCUSSED

Budapest MUNKAUGYI SZEMLE in Hungarian No 6, Jun 80 pp 1-12

[Article by Dr Ferenc Trethon, minister of labor: "A Few Current Questions of Employment Policy and Manpower Management"*]

[Text] Employment policy and manpower management are organic parts of economic policy and are implemented in close connection and interrelation with the latter. Our related tasks are primarily determined by the goal of the Sixth Five-Year Plan, namely, that the planned development of our economy must be based on and guaranteed by the improvement of the economy's internal and external balance. In the present slower pace of increase of the national income, the questions of productivity, efficiency and profitability come to the foreground more than before.

Thus the main requirement of our employment policy at present as well as in the future--aside from maintaining total employment--is the sensible use of the manpower at our disposal. This goal also means that we continue to consider human welfare--to the extent of our capabilities--as our primary task. In the spirit of the 12th congress, our attention is directed more and more to the human factors of building the socialist society. This is what we think about in working out our employment policy and the system of means for the practical implementation.

Our man-centered employment policy will be really effective if every worker works where it is most useful for society as a whole. It is an unpardonable waste if many thousands of people work at inefficient jobs. It is an important condition for the modernization of our manpower management to make every job human and economical and to eliminate those which do not meet these requirements.

A Few Characteristic Attributes of the Manpower Situation

It is a significant achievement of our socialist social order that it has created, and continues to guarantee, the total employment of working-age citizens. The number of active breadwinners dynamically increased in Hungary until the mid-1970's--or while manpower resources were still abundant. This was made possible, on the one hand, by the increase in the population and, on the other hand, by the fact that the economic activity of the classes concerned was steadily growing.

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*Speech delivered on 9 May 1980 at the plenary meeting of the National Council of Trade Unions.

However, a new situation has emerged in recent years. The manpower has stopped increasing, the number of young replacements has decreased, and many persons have reached retirement age. The female manpower reserve of housewives has dwindled to a minimum: the level of employment for women has reached the socially possible maximum. The number of working-age retirees (disabled persons and those allowed to retire earlier) has increased. At the same time, the number of active breadwinners working beyond retirement age has decreased and we cannot count on an increase in manpower in the long range either. The processes taking place in the period from 1976 to 1980 have been--and remain--different in several aspects from the targets of the Fifth Five-Year Plan. The number of active breadwinners, instead of increasing by 40-60,000 as planned, is decreasing by 10,000.

The structure of employment is also different from what was planned. As a result of an increase in the absorbing capacity of areas outside industry and the efforts to make manpower management more sensible, the number of industrial workers, instead of increasing somewhat as planned, is decreasing by 100,000. The situation is the same in the construction industry as well, where a decrease of 50,000 is expected. In farming, the number of workers will decrease only by about 20,000, as opposed to the planned decrease of about 90,000.

In spite of the decreasing manpower, the increase of productivity is below that of the previous plan period. This indicates, among other things, that there will be further internal manpower reserves.

The decrease of staff in industry and construction is no extraordinary phenomenon. According to the example of countries which are more developed than we are, technical development entails a slow-down in the increase of the number of industrial employees; the number will even decrease eventually. This process began in Hungary in the mid-1970's, and will continue in the coming period; it is unjustified to slow down this process. To wit, this is a prerequisite for the change that is absolutely necessary because of an industrial manpower management that is inadequate even in the light of a much slower increase in productivity than would be possible and because of a decrease in manpower in the services. In accordance with normal economic development, the service--or so-called tertiary--branches increased their manpower even in recent years. This trend is expected to continue in the future because of the low standard and efficiency of the services, including the essential services and the background industry, which do not meet the justified public demand.

In the near future, because of the relative scarcity of financial means that may be realistically considered, there are only modest possibilities for expanding services. However, by increasing manpower, the quality and level of supply may be significantly increased without any additional investment, which is not negligible even from the standpoint of living standard policies. We consider it to be our continuous task, in the interest of the former, to create the conditions for increasing manpower and expanding the related possibilities.

Our manpower situation in past years was characterized by the fact that the management units did not lower their demands and continued to base their economic growth on staff increase in spite of a steady decrease in supply. This resulted in an unjustifiably exaggerated feeling of want--a so-called want-fever--which had a

negative effect for it looked exclusively at external factors in trying to find the causes of the alleged shortage of enterprise staff and expected the authorities to find the solutions. We often heard in the statements of economic managers an overemphasis of the negative effects of the demand for manpower that exceeds the supply. Instead of talking about eliminating the deficiencies in the use and employment of manpower, internal lack of work and manpower reserves that have been accumulated for any reason, they unjustifiably talked about the absolute manpower shortage, and this entailed many detrimental consequences and became the basis for casting the blame on others and an attitude of appeasement. This also played a role in the fact that there were hardly any initiatives to increase the efficiency of manpower use and to better exploit the given possibilities.

The exaggerated demand for manpower entailed an accumulation of internal manpower surpluses. This is corroborated by the fact that the alleged shortage of manpower at the enterprises did not cause any tangible disruption in the production, for the solution of possible problems was relatively easy through the exploration and use of internal surpluses.

The more stringent requirements of the 1979 economic regulation and the fast stand of the party and social organs and supervising authorities forced the management to assess the manpower situation more realistically. Caring for people making the workers' performance more efficient, creating the conditions for a better organized and better disciplined work, i.e., increasing the efficiency of manpower management began to play a bigger role at the various levels of enterprise management. This resulted in a more sensible practice of manpower management and entailed a decrease of the demand for manpower. The enterprises also began trying to decrease their staffs. None of this led to an external surplus of manpower or caused any problems in employment.

The decrease of the demand for manpower is not as extensive as it should be, however, considering the enterprises' existing internal resources. The process has not yet become wide-spread; its degree varies in the various branches, geographical locations and management units.

The present decrease of demand for manpower in the material branches--alongside with the slower growth in industry and construction--is expected to continue in the period of the Sixth Five-Year Plan. Accordingly, a further increase of the manpower supply is not planned for the coming five years. This cannot prevent economic growth, considering the existing significant internal surpluses.

The service branches and the areas which are still facing a shortage of manpower create adequate employment opportunities for the workers. It is to be noted in addition that the necessarily increasing number of the so-called small and medium-sized plants--their opening is within the framework of the modernization of our economy's enterprise organizational system--also entails a demand for manpower. The number of job-seekers as a whole is expected to match the demand for manpower.

Aside from maintaining total employment, our most important goal continues to be to increase the efficiency of employment. Our fundamental task is to free, or help regrouping, the manpower that exceeds the actual demand but is not used efficiently. By coordinating their measures, the central authorities, the councils and the

enterprises must ensure the smooth reshuffling of the manpower concerned. The present means of influencing job changes, and the institutions of retraining and continued training, are suitable for this task. In order to prepare for supposedly individual problems the emerging in different areas, our most important task is to forecast the expected processes in time. There is no need for extensive new regulations. On the other hand, it is a joint task of ours and the unions to come up with uniform definitions of the new processes and requirements, to conscientiously determine the tasks, and to prepare the organs concerned such as the council apparatus.

One of our current tasks is to improve the manpower management of administrative and supervisory institutions and enterprises and to carry out smoothly the staff reduction as specified by the Council of Ministers. In this regard, I think I must emphasize here that the measures mentioned are not directed against those who work in this area and do not mean that the importance of their activity is questioned. The point is that manpower can be freed as a result of the improvement of the work management at these institutions and the elimination of parallel or dispensable activities, i.e., the improvement of the efficiency of administration and supervision. It is not the work itself with which we had--and continue to have--problems but, in certain cases, its justification and the size of staff that greatly exceeds the actual need.

Staff reduction at the institutions concerned may be carried out gradually in the coming years; by natural attrition on the one hand, and by eliminating the existing vacant positions on the other hand. However, full solution means to match the manpower with the actual requirements of carrying out the tasks, to simplify administration and to make the processes more sensible.

The situation is similar in the case of employees in material production where the problem is, again, not the significance of the work they do, the unjustifiably and perversely large number of employees in many places.

Total and Efficient Employment Continues to Be Our Goal

Total employment is a historic achievement of socialism which cannot be surrendered. Aside from being politically necessary it makes sense economically, for it is evident that a country will become more affluent if all citizens able to work take part in the organized and planned activity directed toward affluence.

However, in addition to guaranteeing the implementation of the fundamental right to work, our employment policy must give an increasing role to efficiency and rational management. This means the sensible use of manpower in socially organized production and the creation of conditions that help establish the most favorable relationship between the real demand for manpower and the population's employment requirements.

This double requirement of the employment policy makes it necessary to redefine the principle and practical implementation of employment without absolutist standards and to sensibly separate the related tasks, rights and obligations of the state, the enterprises and the individuals.

It is a governmental and central task to create, through administration, planning and regulation, the environmental conditions which aid the matching of the demand for manpower with the supply, and to use the existing manpower resources for economically useful production.

The task of the management organs is to use manpower with maximum efficiency, to steadily explore the resources of manpower management and to free the manpower that is superfluous or can be used only uneconomically. It is not only socially detrimental, it is also against the real interests of the group and the individual when, mistakenly referring to total employment, the enterprises use our most valuable resources for uneconomical activity or work and thus prevent their most advantageous use from the nation's point of view.

In talking about the labor situation and the questions of manpower management, we have been thinking until now almost exclusively about the state or socialist sector of the economy. Our employment policy, however, covers the entire national economy and thus it cannot, by definition, ignore the so-called secondary economy. Although this sector is not significant in our national economy, the employment opportunities and the existing revenues there are essential for us in many respects. It is in our interest to recognize the secondary economy—for it is generally made up of useful activities which help in alleviating shortages and thus are important additional resources for our development—and to make better use of it in our social development. The transfer of manpower to this sector can contribute not only to better distribution in the socialist sector according to existing jobs, but can also aid in levelling-off the differences in revenues in certain areas of the second economy.

This is why it is very important, even from the aspect of employment policy, to regulate the cooperation between the socialist sector and the secondary economy and to connect this activity to our economic system and thus to make it socially organized.

The workers' right to work and to choose their jobs is redefined in the enterprise manpower management which is subject to efficiency requirements. We must realize that the obligation to do one's work in a disciplined manner and according to one's training and capability is inseparable from the right to work. The double standard, which can still be found here and there, is also untenable, namely, that the demand for quality in consumption is not on a par with the demand for quality in production. It must also be noted here that the principle of total employment does not include job selections which do not serve society's interests and are made exclusively on the basis of individual initiative, nor does it include the often continuous job changes which can be initiated only by the employee. It is also important to make it understood that total employment cannot mean the employee's defenselessness against the employer, but that it may not result in subjecting the enterprise's point of view to individual interests. We must change the view which has one yardstick for rights from society, and another for obligations to society.

Everyone has the right to choose his work—and his employer—according to his interests, expectations and family circumstances. This possibility for individual decision must continue to be maintained in the future. We wish to fulfill the

requirements of economic sense and efficiency in employment policy not through the use of administrative methods, but through economic means, interest and incentive. This does not mean limiting individual decisions, but rather appropriately influencing their scope and influencing social interests.

In determining our goals--and the means of providing incentive and assuring their achievement--we strive to satisfy as much as possible the concepts and demands of the individuals. This is not only in the interest of individual people, but in the fundamental interest of the society as a whole. However, the goals of employment policy cannot be identical with unconditional guarantees given to the individual. There can thus be in certain cases--according to our intentions, not too many--conflicts between the interests of society and those of the individual which must be solved to the benefit of the former. This is not only a characteristic of the coming period, but a natural attribute of our progress.

Some people may not be able to find a suitable job close to their home. It cannot be overlooked that some people may have to choose between higher income and a less lucrative job that is, on the other hand, closer to their personality and needs and is more advantageous. These are not extraordinary phenomena in every-day life. Nationally, security of existence connected with total employment is stable, and it is thus not only necessary but also possible not to solve the workers' individual social problems without being to the disadvantage of the efficiency of enterprise management or the justified requirements. It is sometimes justified and necessary, of course, to consider individual viewpoints, but these cannot be set against society's interests.

We must also know that in every case where management organizations solve individual social problems to the detriment of efficiency, there will be, in effect, lower budget receipts which are, among other things, sources for the increase in social benefits affecting large masses.

The Improvement of Employment Balance, and Manpower Mobility

An important prerequisite of efficient manpower management is the general and structural balance of employment. The lack of it is also manifest in the fact that there is a simultaneous shortage and surplus of manpower in certain districts, which further increase the already existing structural tensions. Since an increase in manpower cannot be expected because of demographical reasons, it is especially important not to let the labor structure, and any change therein, limit the achievement of our goals of economic policy and the change of the economic structure. This is why we must increase manpower mobility and thereby help to moderate the lack of employment balance and increase mobility.

The matching of the supply of and demand for labor takes place in the process of social and economic development in the form of labor movement, demographic change and change of jobs.

There are more than 1 million cases of labor movement every year in Hungary. The degree and direction of this large and constant movement is determined, among other things, by our school system, the support for mothers with children, the pension system, the number and quality of the existing jobs, the working

conditions and requirements, the distance between the workplace and the home and the conditions of transportation. A few forms of labor movement (such as, for example, youth starting to work, and retirement) are definite, another part is directed by central measures, and yet another part consists of job changes because of economic or subjective considerations, which is called fluctuation, in everyday language. Earlier, society disapproved of fluctuation. Today's public opinion accepts the leaving of a bad labor force as a timely matter, but the justification for leaving a bad working place is not yet generally accepted.

Although the majority of the movements can be considered justified and necessary, there are many unneeded and unhealthy job changes originating from individual interests that are contrary to the requirements of social and economic progress, do not help the rational distribution of manpower, hinder the development of the efficient sectors, and increase the tensions in the professions, the areas and the workplaces. We want to significantly moderate these by extensively and coordinatedly influencing job selections, by eliminating the conditions that result in one-sided and subjective decisions regarding labor movement, and by a wider practical application of incentives for socially justified mobility.

We must also pay more attention to easing the tensions arising from our school system which ignores the national economy's actual needs and structure and, in some cases, even its plans, and from a total effort to meet individual needs which does not reckon with the realistic possibilities at the time of choosing a career, and which thereby creates conflicts at the time of employment.

Labor mobility is not a goal in itself, but a necessity originating from the requirement for more efficient management. In the coming years, we must give special consideration to the mobility-increasing effect of two factors. On the one hand, a need for manpower transfer will emerge which is a consequence of the change in the production and product structure. On the other hand, the movement may be speeded up by those efforts which are directed toward the rationalization of the economic processes and toward the exploration and use of the internal surpluses. This will necessarily result in a manpower surplus in certain management organizations. Those enterprises which are able to adjust their economical production profile to the size and capacity of the existing manpower, will be expected to be able to use a significant part of the surplus mentioned within the given organization. This solution—if it is carried out with adequate efficiency—is the best variation. Supposedly, a significant part of the workers will find other employment within the framework of the natural labor movement (retirement, change of jobs out at one's own initiative) and without individual conflicts.

To our knowledge, the nonmassive regroupings, organized to affect smaller groups of workers, will not create any significant tension in the future either. It is understandable, however, that every transfer or disengagement of manpower has lively local repercussions in a given place. It is thus an important task of the state and social organs to thoroughly prepare such actions economically and politically, and to settle them smoothly and in a humane way. Transfers require a great deal of attention and understanding. We cannot forget either that the enterprise in our country is not only an economic organizational unit, but also a bearer of social conditions. The task is not simply to assure employment, but also to see to it that the diligent and conscientious worker will not become disadvantaged, either financially or as far as social benefits are concerned. We must also do everything in order not to allow the elimination or prevention of tensions arising from the organized transfers to put any limitation on the possibilities

open to the economic leaders to establish increased requirements or to consistently apply the principle of distribution according to performance.

Training, Aptitude, Readiness

In order to appropriately coordinate and bring scientific and technical progress, the number and composition of workplaces, and the manpower into relative balance, we must influence the direction and pace of motion of the factors under discussion according to the existing needs. The extent to which our educational and training system is able to contribute to increasing professional mobility is very significant. The structural changes that accompany economic progress make new requirements for training both in the schools and the workplaces.

In this connection the significance of a rational work distribution between the training schools and the enterprises greatly increases. In addition to professional training, the increase in professional preparedness, the expansion of the knowledge already acquired, and the development of an aptitude and ability to be receptive toward new circumstances is essential. All of this makes it necessary that--besides strengthening the school's role in basic training--in changing the technical structure of employment, the working place must have a greater role in retraining and further training.

Both scientific-technical development and the rapid change of factors that affect the conditions of economic growth raise requirements which the workers can meet only if they assume enough responsibility for their self-training, retraining and continued training, and if the enterprises feel obliged to create the conditions for learning. It must be evident to both individuals and enterprises that learning and training is tantamount to preparing for doing one's job conscientiously. Anyone who is not doing that will fall hopelessly behind.

The increase in the technical level of productive processes means not only the increasing use of more complex machines and working procedures. It also makes it clear that the efficiency of the operation of the man-and-machine relationship depends primarily on the abilities of the technicians who operate, control, direct or change the equipment and tools; it depends on the actual extent to which the workers are able to successfully use technology as a tool and accessory for their work. It also follows from this that the possibilities offered by modern machines can be utilized only by specialists with an adequate and constantly updated knowledge. Special training remains of primary importance even in the operation of man-and-machine systems. Man can always increase his knowledge, whereas the operating technology is incapable of this. Its up-dating can be realized only with man's cooperation.

One of the factors in doing one's job is the training necessary to carry out the task. This must be supplied first by the schools. But the role of the school is also decisive--in addition to training and developing an aptitude--in developing ability. The minimum level of ability must match the concerned party's diploma which proves his preparation. He is also supposed to have an aptitude. At the same time it is also apparent that training which is not entirely adequate and a disproportionately high aptitude may be compensated for to a certain degree, by readiness or an increase in readiness. In the future we must pay close attention

to the relationship between these three factors, and we must achieve more practical results primarily by building and increasing ability.

Optimum efficiency of the man-and-machine system may be attained only by complete harmony between human work and the equipment operated by human work. And the role and significance of trade schools in the wide and efficient use of "smarter and smarter" machines--indispensable from the viewpoint of our development--by highly trained specialists is indisputable. It is also evident that the acquired knowledge can never be "complete" or "finished." It is also important to have specialists who are not only trained, but who will also be willing and able to learn in the future.

This direction of retraining and advanced training supports the demand for continuity and teaching of up-to-date knowledge. It would be a big mistake to train tomorrow's specialists with yesterday's knowledge. It does not help either to attain our goals to give financial recognition for a diploma that proves the training instead of leading to higher efficiency as a result of newer knowledge.

In the course of production, skilled training is not simply "used up." Special knowledge is often acquired and shaped in the factory and in every-day practice. It is always connected to actual tasks and job profiles, and is being used under constantly changing environmental conditions. Knowledge is expanded in the course of work, and knowledge acquired earlier also changes. The result of this is that professional training, coupled with expertise, makes it possible to carry out more complex tasks that demand an ever wider knowledge and more responsibility. It lays the foundation for enriching the work's content, for increasing its level, for the maximum unfolding of capabilities and for the joy of creativity.

Our own experiences also make it more and more evident that a change in one's line of work is an important and necessary act. This is why we must from the beginning equip our specialists with a solid but general knowledge that is expandable in many ways so that the acquired knowledge can meet the new demands in case of a career change, and so that job specialization and job training can be based on it.

Leaders and Their Work

The majority of economic managers are doing their work with expertise and efficiency. Since the utilization of man's creative and value-producing capability--the most important resources--is an essential part of their work, the implementation of our tasks in employment policy and manpower management is inconceivable without the improvement of leadership in general and, within that, of labor-related functions.

It is certain that they are the ones most responsible in this respect as well. It is primarily their responsibility to sensibly define the concrete tasks and to sensibly plan and organize production. It is their responsibility to give the kind of tasks to the workers in which they can best demonstrate their knowledge and experience and in which they can give the most and can make the most money.

First of all, we must make a note on the definition of the concept of "leaders." Unfortunately, there is a widespread view which identifies as leaders only those

people who are in higher leading positions. This view is wrong. Any economic unit can work efficiently only if the concept of leadership is not confined to the first three top executives but includes the complete--and every part of--the chain of leadership, and if the tasks--and the responsibility for them--are clearly defined from the director-general to the head of the smallest unit.

It must be recognized that the specialists in management positions must hold their own in extremely complex circumstances. They must be very receptive in order to be able to make--and implement--decisions in the midst of technical interrelationships, which satisfy various interests, smooth the ever-recurring human conflicts, serve social and political goals, and give priority to efficiency. To have a clear picture of the problems, and to solve the problems, they must have high-quality training, broadmindedness, and exceptional political sense and, last but not least, a will to cooperate with the social organs.

One reason for the importance of the above requirements is that the tasks to be done are generally emerging as the results of numerous factors instead of being simple and clear. The leader must be flexible, must have initiative, and must be willing to take risks--within the appropriate limits of our principles and laws, of course. At the same time he must be able to concentrate on the interpretation and implementation of the tasks given to him and on making his own conceptions understood, implemented and organized.

It follows from the above that a management work is a manysided activity which must be taken into consideration in evaluating his performance. In other words, evaluation must also be built on the principle of completeness. For if the responsibility of the leader is to combine parts of tasks and make the resultants efficient, then it is wrong to make him account for the state of the individual matters. To call to account individually and piece-by-piece, is to foster tactics, formalities and the making of "safety valves," and to cause an increasing lack of sincerity, which is an unwanted consequence of all of the above.

The things mentioned do not mean that we must accept and recognize the leaders' subjective manifestations. On the contrary, serious sanctions must be implemented for reports, for example, that are consciously misleading. It is beyond debate, however, that the basis for evaluating the leaders' performance cannot be anything but the actual performance manifest in the efficiency of the enterprise or cooperative.

It is important for both the appointing organs and authorities and social organs to trust those who have the courage to use new and up-to-date methods of leadership and organizational solutions in order to carry out their tasks. A leadership career must be made attractive to talented and capable young people so that they can make the most of the energy and individual ambition not in a secondary area, but in one that is important for society.

The leader must be trusted, must be allowed to unfold. If he is not capable of this within a realistic time period, then let us not "excuse" him but let us make it possible for him, in the interest of the community, to work in another capacity that is more suitable for him. For this, however, we must also change the social

view which considers a change in the leader's capacity as a "failure" and thus contributes to the unjustified and convulsive clinging to positions of leadership.

Let us acknowledge, then, the work of the leaders, both in its process and in the refliction of the entire product. Then we can expect leaders to have initiative, to use their creative imagination, to take risks and to take firm hold of--in close cooperation with the social organs--the collective they lead.

In addition to the general characteristics regarding leadership and its evaluation, it is evident that special factors may be found at the various levels of the "chain of command" which are only characteristic of the given place. Even in abstaining from the detailed discussion of the levels of leadership, it is necessary to emphasize the foremen who are in a peculiar position.

A special note on this group of specialists is warranted by the fact that not everything is right, according to experience, with their rights and obligations, their material and moral recognition and their replacement. While the higher-level economic managers spend a considerable amount of their time with so-called outside the gate matters and problems of the market, the foremen must deal with tasks and human and professional conflicts inside the gates. The foreman must take a stand at a point of the production process where the tensions of the rapport between man, machine and materials build up the most. This group is well-trained and capable of carrying out great tasks. Let us thus not forget that they are leaders at their own place, qualified not as much for dealing with crises as for leadership, and we must create the requisites and means everywhere, both in financial and moral terms.

The more stringent requirements for the leaders create, at the same time, significant expectations regarding the system of institutional manager training and extension training. In examining the methods and techniques presently employed by our economic managers, we must see that they generally are not up-to-date--with some evident exceptions--at those enterprises which have a decisive role in the world market.

This is harmful in two ways:

--it prevents us from obtaining maximum results with the existing forces of production;

--we are not taking advantage of the possibility inherent in a revival of leadership without any significant material investments.

In order to eliminate this deficiency we must deal more intensively and more purposefully with the development of aptitudes for leadership and with the employment of new and proven techniques. We must see to it that management training becomes more practical, i.e., that we show the managers methods, the usefulness of which is directly manifest in their activity's efficiency.

Modernization of the content of the postgraduate training element is a many sided and constant task requiring great responsibility and precise coordination. Its fundamental requirement is to build it on man-centered practice.

Under our socialist conditions, "the mental factors of material production" do not meet any opposition by the workers--as they do under capitalist conditions. Thus, in addition to a high-level organization of the use of material assets, we must continue in the future to make better use of the possibilities inherent in the human factors of the producing processes.

Unfortunately, it is a rather widespread practice for leaders to consider the matter of labor questions a task that is exclusively under the jurisdiction of the apparatus of manpower administration, and blame only this administration for the deficiencies. We must, no doubt, make serious efforts to improve the training of specialists directly working with the manpower, but it must also be emphasized that dealing with labor questions is part of the leadership activity. It is decisively the task of high enterprise management to develop conceptions in manpower management and wage management and to direct and organize labor activities.

The apparatus of manpower administration prepares and implements everything and thus its tasks, obviously, cannot be limited to employment, transfer, and the administration of the personnel's everyday operative matters.

We ask--and expect--much of the leaders in the various areas of life, whose task today is not to learn the art of making others sweat, but to create the requisites for sensible and meaningful work. This includes not only the technical equipment of the working place, but also human factors and relations. Not only should material production be well-oiled, but the atmosphere should also be conducive to work. Our society's humaneness must be present--and implemented--in everyday practice. The working place may be considered fully imbued with socialist democracy when its atmosphere is conducive to real action and when it demands--and fulfills--this action. This is indispensable to the leader who is doing his job according to the interests of society as a whole, for this is a requisite of unfolding the collective's creative powers and capabilities and is, at the same time, the best possible guarantee for the correctness of his decisions.

On the Enterprises' Organizational Activity

Reaching our goals--in the face of the unfavorable changes in the internal and external conditions of our growth--is a complex task.

It is an almost imperative necessity to use the domestic resources--by mobilizing primarily the existing significant surpluses in the economy--to counterbalance our difficulties and to create favorable conditions for increasing efficiency.

The requisites of the above include the definition and rational, organized and rapid implementation of the appropriate tasks that results in an optimal use of productive factors; that is, they include, among other things, the maximum use of the possibilities inherent in the improvement of enterprise organization. When we define enterprise organization as the requisite of efficient work and the means of reaching the planned goals, it is a justified requirement, then, that we should be much more critical about its present quality--but not by forgetting the results achieved in this area.

We say this because the regular evaluation and examination of organizational activity makes it possible to find the deficiencies in the economy, in the elimination of which this function also has a significant role.

The elimination of our lag—which is relative to our possibilities, and which is manifest in the productivity of the manpower at our disposal, in the output of production capacities, in the competitiveness of the products and, among other things, in the quality of organization, but which is unjustified by the differences in training and technical equipment—mostly depends on the extent to which we will be able to abolish the false view which holds that tasks related to organization are implementations of some kind of an "order from above," which is, then, either interpreted as a campaign goal or is unjustifiably narrowed down. This view considers the activity under discussion neither as a function of leadership, nor as an indispensable means for increasing efficiency through an optimal and rational use of productive factors.

But it is not only the international standards which we must catch up with, but also, and first of all, with ourselves; we must make better use of the possibilities inherent in the talents, knowledge and diligence of our working people.

Organization must include the entire production process, all areas of management and all categories of the workers' activities, from the shops through the enterprise as a whole. This is completely in harmony with the final goal of labor economy, efficiency increase and constant increase in national productivity. Everyone, workers and leaders alike, must organize his daily task. A smaller or greater degree of organization is needed not only for production control, but also for physical work. All of this is, however, only one side of the matter. An extensive and higher-class activity and the rationalization of production are much more important than momentary tasks. They mostly serve precisely to change routine jobs, and customary stereotypes or prevent the emergence of circumstances which hinder productivity.

As a result of scientific and technical development, a mass of new materials and processes is emerging in production, with increasing specialization and concentration. The use of complex systems of machines and the complex mechanization of production processes become widespread, automation becomes more rapid, the number and character of the various jobs change, as do the general erudition and professional competence of the workers and the organizational system of material production. These are the factors which also change the organizational tasks by making them more complex.

The effect of organizational work which is lacking awareness and organization and which sometimes does not serve primarily the realization of planned targets, and the effect of the lack of an organizational conception that constitutes the logical part of enterprise policies, is also manifest in the different levels of organization in the activities within the individual economic units. The gaps in organization which result from the disharmony between partial tasks increasingly become limitations from the standpoint of the economy as a whole. The situation is also not infrequent when the different levels of organization—not only within individual organizations but also between cooperating enterprises—also slow down the improvement of a more broadly defined efficiency.

The concept of external organization is still not a familiar one in our everyday language. For organization is defined by many people primarily as a requirement within the enterprise and understood as a more efficient management of labor, assets and materials. It must be understood, however, that a really successful enterprise activity is unthinkable without high quality cooperational work relations. The producer's and seller's joint market organization, for example, is a related question. In connection with the change in the production structure and the improvement of efficiency, it is an extremely important task in our present stage of development to develop the organization of the processes jointly with technology. This is so because it is not feasible to let the applied organizational solutions lag more and more behind technological development.

The improvement of the quality of function requires first of all the strengthening of the leadership's organization and an increased responsibility for this organization. This is necessary to avoid limiting organization to individual areas or to the alleviation of problems in every-day work, but to have it lay the foundation for mid- and long-range plans and carry out the tasks specified in them.

Organization must promote the preparation--and implementation--of complex enterprise plans which guarantee the priority of efficiency. There is no need for an independent--and thus partly self-centered--organizational plan. The need is for a determination of the organizational tasks necessary for the fulfillment of goals--with the least investment--equally in the field of production, sales, and development. Success can only be expected if the conceptions and actions are united both in planning and implementation. This is, first of all, a task of management, so much the more, as the risks in organizational measures and decisions must also be reckoned with. These are, however, nothing less and nothing more than the risks in other areas of independent enterprise management. Besides, they can be significantly lowered if the working masses are allowed to be involved in the preparation and practical implementation of the measures and decisions.

The modernization of the enterprise's organizational work not only promotes, but at the same time assumes, a developed plant democracy, a working place and enterprise atmosphere which demands the workers' creative activity and initiative and its utilization.

The present inadequate practice and the lack of a conscious, planned and rational organization of the manufacturing processes that also agrees with the workers' interests, is shown by the inadequate number of workers working according to output norms, the inadequate use of social work time base, and the large number of unjustified discrepancies in job conditions. Consequently, there is a low level of productivity, a lag in finishing new projects, and expenditures on developments exceed the planned costs and efficiency is unsatisfactory.

The significance of the loss resulting from the lack of organization changes qualitatively even in the modern industrial production, for it results not only in difficulties in the operation of one or another plant or enterprise, but also in a slow-down of their growth and the loss of their competitiveness. This is why it is especially important to determine and implement those concrete tasks which, on the one hand, help to eliminate the deficiencies and, on the other hand, prevent the

recurrence of inflated disorganization. This necessitates, both in the short and long range, a thorough evaluation and classification of the tasks and possibilities.

It would also be good to abolish the false view that modern organization means a change in all conditions, because this creates a constant insecurity, and in certain cases it leads to haphazard measures. And it does away right at the beginning with the advantages which can be attained with so-called preventive organization.

When we talk about organizational methods of other countries, everyone finds it natural that every minute of the working hours there must be filled with useful activity because organization takes care of that. In our country, on the other hand, there are still those who—putting aside the objective of socialist organization and the most efficient use, that is humanly possible, of productive questionable benefits that it entails. In our country, too, organization built on work and modern technology is a difficult and often painful task which entails conflicts and requires a hard struggle. It is based on a merciless examination and criticism of certain methods, it means a fight against innervations and habits, it gives time a central role, it makes performance measurable by establishing mandatory requirements and norms, and it pushes aside everything that slows down the normal and logical course of work and hinders the use of the workers' training and creativity.

Certain areas of work may become superfluous in a given place and there may be some people who must learn a new job or different working methods. This is mostly unpleasant. This is why it happens that the more organizational measures approach the individual's work, the more obstacles and opposition it faces.

What causes this? The fact that although organization is the best development, it is also the most difficult one, for this kind of "investment" takes place in people's heads. It is generally easier to exchange an old machine for a new one than to change familiar, reflex-like thinking and habitual schemes. In the interest of not letting the resulting tensions intensify, it is important to eliminate the misunderstandings regarding the role of organization, and to make people understand and respect this activity.

We must make the enterprise collectives the first to recognize the objective and meaning of organization, and to apply them in the practice of every-day production. They should clearly see that the elimination of the emerging economic problems, the flexible adaptation to external conditions, and even their individual financial interests depend primarily on the extent to which we will succeed, through optimal use of the internal resources, in guaranteeing an undisturbed pace of our development through self-effort.

In the course of carrying out the tasks related to the improvement of organization, efficiency, productivity and the circumstances and conditions at the working place are closely connected goals of identical value which cannot oppose or be subjected to one another. We must also consider in this regard that work discipline is better than average where the working conditions are generally better and the work is better organized: respect for, and loyalty to, the working place is

higher, and identification with the enterprise's goals is stronger in an enterprise where there are better social benefits. When we create wide possibilities for increasing the level of general education, professional training and mobility; when we guarantee a job for everyone that suits his talents--and that makes it possible to use his talents--then we also must create the working conditions accordingly.

Unfortunately, it still happens today that, in the hope of obtaining bank credit or state subsidy, and in order to make them "less expensive," investment proposals do not include investments related to the improvement of working conditions and social benefits. This practice is even explained: these do not increase production. The people holding this view forget that sensible work and favorable working conditions result not only in the workers' satisfaction but also in higher production.

The following statement, based on one of the reports of the Central Bureau of Statistics, is worth mentioning in this regard: that the working conditions have not improved as much as would have been possible or desirable despite a stepped-up mechanization of work processes and constant reconstructions. But working conditions have a significant effect on selecting--and staying in--one's career. At the present living standard and the present requirements of life style, manpower can hardly be directed to--and, even more important, to remain in--certain specialties through wages, or more precisely, through wages only. International experience also indicates that in every situation where incomes provide more than bare livelihood, working conditions play in increasing role in the use of the ability and willingness of the working man.

It is in our common interest to make a favorable change in this area for the workers. A requisite for this is, however, to emphasize the humanization of the work in evaluating investment goals and in determining the use of enterprise funds. The view must be made general that the existing material resources can be used not only to change unfavorable conditions, but also to prevent unbeneficial working conditions.

The working man himself is playing a larger role than before in increasing economic efficiency. We must thus adopt the view that no inhumane decision can be economical! It is also true, of course, that no step can be humane only without being at the same time directly or indirectly an efficiency incentive.

The Material Interest

From the aspect of the realization of fundamental goals of employment policy, socialist distribution and material and moral incentives are very important. We must never overlook: socialist equality means only equal opportunity, and cannot be identifiable with the egalitarianism that can be experienced in distribution. In other words: every member of society may work according to his ability, but the revenues--and thus the goods--may be shared only on the basis of individual performance.

The realization of socioeconomic goals is largely dependent on the extent to which we are able to make the incentive effect of the wages serve the attainment of our goals.

An appropriate material recognition of better-than-average individual and collective performance requires in practice a more extesnive differentiation of incomes according to the quantity and quality of the work done.

Income differentiation is an essential, but not a single and exclusive, means of carrying out our economic tasks. The actual implementation of the principle of distribution according to performance, and the appropriate incentives for higher performance is hindered in practice by the widespread "egalitarianism." This method does not connect performance and incomes originating from work, and thus the incomes in many cases deviate only slightly from the average despite significant differences in efficiency.

The poor workers, of course, do not oppose this. The average workers--who constitute the largest group--are more or less satisfied, and the outstanding workers, although their performance is above average, do not have an interest in making an even greater effort. The trouble is that this kind of wage system does not make an average worker out of a poor one, or an outstanding worker out of an average one. On the contrary, the latter also begins to lose his vigor and pretentiousness.

It is an extremely dangerous consequence of this process that the levelling of the incomes will at the end result in a levelling of performance and--because of a lack of incentive distribution--in a down-shift toward the lower levels. This kind of a tendency makes the attainment of our goals in economic policy more difficult in the long run and jeopardizes our competitiveness and progress and it is thus against our social interests.

It is an economic requirement to make not only the individual but also the enterprise collectives interested in better performance. Accordingly, individual incomes must also be differentiated on the basis of the efficiency and profitability of the enterprise. According to the norms and requisites of the present regulation, enterprises of different efficiency and enterprises which increase their output to different degrees have different possibilities as well for increasing wages and incomes.

There are some people whose argument against the previous statement is that the enterprise's output is not equal to the sum of individual outputs. It is a real fact that a change in market regulations or in the economic conditions, for example, may affect the enterprise's output irrespective of individual performance. In spite of this, we cannot dispense with the incentives for the entire collective, if only because in this way there is a greater responsibility on every level of management and every employee may sense more directly the success, or possible lack of success, of the enterprise's work.

The lower efficiency of the economic processes is in many cases manifest in lower wages and incomes as compared to the plans or the previous year. In such cases, the first thing mentioned is often the inadequacy of the wage and income regulating system. Certainly this part of the regulation is not without any flaws either and needs a constant updating, but we would be misled by saying that this is the only reason why incomes do not increase. The unions also must take the stand that

the first obligation in this regard, too, is to uncover and to eliminate the inner causes of the phenomena, and only then can the external circumstances be blamed.

The wage and income regulating system has an adequate incentive effect only if it is coupled with the updating of the system of interests within the enterprises. This must be done in such a way that it can become an effective means of achieving the enterprises' goals and encouraging the workers to carry out their tasks. It must be considered that the workers as individuals see the individual elements of the system of interests within the enterprise instead of the centrally designed system of wage and income regulation, and feel their effect and consequences.

In updating the internal system of interests, it is generally beneficial to expand the kinds and content of the wage forms employed. Technical development gradually decreases man's role in determining quantity and at the same time increases his responsibility with regard to quality. On a longer range, we must establish and popularize wage forms which meet the new requirements. It is important to broaden the practice of group waging which makes it possible to base financial recognition on the performance of a smaller collective and to make the distribution between its members according to their quantitative and qualitative contribution.

In the course of our political and social development and mainly through the socialist brigades, the essential requisite of successful group work has been established: people working in a collective for a common goal who can and want to help each other. It is necessary to make a conscious and planned use of this advantage of our social system and to make it a basis for collective work and task waging. The requisite for success is to aid the realization of the political and educational goals of the socialist brigade movement through up-to-date organizational methods and means, and to achieve a higher efficiency through the unification of views and deeds.

Several additional measures, seeking to foster distribution according to performance, also urged an increase in the number of task wage earners. This is indisputably right as a general requirement. In this regard we also must reckon with the fact that the financial recognition of performance and differentiation have a real incentive effect only if they are based on factors which depend primarily on the work of the interested parties and at the same time also contribute, directly or indirectly, to increasing the efficiency of enterprise management. Thus in updating the internal system of interest, the degree of differentiated waging on the basis of performance must be determined in such a way that the tangible production increase that is beneficial for the enterprise is coupled with a wage increase for the worker that will really make him interested.

It also must be mentioned that a mechanical or slogan-like interpretation of wage differentiation has serious dangers. Such a false view is that the bigger the differences between the wages or incomes are, the more they serve the cause of material incentive. Two-fold and three-fold differences in wages at the same job mean, first of all, that the performance requirements are not appropriate: the norm and the tasks are set at the lowest performance level. This practice does not show, however, which individual is ill-suited for carrying out the given task.

It is also dangerous if, as a result of the existing and adopted incentive system, this or that worker's or working group's output "jumps" and if wage differentiations are made on that basis, changing almost periodically. In such a case, a manipulation of output requirements is presumable--not without any basis--which finally accomplishes egalitarianism over a longer period of time.

In connection with the above, we must mention our long-range goals with regard to differentiation.

The decrease in the differences apparent in the work performance of the individual workers and collectives is a significant reserve for increasing economic efficiency. Therefore regarding wage differentiation, we absolutely cannot prescribe these reserves for increasing efficiency to generally increase the differences in output. On the contrary, it is in our interest to make the practice of distribution according to performance help the sensible use of productive factors everywhere. The distance between the quantity and quality of the work and the proportionate wages must decrease by approaching the level of the best workers. We cannot accept in the long range the widely different use of the so-called potential possibilities of the individual management organizations--including, for example, manpower, machine equipment and market possibilities. Our objective can be only to make both the individuals and the enterprises (cooperatives) work and operate with an efficiency that approaches the optimum level. This requires not only determination, but also a search for the causes of the differences between individual performances and between the efficiency of the individual management organizations, the elimination of these causes, an analysis of the experiences of the best, and the propagation of the latter.

Quality work must be better, and more consistently recognized in the future, and the principle must be implemented that he who works better than the others, has a higher output and is engaged in a socially more useful activity, should also live better than his companions.

In examining the effect mechanism of material incentives, there are many people who say that we should encourage a more consistent wage differentiation according to performance in such a period when, because of our worries about balance, the pace of our economic growth can be slower and the pace of increase in real wages can be more modest than previously.

It is a real fact that the national economic indicators--the projected increase of real wages--are lower than in past years, but we must not forget that, on the one hand, incentives do not work through real wages but through nominal wages and, on the other hand, the macro-level average value is the result of differentiation at several levels.

The Role of the Mass Organizations

In connection with the foregoing, it is necessary to express a few thoughts about the importance of the cooperation between the party organizations, union organizations and the leadership. For the realization of our goals in employment policy and the improvement of our manpower management practice depends to a significant extent on sociopolitical conditions as well. To be able to engage in useful

activity in the area mentioned, one must be able to understand and feel the econopolitical and sociopolitical relationships of employment policy and manpower management.

This view can be implemented in practice only if the economic management requires the factory's part and social organizations to be cooperative partners in laying the foundation for carrying out the tasks and in organizing the implementation from the aspect of the movement.

The real support of the party and social organization is needed by the economic leadership to change the initial results apparent in our employment policy and manpower management into a permanent development tendency everywhere. This is needed all the more because all of those requirements which we are formulating today, previously were traditional and permanent elements of our socialist economic policy on the one hand, and new goals, on the other hand, which will be valid for a long time to come. The necessary changes related to the foregoing are not only complex tasks, but they also create numerous tensions--and require their release. Both in the work for the movement and in leadership, the rapid and timely recognition and analysis of the emerging problems--and immediate actions--is becoming more important than ever before. We must thus change not only the sensitivity, but also the speed of our reaction. We must decrease reaction time and improve our reflexes. The former also applies, of course, to the appropriate methods and successful solutions, for it is in our interest to recognize them swiftly and use them widely.

The factory's part and union organizations can achieve this, first of all, by concentrating their activity on the further improvement of the situation and by striving primarily to create the sociopolitical conditions for the efficient use of manpower. In the course of this, they can use their characteristic means to usefully cooperate in the exploration of manpower reserves, the improvement of the level of organization and the creation of conditions that foster the unfolding of the workers' ability and willingness.

The unions can play an especially important role in awakening the workers' demand for more up-to-date methods of plant and work organization, and in making the workers receptive to the use of the new methods. All of this means: to make them aware that in this way the interested parties themselves can actively influence the implementation of their own interests, because they also depend on, among other things, organization, which is a requisite for getting higher pay and a foundation for higher performance.

All of this presupposes efficient cooperation between the party organizations, economic managers and union organs in matching the interests of the society as a whole, the group, and the individual. There is a need for a movement of factory politics which is searching for the best methods of coupling the interests which can at the same time also make the function of the forum system of the factory's democracy more meaningful.

Our task now is to safeguard our achievements in economic progress, living standard and culture, laying the foundation for our later dynamic development. What

is needed to accomplish this? Among other things, there should be no one in our ranks who is satisfied with himself when he is not doing his job at his best.

In earlier years we used to say: we have to work as usual, only a little better. This view is unacceptable today. We must work differently from before, and first of all we must improve the quality of our work. What is needed to achieve this? More creative ability, to look for, and find, better solutions than before; deeper and more thorcugh knowledge, to work out more up-to-date and more economical methods, and, finally, an ability for renewal, a spirit of enterprise and courage, and an ability to use these talents in person.

We have a lot to do, but it is good to know that there are many of us who want to do something. We have a program: the resolution of the 12th congress, the honest implementation of which is our common responsibility. In the spirit of this, our attention must be focused, today, tomorrow and in the future, on the fact that it is not simply manpower, but man, who stands in the center of our employment policy and manpower management.

We are building a socialist society which serves the community, and which not only respects, but also raises man's value and the output of his talent and diligence. We proclaim: what is important is not what you are, what you "rank" is, but how much you do for the community. We must value work in man and man in work.

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DEVELOPMENT OF ECONOMIC TIES WITH BALKAN COUNTRIES EXAMINED

Bucharest REVISTA ECONOMICA in Romanian No 37, 12 Sep 80 pp 25-26

/Article by A. Constantinescu, Institute of World Economics: "Development of Economic Relations with All Balkan Countries Contributes to Security and Peace in Europe and the World"/

/Text/ Development and diversification of bilateral and multilateral economic collaboration among the countries of the European continent, especially on the regional and subregional levels, are among the essential features of the general process of creating a climate of peace and security in Europe. Accordingly provision for an atmosphere of stability and peace in the Balkans plays an important part in the efforts to establish security and cooperation on the continental scale. Comrade Nicolae Ceausescu, the president of socialist Romania, has clearly pointed out on many occasions the close tie between development of collaboration in the Balkans and construction of European security. As he said on the occasion of the recent official visit of Constantin Karamanlis, president of the Hellenic Republic, to Romania, "The Romanian people, committed with all their forces to the great task of national socialist development, are keenly interested in promoting extensive collaboration with all states of the world and especially with their neighbors, the states in the region where they live. We are constantly trying to develop relations of collaboration and friendship with all the Balkan countries, and we want the existing problems in this region to be solved peacefully through mutual understanding. We want lasting good-neighbor relations of bilateral and multilateral international collaboration established in the Balkans area, so that the Balkans will become a region of peace, friendship and fruitful cooperation and a region free of nuclear weapons. We also view development of Balkan collaboration in a politically healthy climate in the light of the general efforts onbehalf of security and cooperation in Europe and specific implementation of the documents signed in Helsinki."

Development of economic collaboration, both in the form of trade exchanges and in that of economic and technical-scientific cooperation, with all other Balkan countries has been essential in the last 15 years especially as one of the main ways of implementing socialist Romania's foreign policy on establishing a climate of peace and security in Europe.

With the approach of the meeting in Madrid, which is to be an important occasion for mobilizing all peoples' efforts toward abatement of tension and creation of a true

climate of fruitful, mutually advantageous collaboration among the countries of the continent, consolidation and development of relations of good economic collaboration and cooperation among the Balkan countries takes on new proportions, especially since the Balkan countries' economic relations benefit by conditions favoring development of collaboration in addition to their geographic proximity on the subregional level. The Balkan countries' economies are on comparable levels of overall development, and they are actually among the developing countries. In this connection, the heavy emphasis placed upon development of industry and its share in the whole economy is a common characteristic of all the countries in the area, despite certain structural differences. The policies of medium and long-range economic development pursued by the analyzed countries have as a common denominator the attainment of high economic growth rates based on sustained investment efforts, especially in industry.

On the other hand, most of the Balkan countries' general economic development critically depends upon multiplication and expansion of the export markets for their products and of their foreign sources of supply. In other words, foreign economic exchanges play a vital part in development of domestic production* and formation of the national income of every country. This crucial importance of foreign trade to the Balkan countries' economic development is also a major stimulant to greater collaboration in the Balkan area.

Due to the action of these factors, the bilateral economic relations among the respective countries have shown a rising trend in the last decade especially. Trade exchanges were developed and a number of cooperative programs of mutual importance to the participating countries were undertaken. Despite the results obtained so far, the proportion of the exchanges in the Balkan countries' total foreign trade is still relatively low, indicating that there are some major unexploited reserves for interregional economic collaboration.

As an active promoter of economic collaboration in the area, Romania specially emphasizes development of its economic exchanges with the other Balkan countries. The proportion of exchanges with these countries in Romania's foreign trade steadily increased from 5 percent in 1970 to 6 percent in 1975 and to about 6.9 percent in 1978, which are considerably above the levels logged by the other countries in the region.

This evolution is based upon the far higher average annual growth rate reached by the total exchanges with the Balkan countries (21.3 percent) than that of all Romanian foreign trade (16.5 percent) during the same period.

The long-term trade and cooperative agreements concluded between Romania and these countries, which agreements lend stability and continuity to relations, provide a favorable background to stimulate the economic exchanges with the other countries in the area.

Romania consistently tries to develop more stable economic and technical-scientific cooperation among the Balkan countries, and a number of mutually advantageous programs have been started with the neighboring countries especially, such as cooperative production of polyisoprene rubber, construction of a complex to produce olefins, cooperative programs in chemistry and the iron and steel industry, the Turnu

*For example, in the case of Bulgaria and Greece a 1 percent increase in domestic production requires a more rapid increase of 2 and 1.5 percent respectively in the physical volume of trade exchanges with foreign countries.

Magurele-Nicopole hydraulic and navigation complex, the mixed enterprise for heavy machine building in Giurgiu and Ruse with Bulgaria, the Iron Gates I and II hydropower and navigation systems on the Danube, the cooperation between the Pancevo Petrochemical Combine and the Timisoara Chemical Combine and that in production of electric locomotives etc. with Yugoslavia. Economic relations between Romania and Albania have shown a rising trend, characterized by an increased volume of reciprocal deliveries and extension of the list of products. The main Romanian products exported to Albania are drilling installations and petroleum equipment, electric motors, electrotechnical equipment, components for radio and TV sets, chemical products, rolled steel products, mineral oils, tires etc. The Albanian foreign trade enterprises send Romania bitumen, chromium ore and concentrates, pyrites concentrates, power coal, sulfur and some food industry products. It is estimated on the basis of the good results so far obtained that the trade exchanges as well as the various forms of economic collaboration between the two countries will show a rising trend in the next few years.

So far the cooperation between Romania and Greece has mainly consisted of forming the Elpex and Terhellas mixed companies to market petroleum products and various other Romanian and Greek products, joint construction of automated telephone exchanges in the Ioannina and Chaidari communities and of lumber mill in Drama, petroleum drilling operations on the delta of the Nestos River and in the Kamotini area, and preparing studies for electrification of the Greek railways. President Constantin Karamanlis' recent visit to Romania occasioned the two countries' decision to expand cooperation in the basic sectors of the national economies. As for Romanian-Turkish economic cooperation, the main programs in various stages of implementation are construction of a crude oil refinery in Central Anatolia with an annual processing capacity of 5 million tons of crude oil, construction of a production capacity for sodium chromate and bichromate, and a number of other arrangements (especially for exploration and exploitation of raw material resources) expected to be made in the next few years.

Many other specific ways and means of expanding and diversifying the economic exchanges between Romania and the other Balkan countries are being considered by the parties and studied by the mixed commissions that check and analyze the accomplishment of the goals set in the long-term agreements for developing bilateral economic relations.

Romania's good results in developing economic exchanges with the other Balkan countries bear witness to the possibilities of stimulating collaboration in the Balkans area, and they may serve as an example of the method of exploiting (on the basis of the principles of respect for every nation's independence and sovereignty, noninterference in internal affairs, equality of rights and mutual benefit) the opportunities for collaboration offered by the growing economic potentials of the respective countries. Better exploitation of the above-mentioned factors (comparable levels of economic development; the same general policies in promoting investment projects, especially in industry and foreign trade; geographic proximity; and the existence of traditional ties on various levels), which have a favorable effect and can have an even more favorable one in the future in stimulating economic relations among the Balkan countries, can guarantee proper exploitation of the important reserves for economic collaboration.

On the basis of the experience acquired the need is felt of passing on to a higher stage of Balkan collaboration wherein multilateral cooperative programs will be considered alongside development of the bilateral economic exchanges. A start in this direction (especially for forming the general framework and determining the possible

courses of action) was made by organizing the Meeting for Multilateral Economic and Technical Cooperation Among the Balkan States in Athens in 1976, which made it possible to devote the participating countries' common interest in developing cooperation among them chiefly to five large fields (agriculture, trade, energy, transportation and telecommunications, and the environment). Note that the meeting was based on the viewpoint and prospects opened up by the Final Act of Helsinki, as an important multilateral action undertaken by the Balkan countries in pursuance of the decisions of the conference. It should also be pointed out that the meeting established the concept of multilateral Balkan cooperation among the countries in the area, but without making it appear as intended to form any closed group isolated from other countries. On the contrary, by virtue of the good effect it would have in the way of general economic development of every country in the area, greater participation in the world economic cycle, and stability and continuity of the exchanges, this cooperation would be a factor to encourage economic collaboration throughout the continent of Europe.

The results so far obtained in developing the bilateral and multilateral economic relations among the Balkan countries justify views that it is possible and necessary to find new ways and areas of cooperation to supplement the traditional trade exchanges that will make better use of their financial, material and human resources in order to satisfy mutual interests.

On this subject, cooperative production of electric power for example can be envisaged for the future, through better exploitation of hydraulic and thermal energy resources, and this cooperation could be extended to the formation of an interconnected power system in the Balkans. Another great and highly important field wherein cooperation among the Balkan countries can be developed is implementation of joint investment plans for exploiting and utilizing the mineral resources in these countries (lead, zinc, chromium, iron ore, coals etc.). The Balkan countries can also cooperate in various sectors of industry (motor vehicles, shipbuilding, tractors, machine tools, household electric appliances etc.) and of agriculture (irrigation, zootechnology), wherein some of these countries have come to acquire experience and results favorably regarded on the international level. A major role in the overall development of inter-Balkan economic relations could be played by cooperation in improving the economic substructure in these countries, and also in the services field. Plans could also be considered for improving the transportation and communications systems, possibly to the point of creating an integrated highway system on the Balkan level, and also for better use of the harbor and water transport capacities.

Such cooperative programs could take various forms, including formation of mixed companies based on contributions of capital, equipment, know-how etc. from the interested countries.

Expanded economic and technical-scientific cooperation in the various above-mentioned fields conforms well to the objectives of the medium and long-range plans for developing the Balkan countries' national economies.

Stimulation of the trade exchanges and implementation of specific programs in the foregoing fields (and also in other fields and in other forms of economic collaboration that can be discovered in the course of organized sectorial consultations among the Balkan countries) should be facilitated by providing a better framework for development of economic relations. For this purpose it could be highly practicable to agree upon some measures both for organization properly speaking of business

relations (establishing institutionalized contacts between the chambers of commerce and industry of the countries in the area, creating permanent trade centers of the various Balkan countries in the other countries in the region, etc.) and for facilitating the reciprocal trade flows (by measures to simplify customs formalities, to grant rate facilities in the transportation sector, etc.).

These are only a few of the courses the Balkan countries can take to develop economic collaboration. As an essential component of the general process of securing a climate of understanding and friendship among the European countries, expanded economic collaboration in the Balkans can play a real, specific part in accomplishing the aims pursued by the countries of the continent, which aims will be repeated at the approaching meeting in Madrid this fall.

Deeply involved in the efforts to establish security and peace in Europe, Romania is militating for the formation of an area of understanding and collaboration in the Balkans, acting especially in the direction of closer economic ties with the other countries in the region. Romania's emphasis upon this major aim is attested by the many high-level meetings and contacts with chiefs of states and governments in the Balkan countries that will lead to further development of bilateral relations as well as the consistent promotion of the idea of expanding the inter-Balkan meetings and institutionalizing some definite structures for cooperation in various fields, structures which will help to stimulate multilateral collaboration in the area. The decision expressed last week by the presidents of Romania and Greece to resume the initiative of organizing multilateral meetings for agreement on the regional level upon some forms of cooperation in fields of common interest is particularly important in this respect.

As President Nicolae Ceausescu recently stated on the occasion of the official visit of friendship to Romania by the party and state delegation of Bulgaria headed by Comrade Todor Zhivkov, "Romania maintains good relations with all Balkan countries and is resolved to make every effort to develop collaboration among the states of this geographic area, socialist and nonsocialist ones, since it serves the vital interests of every people and the general cause of security and peace throughout the world."

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EXPERIENCES WITH NEW ECONOMIC MECHANISM DISCUSSED

Bucharest ERA SOCIALISTA in Romanian No 15, 5 Aug 80 pp 24-29

[Report by Ion Chirculescu: "The New Economic-Financial Mechanism, and the Communist Style of Management"]

[Text] A major imperative in our socioeconomic life is the efficient implementation of the new economic-financial mechanism in all areas of activity. Although one and half years have passed since it began to be generally applied, the new mechanism is encountering difficulties, being resisted by the old ways, by the custom of working without having to account for the economic results that are obtained. The ideas and indications included in the speeches that Nicolae Ceausescu delivered to the workshop of the Central Committee of the RCP in May of this year, and to the expanded plenary session of the National Council of Workers in June, define the sphere of action of party organizations and of collective management organs in enterprises, industrial centrals, and ministries, stressing the need to develop a new concept of economic development, a concept which will serve as foundation for assuring good worker self-management and economic-financial self-administration, resulting in an effective involvement of workers in management and in the solution of problems raised by the higher efficiency and profitability of the production of material goods. It goes without saying that the improved planning and management of socioeconomic life is not a simple problem and that it does not occur overnight; it does assume a collective contribution of competent thought and action, a high degree of responsibility, the elimination of old practices, and the overcoming of inertia and conservatism in economic activities. The debate organized by ERA SOCIALISTA together with the Sector I Party Committee of Bucharest, was attended by party activists and staff workers in the economy, and provided an occasion to examine some of the effects of the confrontation between the new economic-financial mechanism and practice. The participants described their own experiences, and at the same time expressed a number of opinions and suggestions about concrete means for the efficient application of the new economic mechanism.

Participants in the Debate

Marin Voinea, secretary of the Party Committee of Sector I Bucharest
Nedelcu Antonescu, director of the Otopeni Enterprise for Measurement and Control Instruments
Liviu Beghegeanu, deputy director general of the Industrial Central for Automation, director of the Automatica Enterprise
Ilie Bologa, secretary of the party committee and chairman of the workers' council at the Grivita Rosie Enterprise for Chemical Equipment
Maria Diaconu, secretary of the party committee and chairwoman of the workers' council at the Dacia Enterprise
Mihai Popa, deputy secretary of the party committee at the Grivita Rosie Enterprise for Chemical Equipment
Mircea Radulescu, trade director at the Zarea Enterprise
Florentin Visan, chief accountant at the Industrial Central for Chemical Equipment and at the Grivita Rosie Enterprise for Chemical Equipment
Leonard Zugravu, director of the Zarea Enterprise

Respect for Functions Conferred by Law

Marin Voinea: The most pressing problem in the effective and successful implementation of the new economic-financial mechanism, is a firm respect for the functions conferred by law, and in equal measure, a greater responsibility on the part of enterprises to increase the efficiency of production and profitability.

This major imperative polarizes all the concerns of the Sector I Party Committee. In the light of the party leadership indications, political education actions are being continued with greater intensity; they are intended to contribute to the understanding of the principles of the economic mechanism, so that the workers' efforts will result in diversified and high quality production, obtained under conditions of maximum efficiency.

The fruits of this more efficient work can be seen in high rates of net production and profit growth, and in a systematic reduction of material costs; they are ultimately found in a notable success: during this month, and more exactly on 8 July, the enterprises in Sector I succeeded in completing all their tasks for the current five-year plan, more than five months ahead of schedule.

This is an impressive success, demonstrating in fact that achievements could have been even better if in each enterprise, the communists and all workers had militated more perseveringly for the effective implementation of the new mechanism. This point deserves to be stressed inasmuch as experience has shown that the new mechanism can be asserted only through a sustained and collective action of workers in promoting new ideas, and in eliminating old practices and mentalities which are still harmful at all levels of economic administration. That is why in this vast action which we are conducting with increasing intensity, we are helping party organizations to understand

that this is not a matter of one more step or special measure to be undertaken, but rather of a multilateral and constant action, founded on concrete goals which include the whole existence of enterprises, and which focuses the workers' efforts on steady achievement of net and physical production, systematic reduction of material costs, most efficient utilization of production capabilities, improved product quality, adoption of new products, modernized manufacturing technologies, and superior exploitation of raw materials.

The manner in which these objectives are achieved represents the only unit of measurement for determining the efficiency of the party's work; not in terms of the number of meetings held or actions undertaken, but rather according to the efficiency with which the planned production is achieved, and to the size of profits. It is in the interest of party work to eliminate bureaucracy from the activity of party organizations, the more so since such attitudes are not isolated phenomena. More than a few party assemblies are subjected to perfunctory attitudes toward major production problems, with general discussions being followed by general measures, none of which carry an echo among the workers. These assemblies are no more accidental than the conservative, isolationist trends that are often encountered, or the repeated attempts at finding justifications for each shortcoming, placing the blame on factors outside the enterprise or party organization.

Nedelcu Antonescu: I find that a dialectical relationship exists between a firm respect for functions conferred by law, and the achievement of maximum economic efficiency in production. Because of this, the law on the organization and management of state socialist state units has assigned extensive functions to enterprises for the planning and administration of their activities, functions which far from being mere delegations of responsibilities, represent one of the major leverages for implementing the new mechanism and worker self-management.

In practice however, some of these functions find their niche with some difficulty. We are still encountering conservatism, which expresses itself in various forms, such as initiative limitations in enterprises, failure to consider the real potential of enterprises, punctilious supervision, or the issuance of all sorts of instructions for implementing laws or regulations.

Editor: What is the explanation for this situation? Are the principles of the new economic-financial mechanism not viable, or is our economy still not ready for the application of these principles?

Liviu Beghegeanu: Neither one nor the other! The principles of the new financial-economic mechanism are good, and fully meet the needs of the national economy, and the conditions created for a transition to a new quality and the achievement of a high economic efficiency.

If in practice some functions at the enterprise, and even at the industrial central levels have some difficulties in being implemented, I believe this to be determined by the transition from the old system of management and planning, to the new, improved system. In this transition region, the circumstances are not yet fully adjusted; the influence of the old mentality persists, and indicators are still expected to be established "upstairs" by CSP (State Planning Committee) and transmitted to enterprises through ministries and industrial centrals. This is no different from having failed to definitely eliminate the practice where ministries and industrial centrals hold the reins" of enterprises through a flood of indicators and fussy supervision, as has already been mentioned.

Ilie Bologa: I do not share the point of view regarding the lack of maturity of enterprises in terms of managing and planning their own activities.

The truth is, as stated by Beghegeanu, that the old relationships cultivated by excessive centralism, by routine, and by conservatism, still persist and manifest themselves here and there with various intensities, depending on the degree of implication of various interests at various hierarchic levels.

Without any justification, many cases ignore that the enterprise is the basic link in the production of material goods. As a result, nearly everything is reduced to plan figures, while man and the concerns and difficulties of the enterprise are shunted to the background. I often have the feeling that the enterprise is one thing, and the central organs another, a condition summarized by the popular expression: "You figure it out, there's nothing we can do about it, this is the plan, this is the situation."

Mihai Popa: I also do not share the point of view expressed here regarding the insufficient maturity of enterprises, although it might be true and to my knowledge such conditions do exist.

While some functions continue to be merely perfunctory, this situation is also cultivated, in my opinion, by the insufficient confidence placed in the enterprises. But under the conditions of the new financial-economic mechanism there are sound reasons for placing proper confidence in enterprises and workers' councils according to law, a confidence which in fact is fostered by the nature and character of socialist production relations. This of course does not mean blind faith, which borders on incompetence or a lack of foundation, but the confidence implied by innovation, collective thought, and the struggle for innovation and for economic efficiency. The Grivita Rosie Enterprise for Chemical Equipment, and to the best of my knowledge many other enterprises, have powerful party organizations, staffs that are highly experienced in production planning and management, competent engineers, highly qualified workers, as well as a climate which allows the formulation of opinions and criticisms. All these

facts do not justify discounting the functions of enterprises to any degree, but on the contrary, provide a strong basis for implementing the new financial-economic mechanism and for increasing the responsibility of enterprises.

Liviu Beghegeanu: I come back to the question which I already raised, because its answer, which is not a simple one, is very important to the successful implementation of the new mechanism. I want to stress that it is not a matter of so-called incompetence, but rather of the existence of a new concept in economic development, whose effect is that maturity in management becomes a dynamic catalyst of the workers' efforts. The range of reaction of any collective management organ can be limited, and its activity can be reduced, if it does not exhibit the dynamic thinking process that allows it to accept and work for what that which is new. How else can we interpret the concern consistently voiced by the party leadership and by Nicolae Ceausescu, to radically change our concept of economic development at all hierarchic levels as a fundamental condition for directing our efforts toward the qualitative aspects of production and for the successful implementation of the new mechanism.

Dinu Sandulescu: If there is one area in which enterprises are insufficiently well prepared, that area is data processing. And without it, we cannot use scientific methods for planning, organizing, and formulating decisions, which as we know, form a major part of the new mechanism.

In order to act dynamically and efficiently in the production process, we must effectively know, even daily, the level of the physical and net production achieved in an enterprise and its departments. Unfortunately, we only know the net production 15 days after the closing of the plan month, as a result of which we find it impossible to take effective actions against shortcomings, and eliminate the causes of higher production costs.

Maria Diaconu: The foundation of the plan on realistic bases is an essential condition for the implementation of the new economic-financial mechanism and for the development of each enterprise's personality.

Based on the law, notable efforts are made to take into consideration the actual conditions and capabilities of an enterprise during the plan formulation. Despite this, matters have not radically changed until now, so that enterprises are placed in the position of accepting the plan figures established by an industrial central or ministry, figures which in many cases are not very realistic.

Such practices are not likely to stimulate workers' collectives; they limit the assertion of worker self-management and diffuse responsibility, while encouraging perfunctory attitudes during the discussion of problems at general assemblies or workers' councils.

Florentin Visan: In planning practice, we often find that the proposals of enterprises are one thing, the adopted plans another, and the final, achieved plans yet another thing. This does not mean that we are talking about three versions of the same plan, but rather about one and the same plan, transmitted by the central, which to some extent and not always, considers the proposals advanced by enterprises and includes a number of errors, such as establishing material costs without accounting for production structures.

That is the situation at the Grivita Rosie Enterprise for Chemical Equipment, whose production is unique. As stipulated in the law, the plan is indeed formulated by the enterprise: it is based on limit indicators received from its supervising organs. But because the production is unique, its structure cannot be known until at least a few months before the beginning of the plan year; consequently, material costs per 1000 lei of goods produced are unknown as well, and are therefore based on the average costs of the previous year. But when we finally know the structure of our production and consequently our material costs, we are not allowed to make the necessary corrections, and are of course included in the consumption quotas approved by the state plan. As a result, planned material costs are much lower, but they do not correspond to reality. And so, although the enterprise completes its physical production with optimum material costs, falling within the consumption quotas in effect, its economic results are artificially reduced because the calculation of the value of net production takes into account the planned material costs, which are much lower and therefore create, on paper, a higher value of net production.

Leonard Zugravu: An essential condition for a realistic foundation of the plan is the timely supply of raw and other materials, to match the structure of production. By knowing its production structure in time, and by obtaining its technical and material supplies as a function of this structure, an enterprise is in a position to soundly base its manufacturing programs and therefore act efficiently on costs and consumption quotas. It is futile to formulate measures all year long, because unsteady supplies and the uncertain procurement of materials necessary for the manufacturing process greatly reduce the enterprise's possibilities to produce with maximum efficiency.

Mihai Popa: A point needs to be made here! The problem of technical and material supply is one thing for mass production, and another for the production of special products. Having said this, I will mention the difficulty of obtaining technical and material supplies for special product production, a difficulty compounded mostly by the impossibility of knowing the structure of production ahead of time, since as a rule, our customers are late in presenting designs for the installations they order. Without these designs, the enterprise must obtain its supplies by using the experience of previous years and the sketchy information it might have about the products to be manufactured.

Editor: Why must the enterprise which produces special installations, buy raw and other materials without knowing the structure of the production to be undertaken? This freezes funds, leading to supplementary costs which reduce profits.

Florentin Visan: To begin with, because of present procurement methods, the enterprise must specify its material needs at least nine months before the beginning of the manufacturing year. If it does not follow this procedure, which it cannot in fact do, it might as well close its gates since it would have no materials with which to work. So even though the new mechanism forces us to measure each leu and to use it as efficiently as possible, we are also forced to immobilize raw materials which every year amount to many millions and for which we pay interest.

Editor: What then is the solution? After all, an activity such as this one, with negative effects on profitability, is incompatible with the principles of the economic-financial mechanism.

Ilie Bologa: In my opinion, the solution is to reconsider the activity of the supply bases, so that they will fully meet their obligations. That's what they were created for! They must have on hand all the necessary raw and other materials in accordance with the plan tasks formulated for production branches and sub-branches. In this way, each enterprise would be able to obtain its supplies effectively and systematically, eliminating the dead storage of materials, uncertain procurement, and the searches among all the suppliers of these materials.

But what is the real situation? Our enterprise's contracts with its supply base cover only 5 percent of its needs, the rest having been contracted directly with suppliers whom we have found here and there at great expense of time and money. It is easy to understand then why we store raw and other materials, and why this would not happen if we knew the structure of production and were therefore able to obtain our supplies efficiently, as needed.

Florentin Visan: There is yet another aspect, which has acquired new meaning with the energy crisis, when particular stress is being placed on economies of metals, electricity, and fuels. Let me explain!

The fact that the supply bases are not what they should be, and that enterprises have to solve most of their problems directly with suppliers, encourages the waste of raw and other materials. In many cases, our requirements are for small quantities: 5-10 tons of sheet metal or bars of various dimensions. But the suppliers cannot produce in such small amounts, and we then must contract for five times as much as we need for the manufacture of a given installation.

Marin Voinea: From the standpoint of economic efficiency, I think that it would be a good idea to establish a minimum optimum stock which the enterprise should hold, and if not the enterprise then its supply base. The loss from idleness caused by a shortage of materials is always greater and very difficult to recover, than the "loss" implied by the costs of material dead storage.

Nedelcu Antonescu: The respect for the functions conferred by law on enterprises for production planning and management, must have a direct counterpart in a higher sense of responsibility on the part of the unit's collective management. A great deal of thought is therefore needed to find new solutions for the maximum use of production capabilities and work hours, for a better utilization of raw materials, and for improved product quality. Only in this way will the workers' efforts result in high efficiency, with the unit of measure being the day-to-day physical and net production, profits, and profitability obtained in excess of the plan.

Fruitful Collaboration Based on Dynamic, Efficient Work Style

Marin Voinea: A fruitful collaboration between enterprise, industrial central, and ministry, is of overwhelming importance for the successful implementation of the new mechanism, and for obtaining maximum efficiency in all the sectors of material goods production. The interests of the enterprise are not one thing, and those of society another. On the contrary, these interests blend organically, allowing social labor to be used according to the needs of collectivities; enterprises do not produce what they want and how they want, but strive to respond as well as possibly to market demands, seeking to make the best use of material and human resources, since that is what improves profits and profitability, and consequently the profit share of the workers. Naturally, in this complex process of changes in activities, there arise inherent difficulties, discrepancies, and so on, which can be best and most effectively overcome or solved by a collective effort of thought and action on the part of enterprises, industrial centrals, and ministries. As Nicolae Ceausescu has pointed out at the expanded plenary session of the National Council of Workers, no ministry leadership can think for all the managements of enterprises and centrals; on the contrary, they will find incomparably better solutions working and consulting constantly with these managements, formulating together with them plans and measures for implementation. It is only with the effective and constant support of ministries and industrial centrals that enterprises will be able to solve all the problems concerning the negotiation of firm contracts for the plan at the level of existing capabilities, the assurance of technical and material supplies, and the technical preparation of products.

In this way, the plan can be realistically based and can truly become a powerful instrument for stimulating the initiative and efforts of workers for the best possible exploitation of material and labor resources.

Maria Diaconu: Full and efficient collaboration between enterprises, industrial centrals, and ministries is not at all easy because the old relationships created by excessive centralization, routine, and conservatism, do not disappear by themselves. The practice thus persists of issuing directives without technical and economic foundation, with the enterprise's only freedom being to find its own solutions for fulfilling the plan.

More mutual trust, more concern for asserting the personality of enterprises and for the effective participation of supervising organs in the realistic fundamentation and fulfillment of the plan, are not mere slogans, but elements that define the new economic-financial mechanism.

Liviu Beghegeanu: For an industrial central to be a true functional organization, which will coordinate all activities, combine separate efforts, and encourage improved production quality, it must have the proper instruments and jurisdictions for management. The fact that it does not have the proper jurisdictions, being allowed to decide solely on trivial matters, explains a number of persistent shortcomings which harm the fruitful and systematic collaboration between enterprises, industrial centrals, and ministries.

Editor: According to the law, industrial centrals are invested with a number of functions; these constitute an effective instrument by means of which industrial centrals can efficiently manage and coordinate all activities, participating directly in the solution to problems.

Marin Voinea: The truth of the matter is that industrial centrals do not exercise as they should the functions that the law confers upon them. Centrals have very little effect in the cooperation among their subordinated enterprises and on the organization of labor and production in these enterprises. Yet these are some of the major functions of industrial centrals, which largely justify their existence.

Unfortunately, most of the current activities of industrial centrals are devoted to the transmission of the plan by assigning plan tasks to enterprises according to criteria which are at times arbitrary, and to centralizing the results obtained by enterprises in fulfilling the plan. They supervise activities mostly in terms of records, sending and receiving mounds of reports, statistical data, and various assignments. This in my opinion, also explains the inability of some centrals to be close to their enterprises and to participate directly in the solutions to problems.

Ilie Bologa: Industrial centrals must move beyond the present stage, where a large part of their activities are devoted to the distribution of annual plan indicators and the gathering of the same indicators at the end of the month or quarter. Centrals must focus more of their interests on cooperation, contracts, and the organization of production and labor.

Our enterprise is encountering many difficulties generated by poor collaboration with other enterprises and the failure to respect economic contracts. Instead of receiving effective assistance in solving these problems, we receive all sorts of assignments, some of them useless. Yet one cannot overlook the fact that in manufacturing its highly complex installations, the Grivita Rosie Enterprise for Chemical Equipment collaborates with more than 50 industrial units. The industrial central must therefore provide efficient and effective support, especially since this is one of its basic functions, and given that it now has a staff of 250 people as compared to the 70-80 which were employed in the past by the general directorate of the ministry.

Liviu Beghegeanu: Only by being fully aware of the real conditions, and only through an efficient participation in solving problems throughout the period of formulation and fulfillment of the plan, will an industrial central overcome old management methods, eliminating such practices as the calculation expedients they perform to avoid improper overages.

What are we talking about? When some of the subordinate enterprises do not fulfill the plan, the central seeks to correlate the indicators for the branch as a whole, using those enterprises which have surpassed the plan -- taking from this one and giving to the other -- so that the plan appears to have been fulfilled at the level of the central. But such practices pervert the efforts of each individual enterprise, fail to encourage workers' collectives, and foster perfunctory attitudes in discussions held by general workers' assemblies. In addition to this, the fictitious achievements indicated by the correction of indicators lead to shortages, since the paper coverage of failures in enterprises which do not fulfill their plans cannot cover the shortage of goods that were not produced. In final analysis this means an inability to honor cooperation contracts with other enterprises, and to satisfy the society's demand for usable products.

Nedelcu Antonescu: The ineffectual relations between the industrial central and its subordinated enterprises also result from the fact that the directors of enterprises are not part of the central's executive bureau. On the other hand, this organ does include department heads from the central; these officials' responsibilites are bureaucratic, honorary, in terms of the manner in which enterprises fulfill their plan tasks, yet these same officials are in a position to determine the fate of the enterprises.

This situation, which I find unrealistic, is justified with the argument that the enterprises are disseminated in various counties and at large distances from the central. But I wonder why this argument is not equally as valid when the directors are invited to meetings of the central's executive bureau? And there are quite a few of these meetings!

Maria Diaconu: Many problems could be effectively solved if the staffs of industrial centrals were to visit the enterprises to become aware of collectives' concerns, and to effectively contribute to the solution of

problems raised by planning technical and material supply, improved technologies, and better product quality. In many cases, the presence of representatives of higher organs is mostly perfunctory, limiting itself to notebook entries of the questions that are raised by enterprises.

Mihai Popa: Some representatives of the higher organs manage to concern themselves with all sorts of details, such as screws or flanges, sidestepping the enterprise's major problems, such as technical and material supplies, cooperation, and contract schedules. Others limit themselves to dispatching activities.

Leonard Zugravu: The efficiency of inspections is well known, and their role in performance is well accepted. Unfortunately, there are many cases in which a number of control organs, violating prevailing regulations, peform one inspection after another, most of them without justifiable efficiency, and with very few of them offering any help in decision making. At the same time, the inspections encroach upon the activities of enterprise staffs, who must provide all sorts of explanations, write reports, and fill out forms.

Editor: If they do not provide solutions to problems, then what is the role of these inspections?

Mircea Radulescu: While a series of inspections does not translate in a series of solutions, we must nevertheless formulate plans of measures. And monthly, we must report in writing the status of these plans, with a resulting paperwork merry-go-round!

Florentin Visan: In quite a few cases the enterprise is visited by entire collectives, which formulate plans of measures on the basis of an inspection, and who then leave; a few months later, they return to draw up another plan of measures but solve nothing.

Dinu Sandulescu: The work efficiency of management, as well as the collaboration between enterprise, industrial central, and ministry, would be much improved if the records system were to be rationalized by reducing the number of status and departmental reports, as well as decade, monthly, and even daily statistical data summaries. This simplification would cause some higher level organs to stop asking for all sorts of plans of action which require time to formulate, and would reduce the number of memoranda, instructions, and status reports.

Florentin Visan: This bureaucracy has become purely and simply suffocating. Every day I put my signature on countless papers of all sorts.

In our enterprise, to which the industrial central is attached, some situations are downright laughable! For instance, the man employed by the central sends his colleague employed by the enterprise various memos and even telexes, even though they share the same office and are seated across from each other. The explanation is simple: he must have proof in writing that he has executed an order.

I am chief accountant of the industrial central and of the enterprise as well. Insofar as the industrial central is the general supplier, I must sign, along with other management personnel, the contracts that the industrial central establishes with its subordinated enterprises. When these contracts reach the enterprise, I must in accordance with my function, also sign the document in which the enterprise enters its objections to the same contracts.

Editor: Then where does the responsibility lie?

Florentin Visan: That's what I ask myself!

Marin Voinea: The wonders of bureaucracy also reach in other areas. One of these is the bureaucratization, in a sense, of party work. As follows:

Since the state strongly restricts the rights of central and control organs to require all sorts of reports and paperwork from enterprises, the sector party committee, which is not subject to these restrictions, is brought into the act. We are thus used as intermediaries to obtain the needed information, thereby greatly reducing the effect of record simplification measures.

Nedelcu Antonescu: As long as the production plan of enterprises is based only on economic contracts negotiated in time, particular importance is placed on the time spent by the director on thinking, design, and collective management. This implies the elimination of the approach that draws management personnel into all sorts of activities. But to remain absorbed for the majority of the time in current problems, means that long-range thinking must be neglected. In my case, dispatching activities, and my efforts in technical and material supply occupy more than 60 percent of my working hours.

That is why I believe it necessary to create conditions for long-range work, so that some of the enterprise management staff will concentrate its special attention on economic contracts, supplies, new products and technologies, and market studies.

Leonard Zugravu: The availability of more time for planning also depends on the proper organization of the council's work, and on a rigorous respect of work programs on the part of each member. I stress this point because a great deal of time is wasted because not all the members of workers' councils fulfill their obligations, or because unfounded plan tasks require additional last-minute emergency efforts for completion of tasks. All of the above, as well as the dispatching activity, are performed at the expense of the part of the program which should be devoted to thinking and analysis, thus lengthening the work beyond its normal limits.

Mircea Radulescu: The proper operation of collective management assumes a thoughtful use of time on the part of the party secretary, who is responsible for the entire political organization activity, as well as for

the activities of the workers' council. This remark is even more to the point since a large portion of time is wasted in performing various functions outside the enterprise or in solving problems within the enterprise, all of which could done just as well by other members of the workers' council. That is why my choice is to limit the number of meetings that the party secretary has to attend outside the enterprise, and to eliminate the practice of referring to him alone any question about problems in the enterprise.

Maximum Efficiency, Primary Criterion in Economic Activities

Ilie Bologa: The requirements of the new economic-financial mechanism demand a suitable solution to the problem of enterprises on which are grafted industrial centrals; such is our case, where the Industrial Central for Chemical Equipment and Refineries is grafted on the Grivita Rosie Enterprise for Chemical Equipment. Although the enterprise produces highly complex, unique installations with an annual value of about 1.2 billion lei, it is not a legal entity, has no trade director, and no chief accountant. Moreover, it fosters a number of negative practices which also harm the enterprise's activity. For instance, a number of good staff members of the enterprise have left it because the pay is higher in the industrial central for the same work and specialty. It would be more equitable if the pay for the same work were identical in the central and the enterprise.

Maria Diaconu: The successful implementation of the new mechanism is organically connected among other things, to a simplification of the indicator system. The elimination of the "total production" plan indicator is one good thing; it had become a hindrance to efficient activity because it encouraged the pursuit of high values in total production, meaning the largest possible consumption of the most expensive materials, as well as little interest in achieving the widest range of physical and net production.

However, very many indicators still exist, such as total production per 1000 lei of fixed assets, which except for their guideline role provide no information and do not help in setting foundations for decisions.

Mihai Popa: Some indicators are downright illogical, such as the "tons of equipment" indicator. Its use sets up an equality in terms of tonnage, between a highly complex installation that weighs 100 tons for instance, and a simple tank which weighs just as much. But while the production of one ton of installation takes 500 hours, that of the tank requires only 100.

This indicator is harmful because it orients the enterprise toward simple and heavy equipment which raises no problems in fulfilling the plan. Not to mention that such an indicator encourages high metal consumption and does not stimulate the fabrication of highly complex and lighter equipment.

Editor: What solutions do you propose for replacing this indicator?

Mihai Popa: We have already suggested some time ago a "ton complexity" or "equivalent ton" indicator which would meet the new requirements.

Liviu Beghegeanu: The income and expenses budget has the most favorable effect on production efficiency and the development of good stewardship. That is why we must act to increase the role of this budget as a major instrument in economic-financial self-management. Unfortunately, some practices prejudice economic efficiency in final analysis. For instance, year after year and for various reasons, some customers do not pay for the products which we deliver. This involves millions of lei. And that's not all. Because these amounts are not entered in the enterprise's income, even though the fault lies with the customers, we are considered as having failed to fulfill our sold and collected production of goods, and implicitly our profits, with all the subsequent negative results for the enterprise. Moreover, because the enterprise has not collected the amounts owed for products delivered, it is compelled to resort to credit in order to pay its suppliers and continue its production, and thus has to also pay interests. All of these reduce economic efficiency, even though the enterprise's collective has fulfilled its obligations.

I believe that the customers should obtain credit to pay their obligations, namely the products that they have bought, and support the interest payments themselves.

Nedelcu Antonescu: The concentration of design activities in institutes is a desirable thing, but I don't believe that it should be made absolute. Experience confirms this conclusion. Up to a few years ago, when the enterprise had a design shop, the renewal of production was more efficient. The shift of design functions from the enterprise to the institute has created difficulties which are likely to reduce the role of design in encouraging new technologies, and in saving metal, energy, as well as financial and material resources. In the first place, as compared to the past, the project is not performed in proper time but rather in the available time and at a cost which is 5-10 time as high, even though the shop is still located within the enterprise. In the second place, product design no longer takes into consideration raw material savings and the use of existing parts. This situation is determined by the fact that the value of the design project is a function of the number of parts designed, and the institute is interested in redesigning the total product, leading to longer pre-production stages and uneconomical expenses.

Marin Voinea: In all areas of activity the effort to implement the new mechanism is synonymous with the effort to increase net and physical production, and economic efficiency, and to heighten the role of worker self-management.

Based on the conclusions drawn from our accumulated experience, we are organizing the preparations for the general workers' assemblies that are being held at present, accenting the encouragement of initiative so as to discover new resources for the qualitative development of production, and

for the effective use of the human and material potential available in enterprises. We are equally concerned with increasing the responsibility of workers' councils for the rapid introduction into production of technical and scientific advances, the completion of net and physical production, the fulfillment of domestic and foreign contractual obligations, and the renewal of products.

The entire activity that we are conducting to implement the new mechanism defines the high responsibility of party organs and organizations, and the need to raise the party work to the level of current requirements. This is also the reason for which we encourage each organization to become integrated as organically as possible in the life of enterprises and to militate for the assertion of collective thinking and workers' spirit, for the plenary manifestation of those who work in the economic life and in the administration of the goods entrusted to society.

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IMPROVEMENTS IN INVESTMENTS SECTOR NECESSARY FOR GROWTH

Bucharest REVISTA ECONOMICA in Romanian No 37, 12 Sep 80 pp 17, 24

/Article by I. Capanu and P. Wagner: "Rapid Conversion of Investments to Fixed Capital Essential to Growth of Technical-Industrial Potential"/

/Text/ Romania's economic development is accurately reflected by the growth of its national income, a process that has provided both for the growth and modernization of the economy's technical-productive potential and for improvement of the workers living standard. The efforts made in this direction required allocation of considerable investment funds that greatly increased the fixed capital, chiefly the productive capital including industrial.

The fixed capital is the main element of the technical-productive potential, and it amounts to about 2 trillion lei compared with about 760 billion lei in 1970 or 360 billion lei in 1960. This evolution indicates the great increase in the degree of technical equipment, as well as the necessity of the most efficient use of fixed capital for the rapid development of the economy. The policy of developing and modernizing the technical-productive potential, consistently implemented by the party, has placed industry in the front rank as a sector that determines the development of the other economic sectors while making a heavy contribution to the national income. Industry holds nearly 70 percent of the value of the fixed productive capital in the economy, a fact indicative of the emphasis that should be placed upon use of this potential to further increase industry's contribution to general economic development.

Since development and modernization of the technical potential directly depend upon investments and their volume and structure according to industrial sectors and component elements and upon the time it takes to convert them to fixed assets, it is clear that expediting construction of the investment capacities and making the most effective use of the activated fixed assets are vital to development of industry and the economy as a whole. Analysis of the ratio between the activated fixed assets and the investments according to industrial sectors brings out a number of points. Whereas in 1966-1970 and 1971-1975 the activated fixed assets showed increases close to those of the investments, relatively great differences between the evolutions of these two indicators have developed since the start of the current five-year plan. The investments in all industry were up 47 percent in 1978 from 1975, while activated fixed assets were up only 3.1 percent. Of course it should be noted that the evolutions of these indicators were affected both by the completion of some industrial capacities in the first 3 years of this five-year plan that were started and financed

during the previous five-year plan, and by starts of big, highly complex capacities in the first years of the current five-year plan with deadlines beyond that period. But as the party documents point out, a large number of investment capacities were not started or finished on time, and that increased the proportion of uncompleted investment projects and considerably impaired the overall effectiveness of the investments and fixed capital.

Table 1. Ratios Between Activated Fixed Assets and Volume of Investments in Some Industrial Sectors (in %)

1 Ramura	1966—1970	1971—1975	1976—1978
2 Energie electrică	91,2	77,2	87,4
Combustibil	69,0	66,3	68,8
Metalurgia feroasă	91,6	79,2	76,8
Metalurgia neferoasă	91,1	83,7	82,3
Construcţii de maşini	81,6	98,5	80,2
Chimie	91,9	83,0	66,4
Sticlă, porţelan, faianţă	89,4	106,3	61,9
3 Total industrie	86,4	86,1	79,3

4 Sursa: Calculat după Anuarul statistic al R. S. România, 1979

1. Sector
2. Electric power
   Fuel
   Ferrous metallurgy
   Nonferrous metallurgy
   Machine building
   Chemistry
   Glass, porcelain, pottery
3. Total for industry
4. Source: Computed according to Statistical Yearbook of Romania 1979

Under these circumstances, as Table 1 indicates, the proportion of activated fixed assets in the volume of investments in all industry declined from 86.1 percent in the 1971-1975 five-year plan to 79.1 percent in the 1976-1978 period. For the main sectors of industry, the ratio between the activated fixed assets and the investments shows a more pronounced decline, in other words an increased volume of immobilized financial and material resources, with bad effects upon the productive potential of industry or the net output in industry and the national income. The calculations show that if the ratio between the activated fixed assets and the volume of investments in the 1971-1975 period had been maintained, industry's technical potential would have been increased by about 16.7 billion lei in terms of the fixed assets that would have been activated. On the basis of the net effectiveness of the fixed assets in the 1976-1978 period, the national income that would have been produced in industry alone through this potential would have come to about 8 billion lei.

The measures adopted in the last few months and the conclusions drawn at the Working Conference of the RCP Central Committee on 30 May 1980 are to be understood in the sense of complete exploitation of the existing possibilities and elimination of the defects that have developed in this area. These measures are intended to considerably reduce the unfinished investment projects, to accelerate activation of the started capacities as far as possible, or to enhance the possibilities of more pronounced growth of the net output and of the national income along with it.

The investments and the activated fixed assets are analyzed in the light of both the objectives of future economic development and the possibilities of implementing the

investment projects, or placing them in operation as soon as possible. To be sure there is a certain gap between the evolution of the investments and that of the activated fixed assets, but its increase affects the technical-productive potential of the analyzed sectors and consequently the possibilities of increasing production and the newly created value. Analysis of the evolution of this correlation shows that the investments increased 1.42 times faster than the activated fixed assets in the 1976-1978 period. The ratio expressing the gap between the evolution of the investments and that of the activated fixed assets was chiefly affected by the evolution of the two indicators in the sectors specified in Table 2.

Table 2. Evolution of Investments and Activated Fixed Assets

1 Ramura	2 Fonduri fixe puse în funcţiune 1978/1975	3 Investiţii 1978/1975	4 Coeficient de devansare
5 Total industrie	103,1	146,9	1,42
Metalurgie feroasă	114.3	147,4	1.29
Metalurgie neferoasă	110,1	152,6	1,39
Construcţii de maşini	103,3	191,3	1,47
Chimie	57,6	159,9	2,78
Extracţia minereurilor nemetalifere	101.0	160,4	1,59
Celuloză şi hîrtie	70,0	144,6	2,05
Textilă	80,7	156,4	1.94

6 Sursa: Calculat pe baza Anuarului statistic al R.S. România, 1979

1. Sector
2. Activated fixed assets 1978/1975
3. Investments 1978/1975
4. Coefficient of advance
5. Total for industry
   Ferrous metallurgy
   Nonferrous metallurgy
   . Machine building
   Chemistry
   Extraction of nonmetallic ores
   . Cellulose and paper
   Textiles
6. Source: Computed according to Statistical Yearbook of Romania 1979

The declining ratio between the activated fixed assets and the investments, or the greater gap between the two indicators, shows that insufficient emphasis in planning at worksites and in procuring the manufacturing equipment was placed upon preparation for opening the investment capacities and the possibilities of completing them in the shortest possible time and eliminating useless immobilization of material and financial resources. In referring to these problems at the Working Conference of the RCP Central Committee on 30 May 1980, the party secretary general pointed out, "In general we have a very large number of investment projects started. We must see to it that henceforth the volume of investments does not exceed the operating capacity for 1 year and consequently the volume of finances for 1 year of investment projects. We must put a complete stop to beginning investment projects without thorough preparation and without securing the plans, the equipment or the appropriate material base." Immobilization of material and financial resources in unfinished investment projects deprives the production sectors of a number of capacities which, if activated in the shortest possible time, can make a major contribution to increased physical production and net output and, on the national level, to increased national

income and consequently to development of the material base of the living standard and the possibilities of future economic growth.

The party's measures to enhance the effectiveness of all economic activity and especially that of investments and fixed assets call for a considerable improvement in the enterprises' activity in order to increase the degree of intensive and extensive use of the technical-productive potential and to intensify exploitation of all possibilities and reserves for augmenting industry's contribution to the national income and the greater public good.

5186
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ROMANIA

IMPLICATIONS, ADVANTAGES OF OVERALL CONTRACT SYSTEM USE

Bucharest REVISTA ECONOMICA in Romanian No 38,19 Sep 80 pp 12-13

[Article by Alecu Busnita and Adrian Neacsu of the Ministry of Labor: "The Overall Contract System - A Superior Way of Organizing and Paying for Work"]

[Text] As part of the general context of measures established by the party and state leadership for the growth of efficiency in economic activities, the new economic mechanism stimulates the higher use of the material and human potential available in our country at the current stage. Within this framework, the elements of the pay system were also conceived and regulated so that they would also ensure the concentration of the workers' efforts in the units towards the achievement of the major objectives of the current stage and the merging of the personal interests with those of the units and, in the end, with the national economy.

Within the framework of the pay system, an important role is played by the means of payment, regarded as instruments for implementing the socialist principle of payment according to the quantity and quality of work performed.

The Judicious Determination of the Work Group's Plan Tasks

Experience has demonstrated that, depending on the degree of development of the national economy, the stimulation of solely the quantitative facets of production is not enough, requiring more and more consideration of qualitative aspects. From this point of view, the current regulations, such as the Law on Salaries, call for a series of means of payment applied according to the conditions specific to different places of work and can respond to the major requirements of national economic development and the specific needs in the units to stimulate the activities of the workers and other personnel in the desired directions.

Among the means of payment that have broad possibilities for stimulating the workers is the overall contract system. Within the framework of this means of payment, there can be a stimulation of the efforts both to make certain quantitative achievements and to attain certain qualitative

achievements (staying within standardized levels of consumption for raw materials and materials, conserving fuels and energy, improving products quality, producing certain items, parts or subassemblies on schedule and so forth). This is possibly because beyond the means of establishing goals, the overall contract systems offers the opportunities to include within its framework diverse categories of personnel (workers directly involved in production, workers indirectly involved, workers involved in an auxiliary capacity, specialists, other categories of technical and specialized personnel and so forth) who, together, can cooperate under better conditions to achieve their goals.

The practice of applying this means of payment has demonstrated that its stimulative effects are not certain and truly efficient except under conditions where the application takes place on a technical-organizational basis that is well-established from all points of view. In this sense, it can be stated that the overall contract system actually is, first of all, a means of rational organizational of production and work and then, on this basis, a means of payment. Certainly, the overall contract system, as a means of organization and payment in itself, cannot resolve the complex problems involved in the achievement of plan goals. But, its application, requiring certain organizational measures from the very beginning, compels the units to do this, continuing to stimulate the workers collectives covered by the overall contract to maintain and, especially, improved the conditions created.

What characterizes the means of payment in the overall contract system, and differs from other forms of contracting, is the contract that is concluded for the achievement of a quantitative task under certain conditions stemming from the unit's plan and expressed in physical units. The contract in this overall contract system should not, first of all, be regarded as a legal document, but as a practical instrument for specific planning, analysis and sizing for all the tasks of the group covered by the overall contract system, calling for the orientation of the collective efforts toward the achievement of certain qualitative facets that are of interest to the unit during the current stage. The drafting of this contract is of the greatest importance since it contains both the interests of the group and each member of it and the interests of the unit. The importance of drawing up the contract also stems from the fact that it requires the unit to carry out a prior analysis of the means of achieving each task for which it will contract, in this way ensuring at the level of the entire unit the adequate organizational measures and the application of a salary policy in closer agreement with the major interests of the enterprise.

At the level of the units and differing from other contracts forms, the means of payment in the overall contract system raises some problems, beginning with the positive aspects we mentioned above, in concluding the contract in this system. This point in applying the overall contract

system requires the exact understanding of certain elements without which one cannot have either the rational organization of production or the stimulation of the collective in a certain direction and, in the final analysis, a process of high efficiency and maximum output. One of the essential elements that must be well understood in concluding the contract is the physical production that is to be achieved on a certain job, as a result of the unit's plan. That is why the planning, production scheduling, and production and labor organizing offices are called upon to play a more active role in exactly establishing from the very beginning the physical tasks that are to be achieved on a certain job. As a function of this aspect, one can determine the size of the group by skills and functions with precision and, where necessary, the category of jobs in a standard work group. On this basis, the total amount of payments can be established for the group if it fully achieves its quantitative, physical and contractual tasks.

In cases where, because of deficiencies in the activities of certain units, contracts should be concluded but the physical production that is to be achieved has not been figured out, application of the system will not be possible. There can be, however, some situations where a certain part of the physical production that is to be completed during a month, for example, cannot be determined for justified reasons at the time the contract is concluded. In such situations, it is not a question of rejecting the contract system, with the remainder of the physical production capable of being established to at least the level of the plan by a contract, and the remainder is figured out during the course of achieving the contract, keeping in mind taking all the organizational measures to ensure the achievement of these tasks.

One aspect that merits attention is keeping together the group covered by the overall contract system and what this means. In its participation in the achievement of tasks, a production section, in its totality, can be considered a group covered by the overall contract system since this group can assume its responsibility for the full achievement of its tasks. The section chief, together solely with those personnel that carry out their jobs at the level of the entire section and without the workers directly involved in production, cannot constitute a group covered by the contract system, as some units are inclined to feel, since this category of people alone cannot achieve the section's tasks, but only all the categories of personnel in the section. As a result, the contract in the overall contract system cannot be concluded at the section level, except when the entire collective in the section is involved, which then constitutes a group covered by the overall contract system. In a similar fashion, this type of contract cannot be concluded solely with the specialist, as some units incorrectly understood, with the rest of the workers not being covered by the contract, but must be concluded with the entire group headed by the specialist, who is also part of the group.

Work Groups with a Unified Character

The creation of groups covered by the overall contract system is of special importance, with this depending to a great degree upon the efficiency itself of applying the overall contract. In this regard, the practice of certain enterprises calls for the creation of certain unified groups covered by the contract system composed both of workers directly involved in production who are paid on the basis of work norms (of time or production) and of workers indirectly involved or involved in an auxiliary fashion who are paid a flat salary until they are incorporated into the group covered by the contract.

In referring to the group covered by this contract, we must stress the opportunity offered by this means of payment to include, in addition to the workers, all the categories of personnel that can make their contribution to the achievement of the tasks that have been contracted for, up to the level of a production section. The inclusion of specialists, foremen and section chiefs in this contract without a doubt creates favorable premises for the proper achievement of the contracted tasks.

Another element that must also be precisely understood from the very beginning and which still creates problems in the units is the qualitative aspect under which the contracted quantitative tasks must be achieved or, in other words, the conditions under which it must be achieved.

Keeping in mind the special importance represented now by the reduction of production materials costs and the rational use of raw materials, materials, fuels and energy, one of the conditions that must obligatorily be contained in this type of contract, as actually regulated by law, is standardized consumption rates corresponding to the contracted quantitative tasks and the planned costs of production. The principal problem that arises is the practical means of verifying these consumption rates at the level of the group where the contract was concluded. In many situations, the technical conditions are not created that will allow following the rates of consumption at the levels where they occur, although for these units knowing their rates of consumption compared to the standardized levels and using this to stimulate those personnel who could reduce these rates would be especially interesting. As an example, we will refer to the reduction in the consumption of electricity at an enterprise interested in this problem and which has a single device to measure consumption installed at the entrance to the enterprise. Under these conditions, the unit will certainly not be able to follow consumption rates and, further, stimulate the personnel in the sections and workshops having higher levels of energy use to conserve energy. The job of establishing specific measures that will ensure a noticeable reduction of material costs, stressed numerous times by the secretary general of the party, comrade Nicolae Ceausescu, cannot be achieved except under the conditions of exactly understanding the specific amount of consumption for each product and each part.

The application of the overall contract system requires, therefore, a more substantial contribution of thinking on the part of the specialists in each unit with regards to the establishment of specific means of following the standardized rates of consumption at the group level where this type of contract is concluded for those raw materials, materials, fuels and energy whose conservation represents a major interest for this unit and the national economy.

The application of the overall contract system requires, similarly, the anticipated establishment of certain techniques for determining and following the standardized rates of consumption for raw materials, materials, fuels and energy, as well as certain other conditions that are outlined in the contract, such as, for example, the quality of different products or projects.

Another condition that must be outlined in the contract is the timeframe of achieving the tasks and the full achievement of the contracted production. According to the specific nature of the different sectors of activity, the contract can call for a steady rate of production as an obligatory condition or give intermediary milestones for making different items, parts and subassemblies outlined in the contract. To the degree that these are produced, it provides the continuity of the production processes in the other sectors where there is cooperation. For example, the processing sections in the machine building units must provide at a steady rate and in the necessary variety all the parts needed at the appropriate time by the assembly sections to finish the product.

The Stimulative Relationship Between the Degree of Fulfilling the Plan and the Size of the Payment

The experience accumulated to date shows that the application of the overall contract system has had a favorable effect in increasing the concern of the leadership of the units for a better organization of production and labor and for a steady supply of raw materials and materials, and, at the same time, has brought about an increase in the interest of the workers and other categories of personnel, who were initially paid a flat salary, for the achievement of contracted production tasks on-time and under proper conditions. It is true that in applying the overall contract system a series of deficiencies also arose with regards to the establishment of certain tasks at levels beneath the capabilities of the group, in other words tasks easily exceeded, and the creation of certain insignificant conditions or the formal pursuit of these conditions so that the effects of the system did not materialize in a plus in efficiency for the unit, but only an increase in money for the members of the group. It is clear that the introduction of this system and the creation of certain unified groups must be done not according to the interests of certain

categories of personnel, but in relation to the interests of production, keeping in mind the broader possibilities offered by the overall contract system in combining personal interests with those of the unit overall.

Keeping in mind the importance of the overall contract system as a means of organizing work and paying for labor and the higher degree of expanding the use of this system compared to other means of payment, as well as the experience acquired in its application, a series of improvements were made through Law No 4/1978 and Decree No 100/1979 designed to eliminate the shortcomin that were uncovered and to give this means of payment additional efficiency. The correct application of the overall contract system in light of the increased requirements imposed by the regulations to which we have referred and the elimination of situations of formal application of this system led to the improvement of the quality of the means of applying this system, to the detriment, however, of its expanded use, compared to the situation existing prior to 1 January 1979. Thus, compared to approximately the 58 percent that the system represented in industry in 1978, in 1979 it reached only the 45 percent level. The restriction in the use of the overall contract system is due, first of all, to the failure to ensure the necessary organizational conditions, as well as the supply of defective raw materials and materials brought about by a lowered level of concern on the part of certain units in taking those measures that would take the existing situation in practice to the level of the conditions outlined by the normative acts in effect.

Beginning with the criticisms made at the session of the Political Executive Committee of the Romanian Communist Party's Central Committee on 14 June 1980, regarding the trend towards restricting the percentage of work governed by extending flat salary labor, the task of the ministries, including the Ministry of Labor, is to push the extension of making salary payments according to contracts, especially under the overall contract system, by appropriately helping the units. Moreover, within the framework of the session we have referred to, it was decided to include precise tasks for each ministry in the plan regarding the degree of extending standardized work and the use of the overall contract system. This measure brought about, right from this moment, an increase in the concern of the units for a return to the overall contract system in those cases where there had been an unjustified rejection of its application.

The successful application of the overall contract system requires, before anything else, ensuring certain thorough technical-organizational conditions, including: the precise statement of the quantitative and qualitative tasks facing each work collective within the plan tasks of the unit, keeping in mind the requirement to completely use production capacities; the establishment of certain thoroughly substantiated work norms that will as accurately as possible represent the amount of work necessary to carry out each group's projects; the creation of certain groups covered by the overall contract system that will include both the workers directly involved

in production and the workers indirectly involved or involved in an auxiliary fashion, specialists and other categories of personnel up to the level of the production sections; the provision of materials, technologies, equipment and so forth necessary for the achievement of the established tasks; the establishment of the means of following the standardized rates of consumption or the planned production costs; the ensuring of conditions for the normal operation of machinery and equipment, and so forth. These technical and organizational measures designed to ensure the appropriate application of the overall contract system actually represents the premises for carrying out a judicious production activity with a high output and efficiency which corresponds to an equal degree to the interests of the national economy and the workers.

8724
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FOREIGN INDEBTEDNESS, TRADE BALANCE ANALYZED

Belgrade NEDELJNE INFORMATIVNE NOVINE in Serbo-Croatian No 1550, 14 Sep 80 pp 7-9

[Article by Mirko Djekic: "The Limits on Our Indebtedness"]

[Text] The American writer William Saroyan chatted late Monday night on Belgrade television's Channel 2. He chatted about many things, from good literature to bad politics. He did so in that pleasant and friendly way Armenians have, especially the talented artists which that people has sowed over the world. Speaking about his fellow Armenians and their national characteristic of taking the difficulties of life with a smile, Saroyan also says this: "But whenever there is a crisis, each of us accepts his responsibility." A word with familiar overtones.

Crisis has crossed the threshold: many times the autumn world crises are unimaginatively referred to as boiling, so let us do so again this time, at a moment when few countries can boast of economic security and stability. In 3 weeks of debate in the special session of the United Nations General Assembly the drastic consequences of present international economic relations have been repeatedly pointed to. The crisis is devastating like a hurricane the developing countries, whose total debt in payments balances has risen to the unprecedented figure of $500 billion. The most recent report of the International Bank shows that the crisis will deepen, since this year's price per barrel of crude, which is $29.80 (twice as high as 2 years ago) will be $50.30 at the end of the next 5-year period and all of $78.30 at the end of the decade. (One barrel of petroleum is 159 liters.)

Is it really possible that the world is still in the initial stage of the most recent cycle of crises, closer to the beginning than the end?

Everyone is looking for the answer in his own way, and those in the most unsuitable situation are those who have been late in seeking a way out of the labyrinth. It is not difficult to guess, from the everyday newspaper headlines if nothing else, that in coming years the crisis will once again fail to bypass our country--already economically destabilized to the extent to which the Yugoslav economy is involved in international flows.

Yugoslavia's Foreign Debt, in millions of dollars

Year	Financial Credit	Goods (equipment) Imported on Credit	Credits Extended Abroad	Net Indebtedness
1970	620	1,527	492	1,855
1971	859	1,948	478	2,699
1972	1,330	2,412	506	3,427
1973	1,829	2,706	683	3,980
1974	2,012	3,205	708	4,652
1975	2,354	4,077	786	5,798
1976	3,000	4,800	916	7,012
1977	3,344	5,992	1,116	8,424
1978	4,281	7,081	1,107	10,726
1979	--	--	--	14,952

At the time of this writing (Tuesday, 9 September) the evening editions of newspapers are greatly concerned with price rises and shortages, and the morning newspapers carried three reports from meetings of the presidiums of the central committees of the League of Communists of Serbia, Croatia and Slovenia on progress in carrying out the stabilization program.

Export or Stagnate

Since the time of the monetary and energy crisis at the beginning of the decade Yugoslavia's position on the world market has been gradually deteriorating, and in the last 2 years, it has turned out--it has become still worse. The most recent price rises of petroleum last year and the year before last and the price rises over a period of years of equipment and technology purchased on foreign markets have so to speak come upon the domestic economy at the peak of the cycle of large investment projects. But they in turn--and this is certainly a topic to itself--have been accomplished by deficit financing, organizations of associated labor putting up a minimum of their own capital and taking in maximum of credit.

It is a well-known conclusion that the present difficulties must have two roots and origins. one external and one internal. From time to time one or the other is overestimated or underestimated, but realistically we cannot separate the causes, since their consequences are identical.

The Yugoslav economy does not constitute a force of any consequence by world standards. Perhaps at certain moments this was a fact that was not seriously taken into account, and certain hard-won markets were negligently abandoned, among them the markets of countries which, as it later turned out, soon were to have a surplus of capital.

According to figures for 1978 (a year for which there are comparative indicators) our country has the lowest per capita annual exports at $259 and lowest imports at $456 of any European country. The percentage of coverage

of imports by exports was among the lowest and shows that there were 567 dinars of exports for every 1,000 dinars of imports. How far that is from such commercial strongmen as Belgium, Holland or Austria, small countries whose soil is not rich! We should bear in mind in this connection that most of the European countries, except for Romania, Bulgaria and Portugal, have in terms of percentage a larger share of foreign exchange earned through the sale of services and from tourism in their balance of payments than our six republics and two provinces together.

A brief anatomical examination and comparison of the two decades, the sixties and seventies, shows that Yugoslavia's trade position was within the limits of its capabilities in the first decade. Between 1960 and 1970 what is called coverage of imports by the money obtained from exports ranged within "normal" limits of about 70 percent. Since that time it has dropped steadily and has ranged between 50 and 60 percent. But since imports are the largest and prevailing item in accounts with foreign countries, foreign indebtedness has also been increasing simultaneously with high ambitions involving imports. In 1970 total Yugoslav indebtedness abroad was less than $2 billion, while last year in already amounted to about $15 billion.

Where do these numbers come from?

A Suit Too Tight

Simultaneously with the worsening of terms of trade and the taking of loans on the world financial market Yugoslavia's overall ambitions in development went in opposite directions and rose rapidly. All that time, since the time we referred to and up to the year before last, when to some extent it was realized that matters had gone too far, the importing of equipment on credit was the most significant item in foreign indebtedness. This amounts to two-thirds of the debt. Our table shows this in more detail.

Certainly this money has neither been thrown away nor "spent," and when these installations go into operation and earn income, will be returned and will stimulate a growth of the national income. However, the difficulties begin at the point when the level of indebtedness is so high that in a particular year it could pass the limit of the growth of the national income, which means that the entire growth of the national income goes to pay off debts. No one would dare to cross that red line for the simple reason that there is no longer any purpose at that point in contracting indebtedness on the world capital market.

Usually the ratio between the total inflow of foreign exchange and the size of the installment to pay off debts in that year is taken as the limit up to which foreign indebtedness may be contracted. If the annual installment does not exceed 20 percent, it cannot be said that the amount is disturbing. Though we do not know what the ratio has been in the last 2 years, the very fact that the Federal Executive Council has firmly insisted on the position that the deficit in the country's exchange balance must not exceed

$2 billion by the end of December, which is all of $1.4 billion less than last year, is indicative of the fact that the exchange balance is "very tight."

This must be paid attention in the most drastic terms if we are to avoid the greatest misfortune which a country can have from the economic standpoint--illiquidity. For decades Yugoslavia has built its reputation on the world market precisely on the fact that at no point could its creditworthiness be questioned.

It is, of course, not difficult to make an analysis of the payments balance and trade balance. And though such things are by and large done in specialized publications, we will also make our attempt in the belief that it will be useful to readers of NIN if we indicate certain of its most interesting points, with the necessary simplifications. And since we are talking about a deficit, these can also be referred to as weak points rather than strong points.

In first place is petroleum. In other words, every time its price goes up on the world market, this increases the price of sophisticated industrial equipment and the most up-to-date technology. The industrial countries like West Germany, Holland or France try through a kind of automatic economic mechanism to pass the burden of the price rises imposed by OPEC on to customers. That they are successful in this is evident from the fact that over most of the past decade so-called export prices of equipment rose faster than export prices of petroleum.

Expensive and More Expensive

Yugoslav economy buys petroleum at world prices. This year it paid about $3.5 billion for this valuable liquid. Last year the deficit in this industry (petroleum and derivatives) was less than $2 billion, whereas in 1975 it ranged about $700 million. In the machinebuilding industry, which means equipment, the deficit was still greater last year, about $2.2 billion. The deficit has doubled over the last 5 years in the production and processing of chemical products. Ferrous metallurgy is a large importer. So are even agriculture and mining.

Up until this very moment the economic policy of the seventies has favored a growth of imports, so that now several key industries on which the rate of increase of industrial output depend are very dependent upon importing raw materials and supplies. Possibly this newspaperman's conclusion is erroneous for the simple reason that annual resolutions on economic policy have called upon the economy to develop domestic sources of raw materials as much as possible and to diminish the dependence on imports. It cannot be said that the task has not been set. That it has not been well understood, as mathematics teachers would say, is evident from the figures which are now before us. But past time has nevertheless gone by; have the economy and those conducting economic policy changed their opinion in the meantime?

Export Capability of the European Countries (standing as of the end of 1978)

Country	Population, in thousands	In Millions of Dollars		Per Capita, in dollars		Coverage of Imports by Exports
		Exports	Imports	Exports	Imports	
Yugoslavia	21,933	5,667	9,988	259	456	56.7
Austria	7,498	12,205	16,013	1,628	2,135	76.2
Greece	9,325	3,375	6,853	362	735	49.2
Portugal	9,653	2,565	5,237	266	543	49.0
Holland	13,971	50,966	52,933	3,648	3,789	96.3
Belgium	9,870	45,053	48,728	4,565	4,937	92.4
Bulgaria	8,892	6,329	6,329	712	712	100.0
Romania	21,853	6,138	6,095	281	279	100.7
Spain	36,655	13,115	18,708	358	510	70.0
France	53,182	76,618	82,019	1,440	1,542	93.4
Italy	56,800	56,068	56,459	987	994	99.3
West Germany	61,212	141,931	120,733	2,318	1,972	117.6

If we leave to one side pronouncements to the effect that more is spent than is being created, that have been used so long that their meaning has changed in proportion: up until a year ago nearly everyone believed that inflation was certainly bringing him benefits, though it was bringing harm to some other elusive person, the moment comes when the expression "there isn't any" inevitably replaces the expressions "we shall see" and "we will get by somehow." Readers of NIN will note that our journal is no longer being printed so often as before--or every week, as was the case a year or 2 ago--on high-grade paper imported from Austria. There is no foreign exchange. At present our mills are not able to produce that quality of newsprint. What can be done: when there isn't any, there isn't. It can only be said that we ought to be farsighted and pool capital through self-management accords with the factories so that now there would be everything. But is farsightedness one of our strong points?

A part of that experience will be embodied in plans covering the immediate future, beginning with the 5-year plan next January. It would be altogether realistic if a policy of substitution of imports by domestic raw materials and energy were conducted gradually, at least insofar as it is possible, and if in 5 years the ratio between the money obtained from exports and the money paid for imports returned to the proportions of 70:100. That difference of 30 dinars would be covered by invisibles, which would also have to provide money to pay off debts in foreign exchange.

Encouragement and Expectations

We can immediately put the following question: How capable is the economy of such an important undertaking of augmenting its exports, say, 2.5-fold over the next 5 years? That is the amount that would be necessary to achieve better ratios, assuming the inevitable growth of imports.

This year is bringing certain encouraging signs. A very ambitious plan was set--to augment exports by about 35 percent, while imports would remain almost at the same level. In four republics a reduction of imports was even envisaged. This plan, which was received with disbelief, is by and large being fulfilled. One can hear among business executives that good results would undoubtedly have been achieved if their initiative had not been hampered more and more frequently. The greater the difficulties, the more frequent administrative action becomes and the more it is offered as an alternative for finding a better way. An alternative which, of course, must be reflected on ever more seriously if its wings are to be clipped early. This is a bird with an improbable talent for arising anew out of its own ashes...

Here at the end perhaps we can return to Saroyan and his lesson "that in moments of crisis they all take on their responsibility." Yugoslavia's economic potential is sufficiently strong so that in coming years it could achieve the goal of better balanced economic relations with foreign countries at a considerably higher level. It is, of course, realistic to assume adverse external influences. Why should we include adverse domestic influences as well?

7045
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AMBIGUITIES OF DINAR DEVALUATION, EXCHANGE EXPLORED

Belgrade NEDELJNE INFORMATIVNE NOVINE in Serbo-Croatian No 1552, 28 Sep 80 pp 11-12

[Article by Mirko Djekic: "Doesn't Anyone Want the Dinar?"]

[Text] When all the banks of Yugoslavia recently made a simultaneous decision to grant no more credits secured by foreign exchange in term deposits, this move was first received with surprise and then was interpreted in a variety of ways. It seemed extraordinary that they should do this at a moment when none of them could boast of holding a sizable amount of what are called strong currencies. Yet foreign exchange in term deposits represented in turn very high quality working capital for all of them.

But that's the way it is. The curious newsmen who hastened to bank associations were given an interpretation which made it is evident that "granting this type of credit" led to something which might be called enrichment at society's expense. After all, if someone, to illustrate, placed 5,000 marks in the bank in a 5-year term deposit, he would in return receive slightly more than 70,000 dinars of credit and interest at 10 percent per annum paid in that same currency. In practice this means that in 5 years when he pays off the credit in dinars, he will have 8,000 marks in his foreign exchange account.

Sounds good? It is. In the meantime inflation will knock down the value of the dinar and will actually make it easier to pay off the credit. At the same time the balance of foreign exchange will increase and will be out of reach of the steady rise of domestic prices, which are still calculated (or will be for some time yet) in dinars.

The Convertible Dinar

Only two details have been overlooked in this calculation.

The first is this: if the rate of inflation in Yugoslavia is not 30 percent, but 3 percent, that entire transaction would be "normal" and "good business." Second: it has been announced publicly that in the first half

of the year the banks received--from Yugoslavs working abroad and emigres and individuals who have foreign currency at home--about $1 billion less than was anticipated. If we add to this that SIZ's [self-managed special-interest community] of the republics and provinces contracted foreign indebtedness last year exceeding by about $1 billion what had been agreed on, it is easy to see that that sum is equal to the deficit in the balance of payments planned for this year.

But this story about our inconsistencies in the everyday conduct of economic policy is more important to what we will be saying because it clearly points up the changes in the basic premises at the very heart of economic policy. Few people have noticed that in taking this step the banks have retreated from convertibility of the dinar. That is, in these transactions have they not been purchasing foreign exchange for dinars at the official rate of exchange and "at par," i.e., one for one? For them was this not convertibility pure and simple?

What do we mean by the convertible dinar? A movement proclaimed in the 1965 reform and forgotten in the seventies?

At this point, 3 months after the devaluation, the dinar is farther from that act, at least so it appears to us, than it ever has been, and this has very important consequences for economic flows and development. It might even be said that our currency is now among those rare world currencies which have external and black market convertibility, but they do not have internal and official convertibility. This odd combination can easily be explained. The dinar, for example, can be changed into liras at Trieste, into francs in Zurich (where it is quoted even on the well-known daily money exchange), and into marks in Bremen and Munich. At rates of exchange, of course, which are considered realistic in those places. At the same time the dinar is being exchanged, say, in Belgrade restaurants and coffeehouses between customers and waiters for any other currency you can name.

Is the Devaluation at Fault for Rising Prices?

This black market of a kind has long ago been legalized. What is unusual is the fact that a particular kind of monetary smuggling has suddenly spread even to work organizations themselves since the new Law on Foreign Exchange Transactions went into effect (if it actually has gone into effect). An enterprise lacking foreign exchange could obtain it from one which did provided that it pay more for it and it was all covered by a self-management accord. This is called "pegging," and in this type of exchange the dollar, for example, has a considerably higher and altogether unrealistic rate of exchange, usually between 30 and 40 percent higher than the official rate.

Since these combinations have been worked even after the devaluation, it is a question whether the devaluation itself has been successful. Our readers

are in any case aware that there is no legal way of converting dinars to other currencies, and work organizations know that transactions on the foreign exchange market are symbolic to such a degree that virtually nothing can be done in that way. After all, what work organization in the present situation would go to the market to sell its marks to some other party it does not know at the official rate of exchange when it knows that elsewhere it can get a higher rate and be looked on as a "benefactor" as well?

All this certainly leads to a question which is not easy to answer--What was the point of the devaluation and what has it achieved? Since there are no official assessments as yet, what follows is only the author's journalistic analysis, makes no claim to be altogether precise, and is written even with the thought that it would be good if it were denied.

As it is stated in the textbooks, there are four principal effects of devaluing any currency: on prices, on the balance of payments, on income and on economic growth or development. This is a difficult operation which requires a very great deal of care and a series of economic measures which are absolutely indispensable.

There is a saying among economists which is not altogether precise from the standpoint of numbers, but shows the kind of relations that exist between rates of exchange and rising prices: a 30-percent devaluation brings 40-percent inflation. There is a certain accuracy in this, especially when we are talking about "import-dependent" economies like ours.

And though we cannot distinguish what the share of the very act of devaluation is in speeding up inflation, since prices were rising even before, it is well known that it cannot be small. Given the higher prices of imported goods and the "rising price" of foreign exchange in the "pegging" process, a rise of production costs and pressure for higher prices are inevitable.

Moreover, the very augmentation of exports results in higher domestic prices. This seems illogical only at first glance. After all, the more goods are exported, unless the production of those goods is increased, the smaller their supply on the domestic market, so that the pressure on prices is greater. Wasn't this obviously the case with the shortages and higher prices of sugar and oil? Finally, devaluation abruptly increases the money supply on the domestic market, and we know that imbalance between money and goods stimulates price rises. Thus in July alone the money supply increased by 21 billion dinars, which is 5 times the monthly average up to that point.

We might conclude that devaluation has been favorable to inflation, since in the meantime there have not been any serious steps to ease business conditions for the economy and reduce production costs. If the series of price rises continues--as it must--then the effects of the devaluation will quickly be exhausted in this domain. We can expect that soon sales on the domestic market will again bring a higher income to many "new exporters"

than on the foreign market, which will then motivate them to stay at home, where it is easier to carry on trade.

The impact of devaluation on the balance of payments is, of course, in the opposite direction: income is increased. The economy is motivated to export more, the tourist season was more prosperous.... In any case, that is why devaluation is undertaken in the first place. But since the figures on our balance of payments are published with long (though unnecessary) delays, it is difficult to say what is happening in that area. Nevertheless, the figures must be considerably improved, and it is already being announced that this year the deficit will be just as planned, which in practice means that it will not essentially exceed the total of $2 billion.

Picture of an Eight-Cornered Dinar

In commodity trade with foreign countries an important change of direction has been accomplished. Thus according to figures of the Federal Bureau of Statistics, exports have risen 34 percent in 7 months of this year, while imports increased 9 percent. It is only a pity that our banks through their uncertain business policy have caused many workers employed abroad to hesitate, so that they are holding a larger portion of their money in the banks of the countries where they work than they previously did and are leaving a larger portion than before at home, augmenting what is called "private clearing." At the same time the rush to open foreign exchange accounts has dropped off, mostly because judgments concerning "enrichment through foreign exchange" have acted as a disincentive. The inflow into the banks will not be as great as might have been expected in view of the favorable impact of the act of devaluation on holders of savings in foreign currencies.

However, the most interesting and at the same time the most unusual relationship is between devaluation and income.

Something is happening here which is not easy to unriddle, but its consequence is the slow but sure displacement of the dinar from that area which is nevertheless the most important for it: it is less and less what it must be--the inviolable standard of value on the domestic market. In this domain it is losing the fight against these various overvalued foreign currencies with world reputation and prestige.

It has now even become customary to divide income into "dinar income" and "foreign exchange income," in which it is clear that the latter is that part which offers work organizations true economic security. This strange relationship is already altering the foundations of the economic system even now. It is our impression that this in fact encourages instability, shortages and other disturbances on the market.

It would, of course, be foolish to say or do anything that would halt the expansion of exports, but the question that must be asked is whether exports are motivated by income or foreign exchange?

If it is income, the economic system is sound and there is no antagonism between work organizations generating a surplus of foreign exchange and those incurring a deficit in foreign exchange. Each of them is participating equally in the creation and distribution of income on the domestic market, thus performing its own function in the social division of labor. If the motive is foreign exchange, then disturbances are inevitable. The dinar is displaced. And we would say that the division of the balance of payments into eight large parts and many smaller ones is conducive to this. The responsibility of the republics and provinces for the country's balance of payments, that of Yugoslavia, seems in part to be interpreted as the responsibility of the republics and provinces for their own payments balances.

That being the case, then it is normal for each to look to the foreign exchange component in its own goods. Not only the republics, but the opstinas as well. That is, there are no products which cannot be exported somewhere and under some terms and conditions--from wheat to airplanes. When this attitude becomes prevalent, then in domestic trade foreign exchange--and not the division of labor--has the last word. Should it prevail.... But it will not, that is the hope of those concerned with the economy.

Dividing Up Machines Among Pockets

The extent to which the unity of the market has been violated precisely because of the general search for "foreign exchange income" is now greater than it was and threatens to be even greater. But the actual act of devaluation did not have the kind of impact on this that people usually believe. Reduction of the dinar's value merely pointed to that part of the mosaic of the economic relations of a self-managed and market economy. It does not fit into the whole....

This involuntary and unfortunate part of the story about devaluation and income is not the whole story. Business executives point to another exceptionally important phenomenon. Income is rising very rapidly. In the first half of this year, before the decision on the new rate of exchange of the dinar, its growth rate was about 30 percent (31.2 percent for the entire economy in the first half of the year). Certainly the share of inflation is the largest in this figure. But even then, and it will be even more in the second half of the year, following devaluation, the value of fixed capital is being siphoned over into income. Put more simply, the value of machines has moved over into income and to everything we mean by that term--contributions and taxes, public services, social services, even in some cases into personal consumption, though this is the only item showing a real decline.

That accounts for the illusion of high income and good operation. Reality must be faced when a new machine is to be purchased to replace the old one. There is no longer any "old saved-up" money for that purpose.

And now just to add a few words about one other impact of devaluation, its impact on economic growth. The rate of growth of industrial output, because of the higher prices of imports, will have to drop. It will be smaller, but more realistic and firmer. The value of a national currency, and this applies to the dinar as well, depends in any case on the cohesion of its economic system and a realistic recognition of its capabilities.

7045
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SURVEY, OUTLOOK TO 1985 FOR SMALL BUSINESS SECTOR

Belgrade KOMUNA in Serbo-Croatian No 9, Sep 80 pp 30-33

[Article by Milka Vranes, independent counselor in the Federal Bureau for Social Planning]

[Text] The point of departure in analyzing the conditions and potential for development of the small business sector in the period from 1981 to 1985 was an analysis of the small business sector's development to date, with particular reference to fulfillment of the medium-term plan for the period from 1976 to 1980, as well as an examination of development potential for the period from 1981 to 1985.

As for assessment of fulfillment of the current medium-term plan, it can be said that in the past 4 years a lower rate than planned has been achieved in the small business sector in spite of a tendency toward invigoration in 1978 and 1979: about 6 percent for the volume of production and services, about 3 percent for employment, and about 2 percent for investments, mainly because of reduction of the capacity of the private portion of this sector. With the growth of production and services in 1980 estimated at 5.5 percent, it is expected that an average growth rate of 5.9 percent could be achieved over the entire 5-year period, instead of 7.2 percent, for employment the rate would be 3.2 percent instead of 3.5 percent, and for investments 2.2 percent instead of 6.5 percent.

Development of the Private and Public Parts of the Small Business Sector in the 1976-1980 Period

With respect to development of the different portions of the small business sector in this period, a more lively dynamics is characteristic of the public portion, which has grown at a rate of 6.5 percent because of the better production orientation of organizations of associated labor in the small business sector, a better business sense, etc.

However, the process of cooperation and business and technical collaboration on a lasting basis between organizations in the small business sector and larger organizations of associated labor is developing slowly.

No detailed mechanism has been worked out for linkage of large production systems with small business organizations for the production of supplemental assortments and parts as well as for very specific efforts to reduce imports of parts and materials when conditions exist for production in small business organizations. There are examples where definite results have been achieved in organizing cooperation and other forms of business collaboration with small business organizations and self-employed persons as well as in opening new plants in other opstinas, republics and autonomous provinces: Gorenje, Meblo and Iskra in Slovenia; Crvena Zastava and Simpo in Serbia; Unis in Bosnia-Hercegovina, etc.

However, a considerably lower growth rate, 4.3 percent instead of the planned 7.6 percent, is characteristic of the private small business sector, above all because of its reduced capacity relative to 1975, which shows that conditions in the self-employed sector for its more rapid development and higher employment are being achieved very slowly.

The process which has begun of pooling the labor of self-employed persons with the associated labor of the public sector through various forms of pooling labor and capital, through cooperation and through other forms of business collaboration, as well as establishment of contract organizations of associated labor are going very slowly and at different rates in the republics and autonomous provinces. Over the last 4 years 68 contract organizations of associated labor have been established (25 in Slovenia, 16 in Serbia, 8 in Macedonia, 7 in Croatia, 6 in Kosovo, 4 in Bosnia-Hercegovina and 2 in Vojvodina); about 1,500 workers have pooled their labor and capital in them. Approximately 30 other contract organizations of associated labor are in the process of being formed. Most of the contract organizations of associated labor are engaged in production, finishing operations in construction and in hostelry, and fewer are rendering services to meet the needs of the public and the economy, though it is in service activities that there is the greatest shortage and society's greatest interest in their establishment.

Given the fact that the growth rate has been lower than planned, the projected changes in the makeup of production and services of small business are not being achieved to a satisfactory extent. The development of service activities is lagging appreciably behind the projections and the need, especially in newly built settlements and in rural areas. The average annual growth rate of craft and trade services in the 1976-1979 period was about 6 percent instead of the planned 8 percent. Problems related to the drop in the reproductive capability of service organizations and inadequate self-management linkage on the basis of shared income of producers and importers of durable consumer goods with service organizations and other interested organizations are concentrated in this area. The rate of reproductive capability of these organizations dropped from 12.7 percent in 1975 to 8.1 percent in 1979.

The Growth of the Public Portion of the Small Business Sector Is Still Faster

The development of the small business sector in the coming medium-term period is determined by our country's economic growth and the level of development it has achieved, by the development of industry, by the rise in the standard of living, and by the improvement and development of agriculture and other activities. In view of the level of development which is to be attained by 1985, Yugoslavia (as has been the case in all industrially advanced countries) will have a considerably greater need for faster development of the activities of the small business sector, especially service activities. The rise of the standard of living, and especially changes in the composition of personal consumption, will create more room for consumption of high-quality technical products, which will considerably increase the demand for the services of repairing and maintaining them.

Proceeding on the basis of the projected growth rates of the social product, which are about 6 percent for the overall economy, about 7 percent for the industrial sector, about 7 percent for construction, and about 6 percent for the personal consumption of the population, it is estimated that the social product of the small business sector could increase at an average annual rate of about 6-7 percent.

However, should there be a slower economic growth in the coming period, the growth rate of small business would probably be at a lower level, since the potential for development of small business are determined above all by the growth of the entire economy and by the rise in the standard of living.

The development of small business in the period from 1981 to 1985 is based on dynamic growth of its public portion and greater utilization of the capability of its private portion. We should continue to expect the public portion to have a faster growth rate than the private portion (6.3 percent and 5.5 percent, respectively). Here we should bear in mind that the ever greater need for nonstandard products and the services of repairing and maintaining durable consumer goods can be satisfied only by organizing up-to-date products and service facilities in the public portion of the small business sector.

More intensive development and a more dynamic growth of income on that basis would create better conditions for expanded reproduction and development of the public portion of the small business sector.

Organizations of associated labor in the small business sector should be oriented in their future development toward more lasting cooperation and business-technical collaboration with industrial and other organizations.

Cooperation should guarantee a faster penetration of science, engineering and technology into small business organizations and should speed up the process of their modernization and specialization. The development of

cooperation should also contribute to faster improvement of the qualifications of personnel, better supply of small business organizations with processing materials and spare parts, as well as a larger amount of capital to develop organizations of associated labor in the small business sector.

Larger Commitment of Private Capital and Development of the Private Portion of the Small Business Sector

The growing demand for products and services of the small business sector will create broad opportunities for development of its private portion as well and for its linkage with associated labor. In the period from 1981 to 1985 it is assumed that the production and services of this portion will grow at an average annual rate of 5.5-6.5 percent since self-employment in the various activities of the small business sector is an important complement to the public sector, especially with respect to products and services of which there is a shortage and small-scale production and service capacities. In addition, small shops are able because of their size and the organic composition of their capital to react more quickly to changes on the market and to adapt their production programs to these changes. It is particularly important that working people enter into association to form craft and trade cooperatives and establish industrial cooperation and business-technical collaboration with organizations of associated labor.

In the period up to 1985 we expect a more rapid process whereby self-employed individuals working with their own assets form associations with associated labor using socialized assets and faster development of contract organizations of associated labor, especially in those activities which are propulsive and in the underdeveloped opstinas. It is therefore indispensable to continue development of a system of informing citizens and workers employed abroad about those economic activities in which they could establish contract organizations of associated labor, about conditions for the establishment and operation of these organizations, and so on, so that this form of pooling labor and capital would expand in the coming period. This would facilitate a greater commitment of the capital of citizens and workers temporarily employed abroad to open new small business facilities and create conditions for higher employment.

Tourism Will Also Tend To Step Up the Growth Rate of Service Activities

The possibility for development of the service activities of the small business sector in the coming period (at an average annual rate of 7-8 percent) is basically determined by the rise in the standard of living, improved supply of durable consumer goods to the population, the development of tourism and better supply of agricultural machinery to farms.

The emphasis in development of service activities should be on those activities which are propulsive—maintenance and repair of motor vehicles, radios and television sets, household electrical appliances because of the shortage of these capacities and the projected high growth rates of

consumption of these goods in the coming planning period. The supply of durable consumer goods to the Yugoslav population is still appreciably lower than in the industrially advanced countries.*

More dynamic development of technical services in the coming period will also be favored by the improved supply of durable consumer goods to the rural population, by further electrification and by introduction of up-to-date appliances and equipment in rural households.

In this context we should expect new repair and service facilities to be opened and existing ones to undergo expansion and modernization. The creation of more favorable conditions (faster adoption of urban plans, speeding up procedure for various permits, and so on) should encourage the opening and improved distribution of new service organizations and shops, especially in tourist areas.

The expected increase in the number of nights spent in lodgings, which is 7 percent for domestic tourists and 7.5 percent for foreign tourists, and the foreign exchange inflow from tourists, which is 8.4 percent, necessitate a very dynamic development of service facilities in tourist areas (personal services, motor vehicle repairs, repairs of vessels, etc.). The present volume and quality of these services cannot even meet the regular needs of permanent residents in tourist localities, much less the increased demand of these services during the tourist season, which is lasting longer and longer in certain areas. It is therefore indispensable that opstinas and broader regional communities devote more attention to developing service activities and existing artistic crafts, which are becoming more important as the standard of living rises and tourist traffic increases. Among other things this would increase the amount of spending by tourists for other than room and board and would improve the economic position of the population of those regions.

All of this will in the coming period certainly strengthen the economic motivation of producers and importers of durable consumer goods to speed up the development of their own network of service centers, to establish firmer links and business-technical collaboration with service organizations of associated labor, and to expand the capacities of the producers with which the motor vehicle industry engages in industrial cooperation so as to improve the supply of spare parts to service organizations, to provide basic and advanced training to personnel, etc.

It will be indispensable in the coming period to improve and develop the production of equipment and tools to meet the needs of small business organizations, which means that manufacturers of equipment will have to increase their production and expand their assortment of equipment, specialized tools and instruments to meet the needs of the varied activities of the small business sector.

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* In 1975 Sweden had 337 automobiles per 1,000 inhabitants, France 290, FRG 289, Great Britain 256, Italy 260, Austria 229 and Yugoslavia only 72.

Personal Services and Services to Households

In line with the growth of personal incomes and the ever higher employment of women, there will be need for personal services and services to households. The orientation here should be on development of service activities to help the family, especially those services which tend to increase the labor productivity of the labor force, employed women above all, freeing them from the old individual way of doing various household chores. However, this orientation requires firmer linkage of local communities with organizations of associated labor, self-managed special-interest communities and other self-managed organizations within and outside of the local community which have an interest in and need for development of these activities.

If these activities are to develop successfully in the coming period, it is indispensable in industrial centers and cities that the network of services to aid the family--washing and ironing laundry, housecleaning, shoe shining and repairs, plumbing and electrical work in the household, taking care of children and elderly members of the household, etc.--be developed in a planned way and in line with economic capabilities and needs. Through tax exemptions, by making business space available and through rent policy cities and opstinas should encourage the opening and better location of service establishments in cities, especially in new residential developments. The development of these activities should go far to creating conditions for a faster rise of the standard of living and improvement of living conditions for both the urban and rural population, to improve the position of women, etc.

Finishing Operations of the Building Trades

The high increase in the volume of construction work in the period up to 1985 (average annual rate about 7 percent), the projected construction of about 820,000 dwelling units, and especially the growth of the demand for maintaining residential and business premises offer conditions for dynamic development of capacities for finishing operations of the building trades and capacity for maintenance and repair of residential and other buildings.

More harmonious development of facilities for plumbing and electrical work and finishing operations of the building trades, improvement of their equipment, and adoption of up-to-date construction technology and organization should ensure higher labor productivity, better quality of finishing work, more uniform use of facilities throughout the entire year and shorter construction time.

A stronger orientation toward faster development of facilities for maintaining and repairing residential, commercial and other buildings, toward their specialization, toward firmer and longer lasting links with self-managed special-interest housing communities would guarantee improvement and a higher standard in the maintenance of residential and other buildings. Local communities, special-interest housing communities and opstinas should

through their economic policy and other measures encourage and orient development of these activities in accordance with the needs and capabilities of their area.

The Manufacturing Portion of the Small Business Sector

Since the potential for development of the manufacturing portion of the small business sector is determined by development of industry as a whole and of the manufacturing industry in particular, over the next 5 years we should assume a further growth of production in the small business sector. The anticipated growth of industrial output at a rate of about 7 percent, and then the ever more pronounced process of specialization and division of labor necessitate further adaptation of producers in the small business sector and determine their production orientation in the period up to 1985 in the following directions:

i. long-term cooperation and business-technical collaboration with industry in the production of parts, in the finishing or partial machining of parts, especially in the production of articles produced by assembly of a large number of components (the motor vehicle industry, the electrical products industry, the metal manufacturing industry, etc.). Complementarity with industrial production will still be the essential characteristic of the manufacturing portion of the small business sector;

ii. small-series production of individual articles whose assortment is undergoing constant expansion and whose production is not economically attractive to industry;

iii. production of nonstandard products, with particular emphasis on specialized products which as a rule require a high level of knowledge, resourcefulness and skill, and then products for special purposes and small groups of consumers, since the demand for such products increases very rapidly with the rise in the standard of living and the buying power of the population;

iv. production oriented toward export, especially production of souvenirs and other custom-made articles.

Greater orientation toward building smaller specialized production units could free us from importing a number of scarce products whose production can be efficiently organized in small production organizations and can contribute to the ultimate appearance and quality of the product--a very wide range of clothing and accessories (metal, wood, plastics, textiles, leather, etc.) and almost the entire range of children's needs.

This production orientation will require that scientific research and development organizations be involved to a greater degree in devising and drafting specific programs for development of small business in particular areas and in the framework of specific production and distribution systems.

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DEVELOPMENT OF 380-KV TRANSMISSION NETWORK--1980-2000

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[Article* by Dr Lazar Ljubisa, chairman of the Committee for Coordination of Construction and Operation of Yugoslavia's 380-kv System; Mihajlo Golubovic, assistant general director of the Community of the Yugoslav Electric Power Industry and professor at the School of Electrical Engineering in Belgrade; Dr Sobodan Despotovic, professor at the School of Electrical Engineering in Belgrade; Dr Bozidar Stefanini, professor at the School of Electrical Engineering in Zagreb; Dr Marjan Plaper, professor at the School of Electrical Engineering in Ljubljana; Dmitar Grcev, professor at the School of Electrical Engineering in Skopje; Dr Milinko Saranovic, professor at the School of Electrical Engineering in Titograd; and Dr Jovo Mandic, professor at the School of Electrical Engineering in Sarajevo: "Development of Yugoslavia's Basic 380-kv Network: Precondition for Optimum Development and Functioning of the Technically and Technologically Unified Yugoslav Electric Power System"]

[Text] The article surveys development of Yugoslavia's 380-kv, 220-kv and 110-kv power transmission system in the past and proposes a conception for future development of Yugoslavia's basic 380-kv network up to the year 2000 as a precondition of optimum development and functioning of the technically and technologically unified Yugoslav electric power system. It describes the shaping and development of Yugoslavia's basic 380-kv network over the period from 1980 to the year 2000 with the average years: 1980, 1985, 1990 and the year 2000.

Background

The electric power system is one of the means of transforming electric power into the necessary forms and of transmitting electric power from the place where it is generated to other places for use. Thus the energy contained in coal, other fuels or water can be transformed into electric power

* Paper delivered at the Conference on Development of Yugoslavia's Fuel and Power Industry, held in Opatija in March 1980.

at the sites where they are located and carried by power transmission lines to the desired points where it is used. Electric power cannot be stored up in systems, since it is virtually simultaneously consumed in them in the form of light, heat, chemical or mechanical energy.

The first electric power systems were very primitive. They consisted of one, two or three power plants and usually operated as individual units, as isolated systems, altogether unconnected to one another. The need to carry higher loads and the requirements of operational safety and efficiency resulted in the interlinkage of the isolated systems and creation of unified interconnected electric power systems.

In stationary normal operation the principal function of an electric power system is to generate electric power where that process is most economical and transmit or transport it in the most economical way where it is needed and where it will be used and consumed. It must ensure electric power consumers continuous and economical operation up to standard and necessary amounts of energy and power. These requirements are best and most simply met by ramified interconnected systems. The Yugoslav electric power system is such a system: it connects the systems of all the republics and autonomous provinces with each other and functions as a unified technical and technological whole, as a single electric power system.

The purpose of this paper is to examine development of the unified Yugoslav electric power system and its past and future capability to transmit electric power.

Development of Yugoslavia's 110-kv, 220-kv and 380-kv Power Transmission Network in the Past and Present

The size of the electric power system, its shape, geometry and form and its development in general depend in particular periods on the size of capacities and amount of electric power being transmitted to consumers, on the geographic location and concentration of sources and consumers and their interconnection by the power lines and elements of the system. The optimum mutual correlation of these factors results in the optimum transmission network, in the optimum electric power system.

Before World War II Yugoslavia did not have 110-kv transmission lines. The 110-kv transmission network in Yugoslavia began to develop only after World War II. The need to carry power loads on the order of 30 MW to 50 MW led to the appearance of the first 110-kv transmission lines first in Slovenia and then in Croatia, Bosnia-Hercegovina, Serbia, Macedonia and Montenegro, and to what amounted in the formation of independent electric power systems of the republics that were not connected to one another. However, the rapid development of the country, of its industry and of the entire Yugoslav economy had even by 1955 brought about linkage of the 110-kv network of Serbia and Bosnia-Hercegovina, by 1957 the 110-kv network of practically all of Yugoslavia had been interconnected, and Yugoslavia's technically and technologically unified interconnected system was created.

The trend, the increase in electric power consumption in Yugoslavia, made it necessary to build large power plants and to link them to consumer centers not with 110-kv transmission lines, since their capability was not adequate, but by 220-kv transmission lines, whose power capability is on the order of 150 MW to 250 MW. Thus in 1960 408 km of 220-kv transmission lines went into operation, and in 1970, with construction of the Djerdap Hydroelectric Power Plant, the first 380-kv transmission line made its appearance between the Djerdap Hydroplant and Belgrade, over a distance of 203 km.

Tables 1, 2, 3 and 4 on development of total net electric power consumption, on net per capita electric power consumption, on development of installed capacities and generation of electric power by hydroplants and thermal plants and on development of the 110-kv, 220-kv and 380-kv transmission networks in Yugoslavia furnish the best evidence on development of the electric power system in the past up through 1978.

Table 1. Development of Total Net Electric Power Consumption in Gigawatt-Hours [millions of kilowatt-hours] and of Generating Capacities in Megawatts in Yugoslavia in the Past

	Indicator	1950	1960.	1970.	1975.	1978.
Yugoslavia	Power	1949	7329	21857	34681	43717
	Capacity	460	1650	4232	6711	8574
Bosnia-Hercegovina	Power	213	1134	2634	4748	6462
	Capacity	54	255	487	811	1138
Montenegro	Power	5	114	515	1493	1766
	Capacity	1	25	100	280	343
Macedonia	Power	41	367	1849	2975	3575
	Capacity	9	84	302	482	634
Croatia	Power	677	1932	500	8050	9628
	Capacity	154	434	992	1495	1744
Slovenia	Power	549	1942	4496	5750	7026
	Capacity	134	437	766	1004	1230
Serbia	Power	464	1840	7363	11665	15260
	Capacity	108	415	1585	2659	3495

Tables 1, 2, 3 and 4 show vividly the sudden leap and high pace of development of Yugoslavia's electric power system over the last 18 years: electric power consumption has increased fivefold, the installed capacities of power plants have also increased fivefold, the number of kilometers of transmission lines has quadrupled, transmission line capability has increased 10-fold, and the installed capacity of substations has increased 11-fold. In relative terms no country in the world has had such a rapid

development as Yugoslavia's electric power system since the war; in terms of its level of development, especially of its 380-kv transmission system, it can be classed among the most highly developed countries of the world.

Table 2. Development of Net Per Capita Electric Power Consumption in Kilowatt-Hours

	1950.	1960.	1970.	1975.	1978.
Yugoslavia	119	398	1073	1623	1990
Bosnia-Hercegovina	80	350	711	1193	1564
Montenegro	13	245	981	2661	3034
Croatia	176	467	1134	1783	2104
Macedonia	33	264	1138	1694	1947
Slovenia	373	1229	2617	3230	3875
Serbia	69	243	878	1329	1690

Table 3. Development of Installed Capacities in Megawatts and of Production in Gigawatt-Hours of Hydroplants (HE) and Thermal Plants (TE) of Yugoslavia's Entire Electric Power Industry

	HE	TE		HE	TE	
	Installed Capacity, MW			Gross Output, GWh		
1950.	290	383	673	1175	1233	2408
1960.	1391	1077	2468	5884	2944	8828
1970.	3636	3243	6879	14741	11282	26023
1975.	4801	4242	9043	19317	20723	40040
1978.	5539	6542	12081	25416	26339	51755

At the 10th Professional Conference of Yugoslav Power Engineers, members of CIGRE, held from 11 to 17 October 1970 in Dubrovnik, which was attended by about 1,000 specialists from the entire country, from electric power organizations, scientific research organizations, institutes, schools of electrical engineering, project planning and design organizations, the electrical products industry and organizations which build electric power facilities, the conception of the development of Yugoslavia's basic 380-kv network was examined and adopted. The conception proposed was unanimously adopted by the participants in the conference, and it was stated that all Yugoslavia's power engineers confront the priority task of working toward its accomplishment.

Adoption of the unified conception of the development and construction of Yugoslavia's basic 380-kv network, which calls for Yugoslavia to be covered by a basic 380-kv ring linking all major production and consumption centers in the country and makes it possible for power plants with units with high unit capacity to fit into the electric power system, was at that time inevitable and imperative for each republic and autonomous province and the only economical solution for the country as a whole.

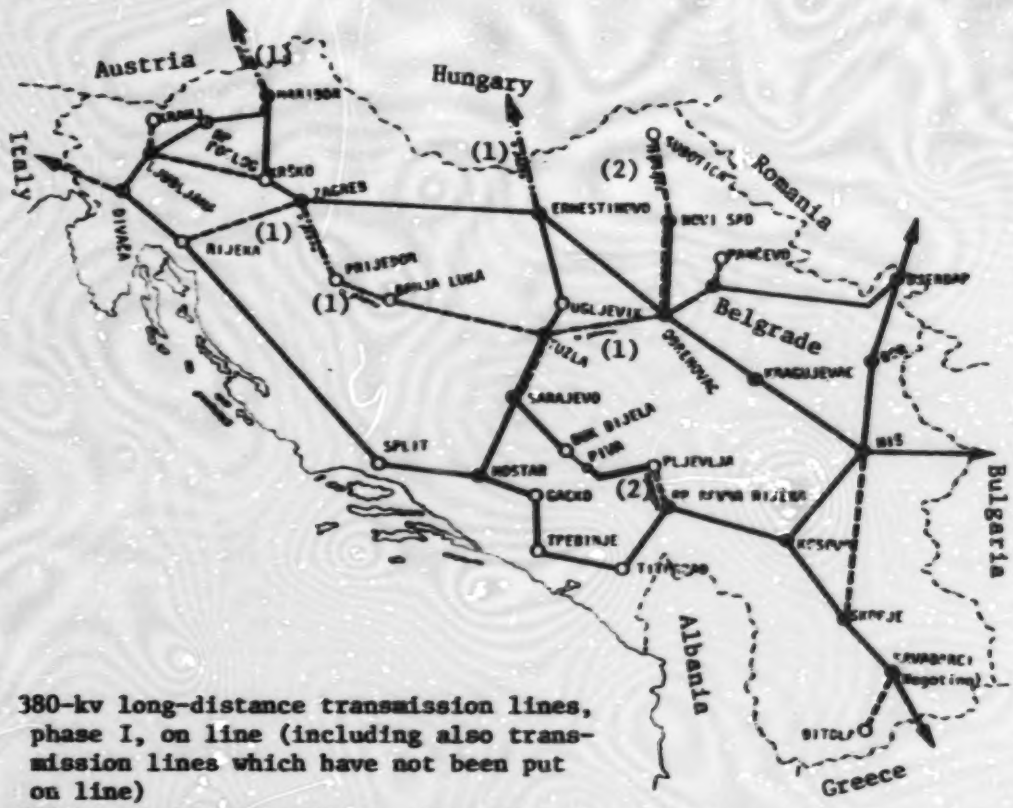
Table 4. Development of the 110-kv, 220-kv and 380-kv Transmission Network in Yugoslavia

Type of Installation	1960.	1970.	1975.	1978.
Long-distance transmission lines, km				
110 kV	5428	8770	11787	13644
220 kV	409	3691	4553	4831
380 kV	—	203	549	2818
Total, km	5837	12664	16889	20293
Substations, MVA				
110 kV	2361	6163	11146	13053
220 kV	150	2800	6300	7900
380 kV	—	800	1500	8400
Total, MVA	2561	9763	18946	29353

The power capability of 380-kv transmission lines, which is on an order between 400 MW and 800 MW and the need to carry large loads from large hydroplants and later large thermal plants as well soon paved the way for the very rapid development of the 380-kv network and a voltage level of the highest order in our country even today, in accordance with the unanimously adopted conception for development of Yugoslavia's basic 380-kv network.

In the first phase of construction of Yugoslavia's basic 380-kv network (Figure 1) 3,295 km of 380-kv long-distance transmission lines and 14 380/220- and 380/110-kv substations with an installed capacity of 8,800 MVA. The 380-kv transmission lines were built and put on line from the Djerdap HE via Belgrade and Obrenovac (with a branch to Novi Sad), Ernestinovo (with a branch to Tuzla, Sarajevo, Buk Bijela and Mostar), Zagreb and Maribor to Ljubljana and Divaca, on the one hand, and from the Djerdap HE via Bor and Nis (with a transverse connection via Kragujevac to Belgrade) to Kosovo, Skopje and Negotino on the other. The 380-kv transmission lines were built from Kosovo via Titograd, Trebinje and Split to Rijeka and Divaca but have not been put on line, since the 380-kv substations and switching installations are under construction.

In the second phase, whose construction is under way (Figure 1), 1,132 km of 380-kv transmission lines, 13 380/220- and 380/110-kv substations with an installed capacity of 9,600 MVA, and 3 380-kv switching installations are being built.



— 380-kv long-distance transmission lines, phase I, on line (including also transmission lines which have not been put on line)

— 380-kv transmission lines, phase II, under construction

• 380-kv substations, phase I, on line

o 380-kv substations, under construction

• 380-kv switching facilities under construction

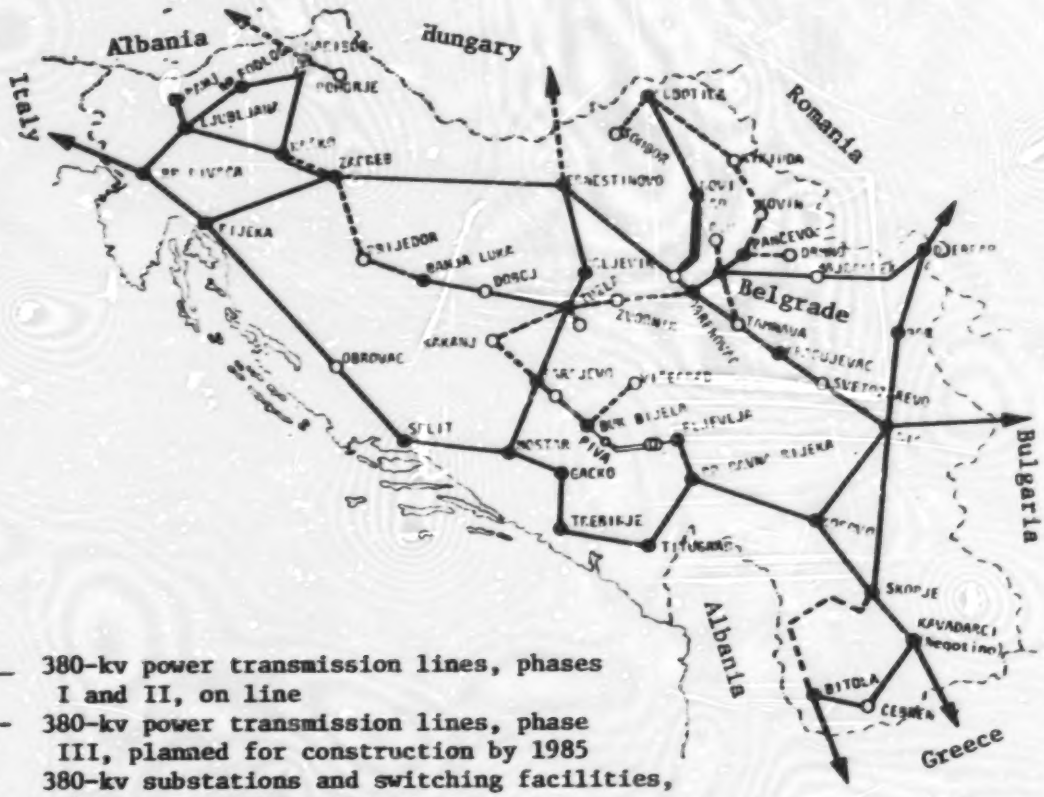
Figure 1. Yugoslavia's basic 380-kv network, status as of 1980.

Key: 1. Planned
2. Built

RP = switching facility

Aware of the good results and benefit of interlinkage of electric power systems, such as reduction of the necessary operational and idle reserve capacity of power plants in the system, the safety and quality of operation of interconnected systems, the possibility of rendering mutual assistance should individual elements of the system fail, the possibility of planning the import and export of electric power, and so on, the Yugoslav system, the Yugoslav electric power industry, has fostered and accomplished intergovernmental linkage with all electric power systems of neighboring countries: Italy one 110-kv link, one 220-kv link, and a 380-kv link is under construction; Austria one 220-kv link and construction of a 380-kv link is planned; Hungary two 110-kv links and one 380-kv link is planned; Romania

two 110-kv link and one 380-kv link, between the two parts of the Djerdap HE; Greece one 110-kv link and one 380-kv link; and Albania one 220-kv link and another 220-kv link is planned. These intergovernmental electric power links have contributed greatly not only in terms of the benefits offered by interconnection of electric power systems, but also in terms of a deepening of good neighborly relations (Figure 5).



—— 380-kv power transmission lines, phases I and II, on line

— — 380-kv power transmission lines, phase III, planned for construction by 1985

● 380-kv substations and switching facilities, phases I and II, on line

o 380-kv substations and switching facilities, phase III, planned for construction by 1985

Figure 2. Yugoslavia's Basic 380-kv Network as Planned for 1985.

Key: RP = switching facility

Yugoslavia's basic 380-kv network (phase I which has been built and phase II which is under construction, as shown in Figure 1) links all the major production and consumer centers in the country, makes it possible to install economical units with high unit capacity in thermal and nuclear power plants, to make the right choice of size in building hydrostorage plants, to better utilize domestic energy resources, to make optimum use of existing and future electric power capacities and to link up with the electric

power systems of neighboring countries. Yugoslavia's basic 380-kv network affords the maximum possible and economically justified level of dependability of supply of electric power to consumers in all areas of the country. From the standpoint of power engineering in the broad sense Yugoslavia's basic 380-kv network has fundamental and infrastructural importance, since it creates the preconditions for optimum development and successful functioning of Yugoslavia's technically and technologically unified electric power system in the coming period. Thanks to its shape and the junctions which are formed it also provides for each of its expansions and the construction and inclusion of new connections, as well as incorporation of a network of voltages of higher order, always comprising and forming Yugoslavia's technically and technologically unified electric power system.

Future Development of Yugoslavia's Power Transmission Network in the Period From 1980 to the Year 2000

Forecasting Needs for Electric Power and Capacity in the 1980-2000 Period

On the basis of the anticipated plans for development of the electric power industries of the republics and autonomous provinces in the 1980-2000 period and figures on development of electric power consumption and realized capacities in the past, a forecast was made of development of electric power consumption and capacity for Yugoslavia as a whole and for its republics in the 1980-2000 period for the average years 1980, 1985, 1990 and the year 2000, using procedures for forecasting the development of electric power consumption and capacity in the future as well as experience, intuition and estimates.

The figures obtained on the growth of demand for electric power and capacity and on per capita electric power consumption are given in Table 5 by republics and for Yugoslavia as a whole.

The planned and forecast need for electric power in Yugoslavia yields the following average annual growth rates:

Over the period 1980-1990	8.6 percent
Over the period 1990-2000	5.9 percent

and the planned or forecast demand for capacity:

Over the period 1980-1990	8.4 percent
Over the period 1990-2000	5.7 percent

The planned growth rates for both power and capacity are realistic and extremely probable, especially in view of the energy crisis in the world and the need for the country to rely on its own sources of energy in the future.

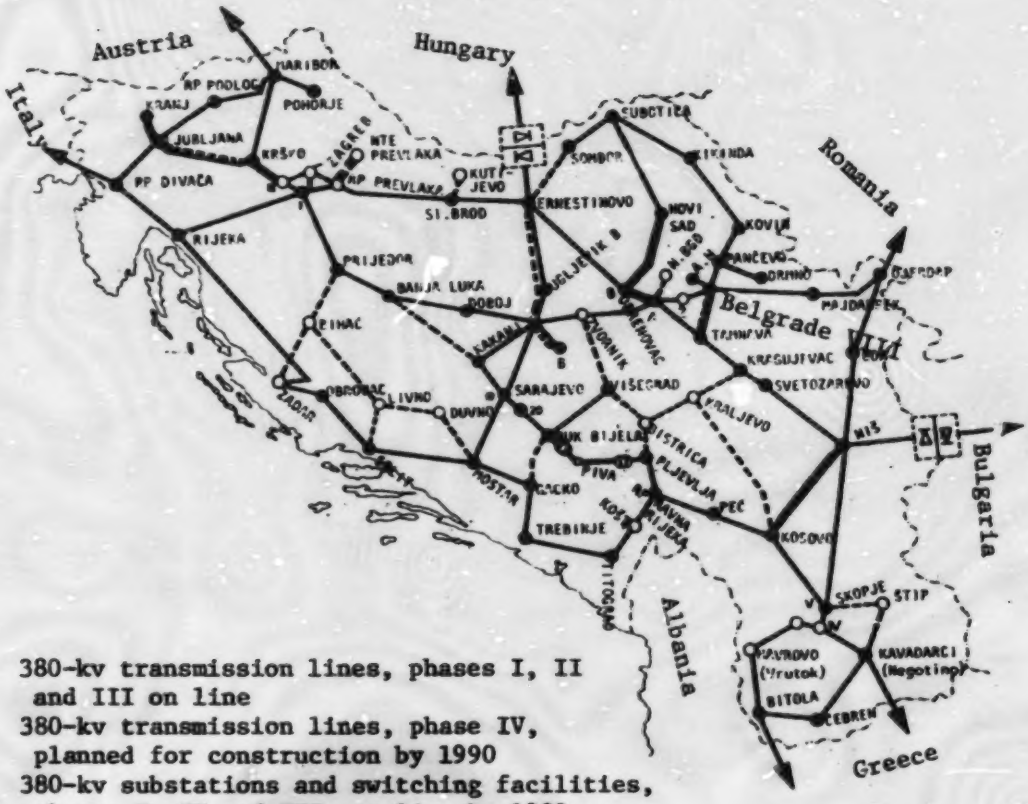
Table 5. Growth of Total Net Demand for Electric Power, Peak Capacity and Per Capita Consumption in the Years 1980, 1985, 1990 and the Year 2000 by Republic and in Yugoslavia as a Whole

Year	Power, GWh	Peak Capacity, MW	Per Capita Electric Power Consumption, kwh/inhabitant
Bosnia-Hercegovina			
1980.	8943	1598	2109
1985.	15553	2813	3439
1990.	21900	3900	4567
2000.	38210	6600	7267
Montenegro			
1980.	2790	509	4701
1985.	3840	711	6095
1990.	5457	990	8218
2000.	7930	1495	10938
Croatia			
1980.	11487	2190	2506
1985.	16772	3207	3598
1990.	23368	4438	4945
2000.	41380	7806	8569
Macedonia			
1980.	5637	1122	2947
1985.	10154	1749	4946
1990.	14260	2410	6532
2000.	24100	4100	9988
Slovenia			
1980.	8269	1480	4536
1985.	12510	2130	6668
1990.	17660	3030	9179
2000.	31350	5368	15566
Serbia			
1980.	19527	4539	2135
1985.	33112	7680	3488
1990.	47929	10957	4853
2000.	87500	19600	8402
Yugoslavia			
1980.	56653	11438	2541
1985.	91941	18296	3957
1990.	130340	25725	5407
2000.	230470	49966	8984

Sources of Electric Power

The sources of electric power and their installed capacities necessary to meet the anticipated electric power consumption and demand for capacity are shown in Table 6 by republics and for Yugoslavia as a whole.

Table 6 shows the extremely rapid development of sources of electric power. Installed capacity of generating plants would quadruple over the 20-year period from 1980 to the year 2000.



— 380-kv transmission lines, phases I, II and III on line

--- 380-kv transmission lines, phase IV, planned for construction by 1990

● 380-kv substations and switching facilities, phases I, II and III, on line by 1980

o 380-kv substations and switching facilities, phase IV, planned for construction

Large-capacity rectifier station for asynchronous connection of electric power systems, planned for construction

Figure 3. Yugoslavia's basic 380-kv network as planned for 1990.

Key: RP = switching facility AH = storage hydroplant
NTE = nuclear power plant

Shaping Yugoslavia's Basic 380-kv Transmission Network

The needs for peak capacities by republics, as adopted and as given in Table 5, in accordance with their geographic location relative to consumption centers, i.e., in line with the 110-kv, 220-kv and 380-kv junctions which have been formed, the available capacities of the sources and knowledge of the possible routes for transmission lines of voltages on the order of 110-kv, 220-kv and 380-kv, the network of all voltage levels was shaped. Figures 1, 2, 3 and 4 show the network obtained for the voltage level 380-kv, the basic Yugoslav transmission network for the years 1980, 1985 and 1990 and that expected for the year 2000.

Table 6. Development of Installed Capacity of Hydroplants (HE) and Thermal Plants (TE) in the Period 1980-2000 by Republics and for Yugoslavia as a Whole, in megawatts

	Bosnia-Hercegovina	Montenegro	Croatia	Macedonia	Slovenia	Serbia	Yugoslavia
Hydroplants							
1980.	1076	646	1454	397	772	2479	6824
1985.	1929	896	1746	656	1044	2775	9036
1990.	2908	1113	2226	957	1540	4135	12879
2000.	4407	1974	3176	2159	2125	4970	18761
Thermal plants							
1980.	1127	—	1559	525	1236	3710	8157
1985.	2492	210	1844	945	1526	7361	14378
1990.	3734	420	2944	1685	1928	9973	20682
2000.	6549	420	5944	2505	3761	20492	39671
Total							
1980.	2203	646	3013	922	2008	6189	14981
1985.	4421	1086	3590	1601	2570	10136	23414
1990.	6642	1533	5170	2652	3468	14108	33571
2000.	10956	2344	9120	4664	5886	25462	58432

Table 7. Development of the 220-kv and 380-kv Transmission Networks in Yugoslavia in the Period From 1980 to the Year 2000

Type of Installation	1980.	1985.	1990.	2000.
Long-distance transmission lines, km				
220 kV	5875	6691	7245	7810
380 kV	4188	5589	7818	10636
Total, km	10063	12280	15063	18446
Substations, MVA				
220 kV	13450	15900	16950	18000
380 kV	15100	24600	34200	48000
Total, MVA	28550	40500	51150	66000

The 380-kv network which was shaped (shown in Figures 1, 2, 3 and 4) ensures good and dependable transmission of electric power both under normal operating conditions and when any element of the system fails. It ensures reliable supply to consumers at the economically justified level of safety. This shape of the network makes it possible to link all the regions of electric power production and consumption and ensures incorporation of large-capacity units of thermal plants and optimum use of storage and large reversible hydroplants. Its shape and the junctions formed provide for its every expansion and for construction of new links should the need for them arise during the period under review. It also makes it possible to link the Yugoslav system to the electric power systems of all neighboring countries.

The 380-kv network thus formed covers Yugoslavia with a basic 380-kv ring that links all the country's major centers of power production and consumption and facilitates optimum development and functioning of the technically and technologically unified Yugoslav electric power system. This ring, with its transverse connections, fully links all large sources and load areas of Yugoslavia with the 380-kv voltage level and also provides for inclusion of all new connections should there be large transmissions of power from Kosovo toward Croatia, Slovenia, and Macedonia or for possible export to Italy, Austria, Greece and other countries of Europe.

The transmission of additional power on the order of 3,000 MW to meet the needs of Croatia, Slovenia and Macedonia from the Kosovo thermal power basin in the coming period up to the year 2000 can be accomplished by building 380-kv main transmission lines from Kosovo via Plevlja, Sarajevo, Banja Luka and Zagreb to Ljubljana on the [illegible] and and from Kosovo via Obrenovac and Ugljevik to Zagreb on the other, as well as from Kosovo to Skopje (Figure 3a).

Transmission of additional power on the order of 4,000 MW might be accomplished by a network of a voltage on the order of 750 kv combined with the network on the order of 380 kv (as shown in Figure 3b).

Construction of the basic 380-kv transmission network will provide a completely technically and technologically unified Yugoslav electric power system, so that it can be operated economically.

With formation of the basic 380-kv transmission network all conditions will have been created for economical and reliable linkage and cooperation of the Yugoslav electric power system with the electric power systems of all neighboring countries (in parallel, or synchronous operation over the 380-kv transmission line from Divaca to Italy and from Maribor to Austria, Negotino to Greece and Bitola to Greece; in asynchronous operation by building rectifier stations on the 380-kv transmission lines between Ernestinovo and Hungary and between Nis and Bulgaria; in insular (ostrvski) operation via the 380-kv link between our part and the Romanian part of the Djerdap HE, and also over the 220-kv link between the 380/220-kv junction from Titograd

to Albania and another 220-kv link which is to be built (Figures 3, 4 and 5).

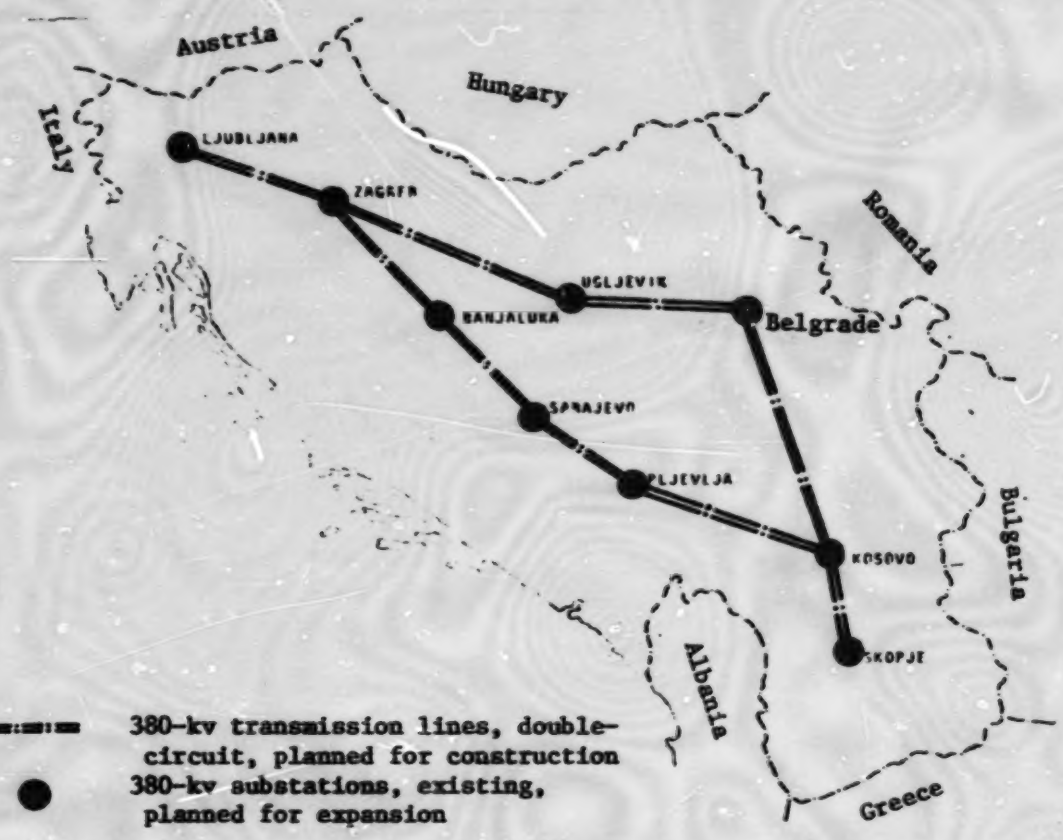


Figure 3a. Yugoslavia's basic main 380-kv network as planned for 1990, which is superimposed on Yugoslavia's basic 380-kv network as planned (Figure 3) to transmit power on the order of 3,000 MW from Kosovo to Croatia, Slovenia and Macedonia.

Table 7 shows development of the 220- and 380-kv transmission network in Yugoslavia by elements over the period 1980-2000.

Table 7 indicates that after 1980 the basic 380-kv network will primarily be developing, while the 220-kv network will in practice be undergoing little development since it is uneconomical and impractical, except in cases when the opposite is demonstrated. The 110-kv transmission network is becoming more important, but its development is not shown in Table 7, since in the 1980-2000 period it will undergo further development almost entirely as a transmission network of interest to each republic and each autonomous province.

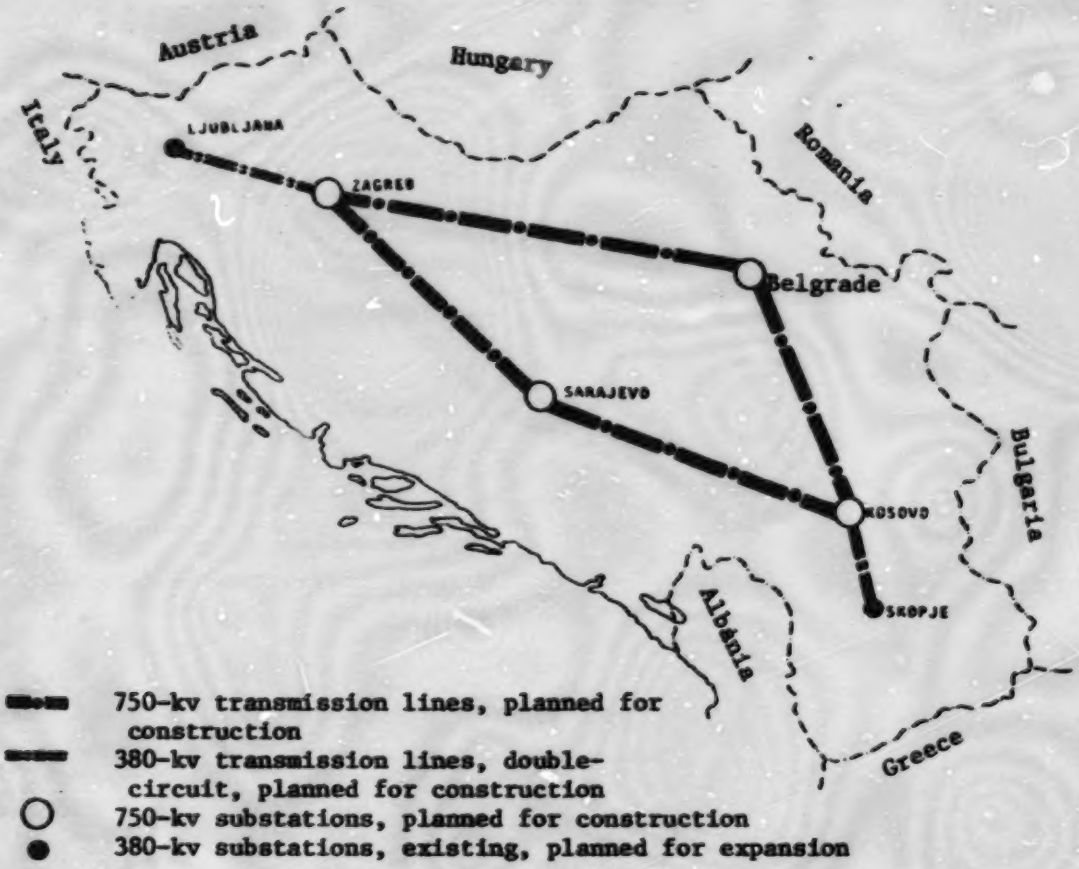


Figure 3b. Yugoslavia's basic 750-kv and 380-kv networks planned for 1980, which is superimposed on Yugoslavia's 380-kv network planned for 1990 (Figure 3) to carry power on the order of 4,000 MW from Kosovo to Croatia, Slovenia and Macedonia and for possible export of electric power.

Development of the Network of Voltages on the Order of 750 kv or 1,150 kv

In the conditions adopted concerning development of capacities and location of generating facilities and also concerning the increased demand for electric power and capacity, there is no need in Yugoslavia to introduce higher voltage levels than 380 kv up to the year 2000, i.e., there is no need to introduce voltages on the order of 750 kv or 1,150 kv. The 380-kv level which has been adopted and the 380-kv network which has been shaped (Figures 1, 2, 3 and 4) will meet all needs for transmission of load and power both dependably and economically up to the year 2000. Undoubtedly the possible transmission of loads on the order of 3,000 MW to 10,000 MW to Croatia, Slovenia and Macedonia or for possible export to Italy, Austria, Greece and other countries of Europe from large power plants concentrated

in Kosovo could result in construction of a network with voltages on an order higher than 380 kv, adoption of the voltage levels 750 kv or 1,150 kv, or even DC electric power transmission at voltages on the order of 2 x 500 kv or higher.

The transmission of additional power on the order of 3,000 MW to meet the needs of Croatia, Slovenia and Macedonia from the Kosovo thermal power basin in the period up to the year 2000 can be accomplished by building 380-kv main transmission lines from Kosovo via Plevlja, Sarajevo, Banja Luka and Zagreb to Ljubljana on the one hand and from Kosovo via Obrenovac and Ugljevik to Zagreb on the other, as well as from Kosovo to Skopje (Figure 3a). Transmission of additional power on the order of 4,000 MW might also be accomplished over a 750-kv network combined with the 380-kv network (as shown in Figure 3b). However, the 380-kv network in the shape shown in Figures 1, 2, 3 and 4 allows for easy incorporation of both the basic 380-kv network of main transmission lines and the basic network of 750- and 380-kv or 1,150-kv voltages (Figures 3a and 3b), comprising and in this way facilitating in turn a unified technical and technological whole, a technically and technologically unified Yugoslav electric power system.

Conclusions

The paper surveys development of the 110-kv, 220-kv and 380-kv transmission networks of the Yugoslav electric power system in the past and up to the year 2000. Covering the period of 20 years in the future, the paper examines the most likely development of the system and emphasizes that 380 kv, the highest present level of voltage in Yugoslavia, is adequate to provide under the conditions adopted safe, good, continuous and economic transmission of electric power to all load centers in the country. The higher voltage level 750 kv or 1,150 kv might come into consideration only if loads exceeding 4,000 MW are to be transmitted to Croatia and Slovenia or for the possible export of electric power to Italy, Austria and other countries of Europe.

The paper covers development of electric power and peak capacities in Yugoslavia and all its republics in the past, beginning with formation of the first 110-kv transmission lines and substations immediately following World War II and up to formation of the unified Yugoslav 110-kv system, the appearance of the 220-kv voltage level, the appearance of the 380-kv voltage level, up through 1978. Systematized data on development of electric power and capacity (Table 2), on development of installed capacities and production of hydroplants and thermal plants (Table 3), on development of the 110-kv, 220-kv and 380-kv transmission networks up through 1978 (Table 4) indicate the very rapid development of the Yugoslav electric power industry, the high pace in development of Yugoslavia's electric power system as a technically and technologically unified whole: over the last 18 years production of electric power and development of installed capacities of generating facilities have grown fivefold, the number of kilometers of transmission lines built has quadrupled, installed capacity of substations

has increased 11-fold, and the transmission capability of the system has increased 10-fold. This very rapid development of the electric power transmission system, especially the 380-kv voltage level, placed Yugoslavia even by 1978 among countries with the most highly developed systems in the world.

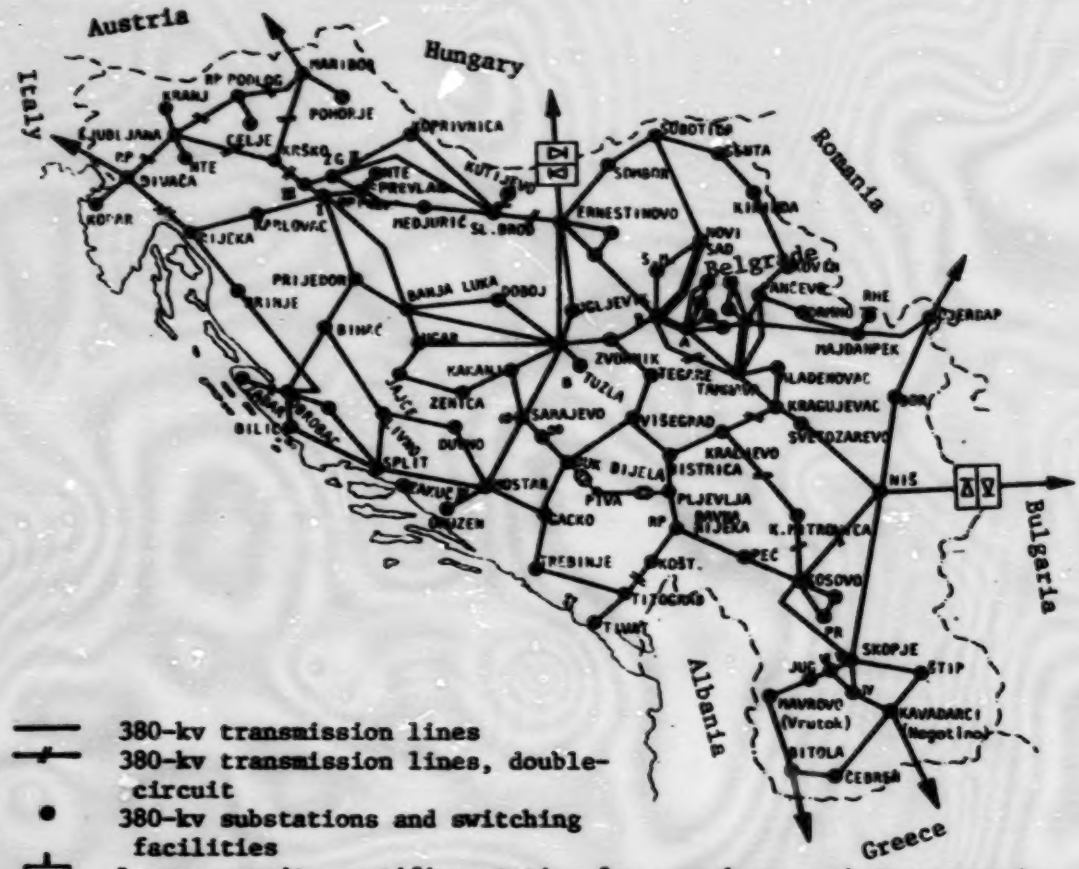


Figure 4. Yugoslavia's basic 380-kv network as anticipated in the year 2000. (The 380-kv network (Figure 3a) or 750- and 380-kv network (Figure 3b) of main transmission lines to carry power on the order of 3,000 or 4,000 MW from Kosovo to Croatia, Slovenia and Macedonia or for possible export of electric power is superimposed on this network.)

Key: RHE = reversible hydroplant RP = switching facility
NTE = nuclear power plant

Figure 5. International electric power interconnections of systems in Europe, geographic survey of the systems.

Key: IS = Iceland; IRL = Ireland; GB = Great Britain; N = Norway; S = Sweden; SF = Finland; DK = Denmark; NL = Netherlands; B = Belgium; L = Luxembourg; F = France; P = Portugal; E = Spain; CH = Switzerland; I = Italy; A = Austria; BRD = West Germany; DDR = East Germany; CS = Czechoslovakia; PL = Poland; SU = Soviet Union; H = Hungary; YU = Yugoslavia; AL = Albania; GR = Greece; TR = Turkey; BG = Bulgaria; R = Romania.

A description is given of the shaping and development of the transmission system, especially the 380-kv system, over the period 1980-2000, with the average years 1980, 1985, 1990 and the year 2000. Taking past development

of electric power consumption and capacity as points of departure, and using up-to-date methods of forecasting them in the future, as well as experience, intuition and human assessment as essential and irreplaceable factors in forecasting, the development of electric power demand and capacity is surveyed (Table 5). A spatial distribution is made of the loads of consumers and generating facilities as adopted and their locations and possible routes for linkage of generating capacities and consumers, and a shape is given for the 380-kv network of Yugoslavia (Figures 1, 2, 3, 3a and 3b, 4 and Table 7), it being stressed that the 110-kv network is becoming more important, but as a transmission network of interest to each republic and province, while the 220-kv network will undergo little development in the future, because it is uneconomical and impractical, except in cases when the opposite is demonstrated.

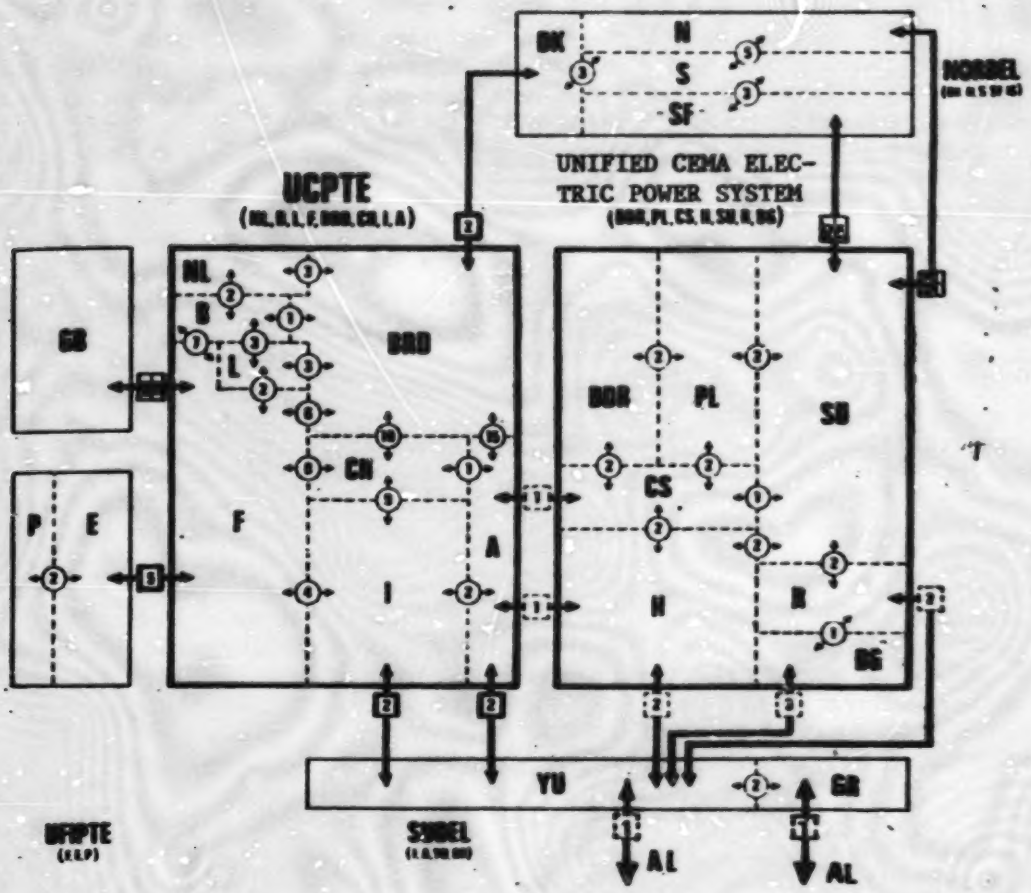
The average annual growth rate of electric power consumption and capacity is about 8.6 percent in the period 1980-2000 and about 6 percent in the period 1990-2000. The forecast growth rates are realistic and the most likely, especially in view of the energy crisis in the world and the need for the country to rely on its own sources of energy in the future. The installed capacities of generating facilities would quadruple in the period 1980-2000, and unit installed capacities of generating facilities have increased from 32 MW at the Kolubara TE in the forties to the 335 MW at Sostanj in the seventies, and a unit capacity on the order of 600 MW is even now assumed in the future at the Obrenovac TE, Kosovo TE and Tuzla TE and capacities on the order of 1,000 MW in nuclear power plants.

Development of Yugoslavia's basic 380-kv network has been conceived in three principal parts or time intervals, as follows:

The first part covers phase I of Yugoslavia's basic 380-kv network, which has been built and phase II, which is under construction—total length of 380-kv transmission lines 4,427 km, 27 substations with an installed capacity of 18,400 MVA and three 380-kv switching installations (Figure 1).

The second portion covers Yugoslavia's basic 380-kv network as it would be built up to 1985, 1990 and the year 2000 on the basis of analysis, examination of both the plans of electric power organizations of the republics and autonomous provinces and also studies which have been made—with a total length of 380-kv transmission lines 6,209 km and transformer stations with an installed capacity of 29,600 MVA (Figures 2, 3 and 4).

The third part covers Yugoslavia's supplemental network of 380-kv main double-circuit transmission lines, which needs to be built to carry additional loads from the Kosovo thermal power basin to meet the needs of Croatia, Slovenia and Macedonia (Figure 3a) or the basic 750-kv network combined with the 380-kv network (Figure 3b) to meet the needs of Croatia, Slovenia and Macedonia and for possible export of electric power to Austria, Italy and other European countries.



- Number of transmission lines for interconnection of electric power systems within the international electric power interconnection
- Number of transmission lines to link electric power systems with international electric power interconnections in synchronous or parallel operation
- Number of transmission lines to link electric power systems in separate or insular operation
- Installation to connect electric power systems in asynchronous operation through large-capacity rectifier stations

Figure 5a. Diagrammatic representation of the systems (intersystem long-distance power transmission lines at 65, 110, 130, 150, 220 and 380 kv), status in 1980.

The proposed conception of development of Yugoslavia's basic 380-kv network of main supplemental double-circuit lines or Yugoslavia's basic 750-kv network combined with the 380-kv network constitutes a priority task and is

relevant both from the technical and technological standpoint and also from the standpoint of power economics, and the proposed solution also meets the strategic-defense and sociopolitical criteria and requirements of the country as a whole. Construction of this network should contribute to effective realization of the country's unified energy policy toward faster reliance on domestic sources of energy in the coming period.

Yugoslavia's 380-kv network is basically shaped in the form of a ring with its transverse ties, it links the largest centers of production and consumption of electric power and capacity, thereby ensuring consumers good, safe and economical power and capacity and at the same time an interconnection with the electric power systems of all neighboring countries and with the large European interconnections UCPTE and the CEMA Unified Power System. By virtue of its shape and the junctions which are formed it also provides for any expansion and the construction and incorporation of new links as well as incorporation of the voltages 750 kv or 1,150 kv, always comprising and forming a technical and technologically unified whole, a technically and technologically unified Yugoslav electric power system.

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CONTENTS

BULGARIA

Research Aims To Improve Capacity of Atomic Power Station
(Ani Sargavakyan; VECHERNI NOVINI, 27 Sep 80) 1

Plans To Increase Consumer Goods Production
(Lilyana Vasileva; POLITICHESKA AGITATSIYA, No 18, 1980)... 3

CZECHOSLOVAKIA

New Pricing System, Future Price Increases Explained
(Vaclav Janecek; MODERNI RIZENI, No 9, 1980) 9

Domestic Flight Price Increase Announced, Explained
(RUDE PRAVO, 17 Oct 80) 15

Briefs
Prague-Havana Nonstop Flights 17

GERMAN DEMOCRATIC REPUBLIC

Transportation System Goals for 1981-85 Plan Outlined
(Wolfram Paetzold, et al.; DDR-VERKEHR, Sep 80) 18

West German Analysis of GDR Combine System Development
(Kurt Erdmann, Manfred Melzer; DUETSCHLAND ARCHIV, Sep 80). 31

HUNGARY

Trade With Developing Countries Described
(Arpad Orosz; FIGYELO, 15 Oct 80) 53

Discussion of Five-Year Plan Viewed
(FIGYELO, 8 Oct 80) 57

How Scholars View It
How Enterprises See It

POLAND

Guidelines for Economic Reform Discussed
(Barbara Wisniewska, Marek Misiak; ZYCIE GOSPODARCZE, 12 Oct 80) 63

ROMANIA

Development of Effective Technical-Material Supply Base
(Dumitru Fundatura; ERA SOCIALISTA, 20 Sep 80) 71

Cost Reduction Key Element in Increasing Efficiency
(Gh. Sica; REVISTA ECONOMICA, 17 Oct 80) 80

Local Responsibility for Consumer Goods Supply Examined
(Gheorghe Teodorascu, Ion Georgescu; REVISTA ECONOMICA, 17 Oct 80) 85

Conservation Factor in Electric, Thermal Energy Production
(Ioan Muntean; ERA SOCIALISTA, 5 Sep 80) 91

Measures To Increase Livestock Production
(Nicolae David; REVISTA ECONOMICA, 10 Oct 80) 98

RESEARCH AIMS TO IMPROVE CAPACITY OF ATOMIC POWER STATION

Sofia VECHERNI NOVINI in Bulgarian 27 Sep 80 p 4

[Article by Ani Sargavakyan: "The Contribution of Scientists to the Development of Nuclear Power Engineering"]

[Text] Just a week ago an announcement was made of the start of the hot test of the third power unit at the Kozloduy AETs [Atomic Power Plant]. The hot test differs from the true starting up of the reactor in that simulating rods are used in the reactor in the place of nuclear fuel rods. Not much time will pass and this unit will also be operating at full steam. Up to now over 27 billion kilowatt-hours of power from nuclear fuel have been sent from the Kozloduy AETs to the entire nation. And one more fact. The AETs in a year produces 20 fold more electric power than the entire nation produced in 1944.

From Prof Vasil Khristov, sector director of the Institute for Nuclear Research and Nuclear Power [IYaIYaE] under the Bulgarian Academy of Sciences in Sofia, we learned that the IYaIYaE is operating under long-range cooperation programs with the Ministry of Power. Valuable research and applied scientific developments have been introduced under a number of programs. These include: for optimum reloading of the nuclear fuel and analysis of the operating modes, for methods and equipment for deactivating the nuclear wastes and protecting the environment, and so forth. During the Seventh Five-Year Plan an economic effect of over 2 million leva is expected from the fulfillment of this work. Of great importance in this regard is the bilateral cooperation with Soviet institutes, as well as the participation of our specialists in the joint research on the reactor system as part of the temporary international collective for reactor physical research in Budapest.

"The third stage in the development of the AETs envisages the completion of two other reactors (the fifth and sixth), Soviet produced, with increased capacity," said Comrade Vasil Khristov. "A new thing for them is that they will be some of the first 1000-megawatt reactors in the socialist commonwealth countries. A 1000 megawatt unit represents a stage in the technical development and improvement of the nuclear plants."

To the question of what is the involvement of the IYAIYaE in the scientific contribution to the engineering plans for the Kozloduy AETs for the Eighth Five-Year Plan, Prof Khristov replied:

"Specialists from the institute, together with the leadership of the AETs, have set out the main areas for the applied scientific and introductory work. These include: scientific feasibility studies for the operating modes of the AETs at rated and above-rated capacity; the elaboration and introduction of new methods and equipment for internal reactor control; the processing and storage of radioactive waste products and the protection of the environment. In the near future the specific tasks will be set for work in the designated areas. The development activities envisage the solution to problems important for operation, including also the automation of certain assemblies for the systems of the AETs. This represents an important element in the intellecualization of production activities. An initiative of our collective is the taking on of an additional promise in honor of the 12th BCP Congress to carry out new development tasks with a significant economic effect. We believe that by this our institute will do its share for the development of scientific and technical progress in Bulgaria during the Eighth Five-Year Plan."

10272
CSO: 2200

PLANS TO INCREASE CONSUMER GOODS PRODUCTION

Sofia POLITICHESKA AGITATSIYA in Bulgarian No 18, 1980 pp 18-24

[Article by Lilyana Vasileva, first deputy minister of light industry: "Increasing Market Variety as an Element of the Party's Social Program"]

[Text] Our party has always paid great attention to light industry as an area of tremendous economic, social and political significance, for it resolves the urgent problems related to the better satisfaction of human needs. This concern was manifested, yet once again, at the Ruse meeting between the BCP Central Committee Secretariat and the first secretaries of okrug party committees and ministries. The formulations expressed by Comrade Todor Zhivkov in his presentation, which were remarkable in terms of their depth and far-sightedness, represent an effective program for a change in this area and for decisively increasing the volume and expanding the variety of consumer goods.

What is the most essential aspect in the current stage of development of light industry?

Thanks to the major investments made in the Sixth and Seventh Five-Year Plan the basic active productive capital was increased and renovated. New highly productive equipment was introduced and new effective technologies were applied. On a parallel basis the raw material base was modernized as well. Added to the traditions of the sector and cadre experience, this provided a solid prerequisite for insuring an adequate number of goods in terms of quantity, quality and variety both for the satisfaction of domestic needs and for export. This was also confirmed by the fact that in recent years the market has been quantitatively saturated with goods produced by the light industry system and the elimination of the durable excess demand over supply. Today goods are available on the market. However, in terms of variety, assortment, quality and colors they are largely unsatisfactory because of higher consumer criteria.

Consequently, the main criterion today in assessing the work of labor collectives within the light industry system is the increased amount of varied and high quality goods on the market. However, at this stage as well the basic effectiveness requirements remain valid. It is a question of the purposeful and systematic reduction of the socially necessary working time for the production of a unit of output. The task of reducing production costs and

increasing profitability will remain the purpose and content of the work of economic, party and trade union managements and labor collectives. These stipulations were reasserted, yet once again, at the July 1980 BCP Central Committee Plenum.

The final and decisive year of the Seventh Five-Year Plan, 1980, is shaping up as effective and useful. Light industry will produce 33.5 million meters of cotton fabrics, 36 million meters of woolen fabrics, 111.5 million pieces of knitted goods, 21 million pairs of shoes, 62.5 million pairs of hose, 39 million pieces of household porcelain ware, and 26.7 million pieces of household glassware. Some progress has been made in the production of furnishings as well.

There will be a considerable increase in the production of fashionable and luxury goods. In individual commodity groups they will account for 30 to 50 percent of the entire output.

Quality changes have been made in the material and technical base as well. Technological standards have been upgraded and a substantial amount of productive capital has been modernized and renovated. New and modern equipment has been installed. The share of goods produced with the help of the new technological systems has risen considerably. Facilities for spindleless weaving has been introduced in the cotton industry. Shorter technological processes have been applied in worsted weaving and shuttleless looms have been installed. In 1979 the fabrics produced with such machines totaled 37 percent of the entire output of the cotton textile industry, 57 percent of the woolen textiles and 50 percent of silk textiles. The material and technical facilities in the knitwear industry have been updated with new multiple-system round-weaving machines, linear automatic machines, and electronic equipment. Nonconventional technologies such as those producing unwoven textiles have developed rapidly.

Positive changes have taken place in the development of the domestic raw material base. In 1979 the share of domestically produced chemical raw materials reached 55 percent.

Considering the new higher requirements, all this proved to be insufficient. The steady growth and rising of requirements, the positive changes in the way of life and standards, so greatly characteristic of recent years, and the increased purchasing power of the population are leading to the formulation of new and even higher claims concerning the production of and trade in commodities and services. In his programmatic presentation at the Ruse meeting Comrade Todor Zhivkov brilliantly depicted the solution of the new problems dictated by socioeconomic progress.

The managements and specialists within the light industry system are currently focusing their efforts on the fulfillment of these important and responsible assignments. The problem of commodity stocks and population services is strategic. It affects the interests of millions of people in our country. That is why, within a short time substantial changes must be made in our overall work in order to saturate the market with adequate amounts of consumer goods. Each economic organization and collective must address itself

to the solution of this problem. To this effect, in 1980 and throughout the next five-year plan investments in the sector will be concentrated on the reconstruction and modernization of existing production capacities. The new machines and equipment which will be added to the production facilities will expand the variety of new goods.

Following the Ruse meeting, all collectives reviewed their possibilities for the additional use of capacities, full utilization of cadres, raw materials and materials, additional production of consumer goods, and implementation of the new responsible assignments. Currently our efforts are focused in several directions, as follows:

Market-Plan-Production

In a way, the stricter requirements concerning the quality and variety of goods were given priority in determining the results and effectiveness of light industry. The consumer value of the goods produced by the labor collectives within the light industry system could be considered the sum total of their useful characteristics which determine their role in the course of the consumption process. Their quality is defined as the level of consumer value manifested in its most direct manner, in the course of the consumption process itself.

That is why the first and basic task is for the production process to meet the requirements of the market. We must produce goods in demand, saleable goods, confirmed through contracts dealing not only with quantity but variety, quality and functional purpose.

All this called for the introduction of substantial changes in several directions: in the contracting system, in the role of the contracting parties in the implementation of contractual relations, in contractual deadlines based on the influence of seasons and fashions, the systematic decentralization of planning and management, and the increase of the rights and responsibilities of economic combines and plants.

This also includes the question of finding the most accurate method through which the conclusion of contracts would outstrip the drafting of engineering blueprints and counterplans. A possible variant here would be the conclusion of annual contracts with subsequent breakdown of specifications in terms of models, sizes, designs, colors, seasons, and so on. At the same time, conditions must be created for the continuing and systematic contracting for some goods most closely related to the dynamics of fashion and fashion trends.

Considerable experience was acquired in this respect in 1979-1980. A number of specific changes have become necessary in the implementation of the tasks set at the Ruse conference and the July 1980 BCP Central Committee Plenum. The fuller utilization of existing opportunities must be insured jointly with the leadership of the Ministry of Internal Trade and Public Services and the wholesale and retail trade organizations.

Systematic Study of Market Conditions and Consumer Demand

Consumer or solvent demand is a type of manifestation of requirements backed by financial funds. The existence of information on the potential, the developing or the current demand for light industry goods is of particular importance today to the proper direction of the production process. It is a question of the study of long term requirements through the analysis of international markets and domestic market trends with a view to preparing and insuring possibilities for the reproduction or design of new goods and of finding them a place in the domestic or foreign market. This is one of the means for decisively improving the variety and assortment of goods. A specific need is satisfied by the manufacturing of dozens of goods with specific functional purposes. The second question of tremendous practical importance is that of the study of already established, current, and essential needs of the market and of introducing daily changes in supplying retail stores with goods in demand in its various sizes, dimensions, colors, designs, and so on. The meeting of such consumer demand requires substantial changes in the organization of retail trade and in relations with producers in order to shorten the way of the commodity from the producer to the store and the consumer. This problem will be resolved through the development of direct contractual relations between the production process and retail trade; the existence of developed retail trade outlets by the producers; and improvements of relations between the producer and wholesale and retail trade.

In no case should the trade outlets of producers replace either retail or wholesale trade. The trade system consists of 45 stores and 19 stands of the Rila, Pirin and Trikotazh firm trade directorates and the general stores of the TsNSM and the monopolizing of some functions in the course of this process by various organs and organizations.

Critical remarks and adverse trends forced us to assess the work of the artistic council and of the units involved in this area within the ministry's system, including experimental-variety bases, modeling units, and collectives of designers, draftsmen and painters. In the Sixth and Seventh Five-Year Plans the creative cadres achieved considerable successes. However, they fall short of the requirements of the BCP Central Committee. In this direction new ideas were formulated at the plenum on design held by the Union of Bulgarian Painters. It is clear that design is an inseparable part of the overall creation of items and that the place of the designer is neither at the end or the beginning but at all stages of the creative development of a new item by technologists, by designers, modeling workers, artists, and producers. Each of these groups faces unresolved problems in its work and in its desire to achieve effectiveness, and esthetic appearance, variety, or high quality, problems which will become the center of our attention in the next few months. Their solution will be our contribution to the creative interpretation of the new economic approach. It is a question of the organization of labor and of the system for paying the creative cadres; of criteria in the assessment of the end product; cost accounting, self-financing and material and moral incentives based on the end results of the entire labor collective; and of information support and the creation of conditions for the individual creative manifestation and establishment of the plant's trademark.

No less important problems arise in connection with the ability of the organization and management of the system to insure fast and timely reaction on the part of the producer to market dynamics. The end goal in this respect is to reach the type of organization and managment in which, under our socialist conditions, fashion will gradually become a controllable process. The quick and adequate combining of fashion trends with the full loading of production capacities and the utilization of available raw and other materials is a rather complex problem.

Cadre Training Consistent With the New Requirements for More and More Varied Goods

The light industry system employs 214,000 workers and specialists. Of these 72 percent are women and 78,000 are Komsomol members. Future cadres for the sector are being trained by all higher educational institutions in the country and by 44 technical and secondary vocational schools. Under the people's system the sector trains educated and highly skilled cadres and develops strong and active labor collectives.

Comrade Todor Zhivkov's statement made at the Ruse meeting fully applies to the light industry: "In terms of our scale, we have a large material and technical base with an expanded scientific and technical potential whose possibilities are unquestionable.... Both management and performing cadres engaged in the production of and trade in goods and services have developed and acquired rich experience."

We already know that the Eighth Five-Year Plan will be a five-year plan of scientific and technical progress, a five-year plan of labor intellectualization. These requirements direct us toward changing not only cadre training but the nature and conditions of labor. The main direction in the field of light industry will be production intellectualization through which we shall continue the line of firmly upgrading labor productivity and increasing the variety of goods.

For a number of years our attention was focused on the development of mechanization. Today production automation has priority.

Intellectualization calls for the modeling of machines which will not only replace human physical efforts but will duplicate man's intellectual activities. Processes which truly contain a high percentage of intellectualization and machines replacing human labor must be introduced in the interrelationship between man and machine and man and technology.

In the Eighth Five-Year Plan automated control systems of technological processes will be introduced in the light industry which is, essentially, one step toward intellectualization. Various electronic appliances for controlling, recording, and managing processes will not only save on labor but will considerably upgrade production effectiveness. In this way intellectualization will work in several directions: reduce the amount of live labor, increase labor productivity severalfold, and sharply upgrade production quality.

Leading production experience is an important reserve in upgrading labor effectiveness. We have adopted an overall scientific system for its study, dissemination and creative application, based on the summarized experience of 20,000 workers in 60 different areas.

As a progressive form of collective labor, the brigade organization of labor is becoming ever more widespread. Its application enables us not only to reduce the amount of manpower but to improve the income of the individual workers.

So far 4,000 brigades have been set up involving over 60 percent of the workers in the sector. One of our main tasks is the further improvement of the brigade organization of labor combined with intracost accounting.

The light industry sectors have their proven leaders, modeling workers, designers, technologists, artists, labor heroes, leading production workers, and multiple machine operators. This is our golden stock and wealth. The development of its creative initiative will lead to a greater number and variety, and better quality goods and services for the population.

5003
CSO: 2200

NEW PRICING SYSTEM, FUTURE PRICE INCREASES EXPLAINED

Prague MODERNI RIZENI in Czech No 9, 1980 pp 38-43

[Article by Engr Vaclav Janecek, Federal Price Office: "Improving New Pricing System in Planned Management System of National Economy after 1980"]

[Text] At the statewide work conference on the Set of Measures, CSSR Premier L. Strougal stated that "the effect of adopted measures designed to improve the system of management depends to a considerable degree on the correct working of the pricing system."

The tasks listed in the Set of Measures for improving the pricing system (system of wholesale prices, improvement of methods and tools of management of price trend in the area of planning, price-setting and price control) aim at the solution of basic monetary problems of further development of our economy and in this respect should contribute also to increasing efficiency of other areas of the management system. Moreover, they emphasize the incentive role of price as the basic criterion of the reproduction process. In combination with other tools of management, they should create more demanding conditions for economic activity and decisionmaking in economic matters at all levels of management during the Seventh Five-Year Plan.

Purpose of Pricing According to the Set of Measures

Further improvement of the planned management system of the national economy concentrates on achieving substantial progress in increasing the effectiveness and efficiency of the economy, mobilization of our export potential and more intensive participation in international division of labor.

Calculation of economic advantages of planned measures and their implementation must become an integral part of decisionmaking process at all levels of management and in all areas. This lays down certain fundamental requirements for prices which must:

a. become a more accurate and stricter criterion of measuring the efficiency of social labor expended. This requirement can be met particularly by:

--more flexible adjustment of the price level and price relations to the development of domestic and external economic conditions of the national economy;

--objectification of domestic prices of products by the application of criteria ensuing from international division of labor;

b. promote economy in production, development of products with high technical standards and quality, and also effective changes in the production programs by:

--applying the price and cost limits also to the newly developed products and production technologies;

--enforcing such methods of price-setting which will determine the proper price level and correct relations between the prices of new products from their social useful value;

--broader use and increased effectiveness of price incentives;

c. effectively prevent economic organizations from "complying" with the qualitative indicators by means of prices and contribute to the observance of state economic discipline.

Planned Measures for Improving of Pricing System

1. More Realistic Evaluation of Material Inputs

The basic price measure planned for the Seventh Five-Year Plan which will provide appropriate economic criteria, corresponding to the economic conditions of economic development in the forthcoming period, is the increase in the wholesale prices of fuels, energy and some raw materials, and its projection into the prices of products in the technologically interrelated stages. This will be reflected in the anticipated increase in the purchase cost of imported and domestic resources during the period of the Seventh Five-Year Plan. This measure will be implemented in such a manner that the prices will not only reflect the trend in the socially necessary costs, but also exert effective pressure for economy and most effective use of fuels and energy, and raw and industrial materials in the processing industry.

In connection with the comprehensive revision of wholesale prices on 1 January 1977, which resulted in the average 52 percent increase in the prices of a basic set of raw materials, and partial increase in the wholesale prices of certain types of fuels and energy on 1 January 1979 (heating oils and coal for power plants by 7 percent, electric and heat energy by 3 percent), the level of wholesale prices of fuels and energy will be raised on the average by 49 percent during the Seventh Five-Year Plan (in comparison with the 1978 prices).

This increase will be effected in two ways:

a. during the 1980-1985 period, the wholesale prices of all domestic and imported fuels and energy (coal for power plants and coking coal, coke, heating oils, natural gas and gas for lighting, electric and heat energy) will increase 2 percent every year. As in 1979, the effect of this increase on the users will not in principle be reflected either in the prices of their products or the planned value indicators (cost, profit). This price measure will thus--together with other tools of management--exert economic pressure on the users and impel them

to the gradual reduction of standard consumption of fuels and energy, their more economical use or to offsetting of price increases by economizing in other areas. As a result, there will be by 1985 a general increase in the wholesale prices of solid and liquid fuels by 19 percent, of electric and heat energy by 15 percent, of gaseous fuels by 12 percent (in comparison with 1978), while some rates of railroad freight transportation will increase in 1981;

b. moreover, simultaneously with the above measure, there will be on 1 January 1981 a single, nonrecurring increase in the wholesale prices of all imported and domestic fuels, energy and some raw materials (for example iron, manganese and chromium ores, molybdenum and tungsten concentrates, zinc, tin, lead, aluminum oxide, crude oil and products refined from it, and ammonia). This increase in the wholesale prices (together with the increase in the wholesale prices of other raw materials such as natural rubber, hides, fibrous asbestos, fluorite, but also of other so-called imports and rates of freight railroad and river transportation) will, as of 1 January 1982, be reflected in the wholesale prices of ferrous, nonferrous and engineering metallurgy, secondary metallurgical production, building materials as well as in other sectors (groups) consuming considerable amounts of raw materials and energy. This one-time increase in the wholesale prices of fuels, energy and raw materials will exceed 30 percent.

In addition, the wholesale prices of precious metals (gold, silver, platinum, palladium, rhodium, and indium) are being increased by 171 percent on the average in 1980 and this increase will be reflected in the interrelated groups of products. On the other hand, the wholesale prices of synthetic fibers are reduced by 13.5 percent on the average which will be reflected in the prices of products of textile and garment industries. The consequences of these price changes will be reflected in the respective sections of the national economic plan.

All production sectors which consume them must participate in offsetting this substantial increase in the prices of materials. Moreover, the effect of these changes must be increasingly compensated for by the higher prices of our products exported to foreign countries (improvement of exchange relations, reduction of the cost of earning hard currency, and stabilization of rates of exchange), and every production sector must continue to explore the possibilities of mitigating the impact of these changes on the domestic prices by reducing its excessive profit and planned costs. Only with such a procedure can the increase in the general level of wholesale prices be reduced to 8 to 9 percent, though with a varying price trend in individual sectors, branches and groups of products.

This one-time revision will affect the wholesale prices of approximately two-thirds of the products of the national economy. At this point, the new price lists have been completed for approximately one-third of the products for which the prices change. The organizations, price coordinators and central agencies must pay extraordinary attention to the price lists which still have to be published. Not only that, the substantial increase in the wholesale prices will change the views on what is or will be profitable for our economy. For this reason, the economic organizations should take into account these changes when determining the value criteria (regardless of their gradual application) already in the preparation of plan estimates for 1981 and the Seventh Five-Year Plan. It is necessary also to prepare without delay the pertinent technical and organizational measures for rationalization of consumption and for the more

efficient utilization of fuels, energy and raw materials. Ability or inability of the economic organizations in this respect will be reflected in the economic results, value added and other qualitative indicators. By its consequences (according to the Set of Measures), it will more directly affect the economic development of organizations and will be more markedly reflected also in the monetary incentives for the managerial personnel and work collectives.

For the same reasons, the organizations must pay attention to the planned revisions of central price regulations of imports: these regulations cover 55 percent of the total import volume at the present time. Although these regulations will remain essentially unchanged in the future, the number of items with regulated prices will be limited to those which are most important from the standpoint of the national economy (at the same time, the rates of the actual price equalization will be made more flexible). The domestic users will thus buy imported products for manufacturing consumption at the fluctuating purchase prices on a larger scale.

2. Application of Cirteria of International Division of Labor in Evaluation of Production Process Outputs

Apart from consistent economy in consumption of increasingly more expensive and less accessible imported and domestic raw materials, the principal way to mitigate the effect of the increase in their [illegible] prices is the most effective use of raw materials for manufacture of products with high technical standards and quality. We cannot waste raw materials for manufacture of sub-standard or standard products, and the goal of innovations must be to produce competitive, top quality products. Only then can we anticipate their economically successful sale on the foreign markets.

A more substantial change in this respect can be achieved only, if production will take into account not only the technical requirements of world markets (technical standards, quality, design and assortment), but also the economic parameters, that is the price attained.

Commenting on this matter at the nationwide work conference mentioned above, CSSR Premier L. Strougal stated: "Though it cannot be carried out at once, the transition to world prices is an economic and political necessity. Only thus can conditions, criteria and motivation be created for management on the level of prominent producers both in the socialist countries and the rest of the world."

The higher adaptability of our economic organizations to the changing value criteria abroad will be achieved not only by the material inputs. It is imperative to adopt more consistently than in the past also the criteria used on the demanding foreign markets for measuring costs and social utility of outputs, and thus to control the technical, technological and economic development in our enterprises.

The approved Set of Measures assumes that closer links between the foreign and domestic prices will be established in all areas of the pricing system. The solutions of these problems and their incorporation into the implementation procedures will be gradual and extraordinarily demanding. This will apply in the first place to the sectors exporting a major part of their production (including the

respective subsidiary sectors), to the area of price limits and price incentives, and gradually also to price-setting and price revisions. The point is that the evaluation of innovations at wholesale prices must match their evaluation on the demanding foreign markets and that the differential export indicator must not deteriorate. In principle, we must strive to have the varying profitability of products at wholesale prices be bilaterally commensurate to their profitability in external economic relations. A basic precondition for the effective solution of these problems is the implementation of respective measures in the financial, economic and currency area.

3. Improvement of the Pricing System, Price Incentives and Price Control

Further progress must be achieved in setting the prices of new products. The emphasis must be placed on working out methods and ways which will direct innovations to the high social utility value of products. The best implementation of such an approach will be the application of parametric and normative criteria in the introduction of comprehensive and group prices in additional areas. To achieve this objective, agreement must be reached with individual ministries on bringing up-to-date the obligatory methods of price-setting. In this context it is assumed that by these up-to-date methods of price-setting the price system as a whole will be made more realistic.

The point of departure for the improvement of pricing of new products is the wider application of price and cost limits which ensure a consistent application of economic criteria as early as in the research stage and throughout development of products.

Further improvement is necessary also in the area of price incentives, whose rules were amended in 1978 on the basis of experience gained in the implementation of the Comprehensive Experiment, in the following respects:

--reciprocity must be achieved in price incentives because the increase in the funds resulting from preferential pricing has not corresponded to the trend in penalty price reduction in recent years.

	1978	1979	1979/1978 Index
	(Million Kcs)		(%)
Preferential pricing	1,312.1	2,126.9	162.1
Penal price reduction	216.5	260.6	120.4

This will call for new measures in the area of both preferential pricing and penalty price reduction, evaluation of products and pecuniary incentives. They must aim at:

--a more detailed elaboration of reasons for the preferential pricing of technically progressive and high quality products. Prices incentives based on the effectiveness of exports must be objectified and differentiated in both directions. In special cases, efficiency of exports can be used as an independent criterion for price incentives;

--a more thorough evaluation of products by testing laboratories of individual ministries, increased capacities and revised, more up-to-date rules of evaluation of technical progressiveness by the central agencies directing technical policy;

--application of surcharges on and reduction of base prices instead of preferential pricing and penalty price reductions, respectively;

--essentially not changing either the maximum scope or principles of interlinking price incentives with the incentive system and methodology of planning.

Price control will be intensified in the following respects: more emphasis will be laid on its prevention; it will concentrate on the main provisions of price measures and particularly on capital investment; control actions will be better coordinated particularly in regard to VHJ [economic production units]; additional levies and sanctions will be more strictly enforced.

4. Improvement of Methods and Tools in Revising Wholesale Prices

In connection with the implementation of price revisions in the first half of the Seventh Five-Year Plan, material problems of the Seventh Five-Year Plan and methodological and organizational conditions created in accordance with the Set of Measures in other areas of management, a concept will be worked out for rationalization of the price system after 1982. If the unfavorable trend in the exchange relations in our foreign trade continues, it will be necessary to revise and bring up-to-date the wholesale prices of additional raw materials during the second half of the Seventh Five-Year Plan and to make preparations for the rationalization of wholesale prices of raw materials for the Eighth Five-Year Plan. Moreover, the price revisions in the processing industries will promote a speedy application of scientific and technical achievements, increased output in new production capacities in accordance with the state target programs, and more accurate reflection of production profitability in wholesale prices.

Together with the improvement of long-term plans of development of prices approved by the government, a system of operational changes in wholesale prices will be verified. Obviously this will be necessitated by the need for more flexible changes based on the relative profitability of products in combination with the value added indicator.

The implementation of the above improvement of the price system is closely related to the creation of necessary preconditions in other areas of management. This primarily applies to the introduction of the systems forecasting of trends in the foreign prices of imports and exports; planning of costs by sectors; improvement of norm-setting, records, calculations, and evaluations of products; wider use of typification and standardization; following up of actual prices in relation both to the planned price revisions and price changes not anticipated by the long-term plan; elaboration of simpler methods of projecting the differences produced by the price changes into the indicators of the national economic plan, and so on.

It is clear that precisely the prices are one of those areas in which the implementation of tasks listed in the Set of Measures should cast more light on the results achieved by the enterprises as well as on the standard of their management. As pointed out by G. Husak, general secretary of the CPCZ Central Committee, in his concluding statement at the 15th Plenary Session of the CPCZ Central Committee: "...the enforcement of these criteria will not always be popular and easy, but the interests of the society require that we do not moderate them."

10501
CSO: 2400

DOMESTIC FLIGHT PRICE INCREASE ANNOUNCED, EXPLAINED

AU201313 Prague RUDE PRAVO in Czech 17 Oct 80 p 2

["IS"-signed report: "Part of the Rationalization of Transportation; On the Adjustment of Tariffs for Domestic Air-Routes"]

[Text] Prague, 16 Oct--At a press conference held in the office of the CSSR Government Presidium Building representatives of the Ministry of Transportation reported on the adjustment of tariffs for domestic air transportation. The new prices go into effect simultaneously with the introduction of the winter flight schedule on 1 November 1980.

The average price increase is, in comparison with the previous tariffs, 100 percent. It is lower for flights to more remote places. An air ticket from Prague to Bratislava, for instance, will cost KCS360 and from Prague to Kosice KCS480. The reduced tariffs for flights on Saturdays, Sundays and holidays are being abolished. The reduction of the price of air tickets for those traveling to Spas will remain in force and will amount to 20-30 percent. Flights from Prague to Gottwaldov, Piestany, Zilina, Brno and flights on some other routes will be limited. More detailed information will be given by the Czechoslovak airlines offices.

The last adjustment of prices of air tickets for domestic transportation was carried out in 1969. The operational costs of air traffic have increased significantly in the 11 years since then. The purchasing cost of the new types of airplanes that were introduced within the framework of the renewal of the Czechoslovak airlines' aircraft pool is almost 3 times higher than that of, let us say, the Ilyushin 18. The cost of air fuel has increased 110 percent since 1969 and it is anticipated that it will continue to grow. The sum of all these factors has been causing a considerable loss in the operation of domestic routes since 1975. Last year the loss amounted to KCS182.5 million.

In 1979 the subsidy for air tickets amounted, for instance on the Prague-Zilina route, to KCS583 per seat (the previous cost of the ticket was KCS210); on the Prague-Uherske Hradiste route to KCS285 (KCS150) and on the Prague-Bratislava route to KCS257 (180). A comparison of air traffic with other forms of transportation illustrates its high demands on fuel consumption. To transport a single person 1,000 kilometers by plane an average of 151 kilograms of standard fuel are needed. For bus transportation the figure is 16 and for electrified railroad transportation only 5.

The above comparisons show conclusively which forms of transportation must be given priority in the interest of the overall rationalization of transportation. Other countries, too, are dealing responsibly with this situation. The losses accrued from domestic air transportation in Hungary and in the GDR led to its complete discontinuation. The adjustment of the tariffs and the limitation of air traffic affects the traveling public only to a negligible extent. So far almost 95 percent of air tickets have been used for official business.

More extensive use of other means of transportation offers compensation for the limited operation of domestic air routes. The completion of the entire expressway section from Prague to Brno, which will officially be put into operation on 8 November, will improve and speed up road transportation to Brno. Special bus routes using modern and especially equipped buses have been prepared that will make up for the limited air traffic in that direction. They will be linked to supplementary routes.

Railroad traffic entails greater difficulties. Express trains arrive with considerable delays and are fully booked. That applies, above all, to the routes across the republic--to the Kosican, Vihorlat and Moravan express trains. The transportation section will have to seriously consider these issues, to ensure that the complex of rational public transportation offers good services.

CSO: 2020

BRIEFS

PRAGUE-HAVANA NONSTOP FLIGHTS--As announced by a Czechoslovak Airlines representative at a press conference held in Havana, Cuba, the Czechoslovak Airlines will commence nonstop flights between Prague and Havana beginning 1 November 1980. The new route flown by Soviet-made IL-62 airplane will take only 10 hours, compared with the old route via Montreal which takes 12 hours. [Prague MLADA FRONTA in Czech 25 Oct 80 p 5]

CSO: 2400

TRANSPORTATION SYSTEM GOALS FOR 1981-85 PLAN OUTLINED

East Berlin DDR-VERKEHR in German Vol 13 No 9, Sep 80 pp 292-295, 298

[Article by Dr Wolfram Paetzold; Heinz Glaeser, geographer; and Udo Seidel; all with Planning Department, GDR Ministry for Transportation: "Results of the Conceptional Work in the Transportation System--Important Prerequisite for the Formulation of the 1981-85 Five-Year Plan." Words and passages in slantlines printed in boldface]

[Text] 1. The Long-Term Conceptional Work of the Transportation System--Objective Requirement in the Development of the Advanced Socialist Society in the GDR

In regard to the further organization of the developed socialist society in the GDR, it is absolutely necessary further to develop the long-term economic planning in preparation for the five-year plans. The standards, the rate of development, the growing interdependence of all sectors of society and the qualitative changes necessitate decisions that over extended periods must be the government's economic policy guideline and thus the basic strategic principle for several five-year plans. This is all the more necessary, since the progressing socialist economic integration of the CEMA member states' national economies on the basis of objectively operative laws calls for agreeements on the problems to be solved--agreements that will extend over a period of 10 to 15 and more years. The joint construction and operation of the "Friendship" natural gas pipeline which assures for decades the European CEMA countries' supply of natural gas is an impressive example of long-term plan decisions.

Only through long-term agreements will it be possible to insure a steady supply of raw materials and energy for the CEMA countries. To safeguard accomplishment of such strategic tasks, long-term plans concerning the necessary funds and expenditures have priority.

It goes without saying that this also requires a--correspondingly long-term--development of the CEMA states' transportation systems and capacities. Thus the integration of the work required for expanding the international links in the long-term conceptional work of the transportation

sector has absolute priority. In this regard, the primary objectives are the expansion of the transit routes and railroad border-crossing points, the expansion of the international road network and the further development of the sea routes and inland waterways and of the air traffic routes. To safeguard international transportation up to 1990, the CEMA countries developed and adopted the target program for the development of the international transport routes.

The SED Program adopted in 1976 at the Ninth Party Congress contains the basic guidelines for the long-term development of the GDR transportation system. The program enjoins the transportation system to meet--by means of socialist intensification and increased efficiency--the economically necessary needs of the population and of the national economy in regard to passenger traffic and freight transport, systematically to carry out the tasks regarding socialist state security and those resulting from the socialist economic integration with the fraternal countries.

In regard to the formulation and specification of the long-term conceptions concerning the transportation system, the following long-term programs, which were adopted by the state and party leadership, represent important starting points:

--Program for safeguarding the supply of energy and raw materials for the national economy;
--housing construction program as the cornerstone of the long-term socio-political program;
--program for the development of the GDR capital, Berlin;
--plan concerning the geographic distribution of the productive forces, including development of the settlement structure and urban development;
--plan concerning the development of science and technology.

In addition, the long-term conceptions of the transportation system must take into account other important economic decisions, e.g. decisions concerning the expansion of the bezirk [GDR administrative unit] towns, the development of the construction sector, the further development of the combines in the national economy, and the development of microelectronics.

Significant long-term decisions were taken in regard to the transportation system itself, e.g. in regard to rationalization of the DR [GDR railroad], the expansion of maritime transport and harbor management, the development of the transport links between the GDR and the CEMA countries and of the links with the FRG. Finally, the long-term work of the transportation sector must draw on forecasts concerning population trends and transport needs and on scientific studies and plans concerning the development of technologies.

2. Function, Objectives and Points of Main Emphasis of the Conceptional Work in the Transportation System

The planning of the GDR transportation system is based on the objectively operative economic laws of the developing socialist society. The planning system comprises the objectives for the transportation sector as a whole and for the individual combines, enterprises and work collectives. Only in this way can the planning meet the requirements concerning the development of socialist democracy. In accordance with their function, a distinction is made between short-, medium- and long-term plan objectives. As a rule, the planning of transport work proper is done on a short-term basis, whereas the establishment of the material prerequisites for transport work calls for longer time spans and thus is the subject of long-term planning. The training and distribution of the workers--a prerequisite for their employment--likewise necessitates long-term planning.

In the transportation sector in particular, long-term planning is essential due to the longevity of the transport routes and buildings and the wide territorial range of the transportation networks with the resultant serious effects in regard to the sites of social production and the residential settlements. However, the procurement and employment of means of transportation also call for long-term developmental planning. The reproduction--in terms of volume and structure--of the large motor-vehicle fleets and rolling stock is another primary concern of long-term transportation planning.

For this reason, the long-term conceptions regarding the development of the transportation capacities over a period of 15 to 20 years are of great importance. The elaboration and formulation of the objectives of the five-year plans and annual plans is carried out on the basis of these long-term conceptions, which have helped to insure steady improvements in transportation efficiency and effectiveness.

In 1978, the "Conception for the Development of the Transport System"--a document that is of great importance in regard to the preparatory work for the 1981/85 five-year plan and that forms the foundation for long-term plans--was drawn up in the Ministry for Transportation (MfV). In contrast to the five-year plans, this conception is meant to provide general guidance, with decisions to be made for certain circumscribed problems. Of crucial importance is the determination of the course to be pursued in regard to the changes to be made, especially in regard to the qualitative improvement of certain aspects of the transportation process and the order of priority of the measures to be taken. Another important task of the long-term conceptional work is to show variants and alternative solutions and at the right moment to submit them to the decision-making organs. Identification of the right moment for a decision is of great importance. Thus, in connection with the construction of a new residential district in Northeast Berlin--which is scheduled to begin after 1985--the decision regarding the link-up to the capital's existing transportation network was made in 1979, which left sufficient time for preparatory work.

Decisions concerning the introduction of new technologies and means of transportation are likewise of great moment. Their consequences--over the next decades--must be determined and taken into consideration. We would like to adduce here a few examples concerning general qualitative improvements of the transportation system, which are to be prepared in the framework of the long-term conceptional work and then submitted to the decision-making organs:

--Traction conversion of the DR [GDR railroad] and determination of the ultimate respective shares of electric and diesel traction;
--development of the DR freight car stock and its composition, e.g. ratio of special to general-purpose railroad cars;
--development of container transportation; expansion of the terminals and procurement of the specialized means of transportation;
--introduction of EDP technology in the transportation system;
--expansion of the seaport of Rostock and of the DR feeder routes;
--expansion of the Berlin-Schoenefeld airport;
--development of the air service in GDR agriculture;
--determination and specification of the expansion parameters of the major transportation networks in accordance with the economic requirements;
--determination of the DR's volume of new construction of freight cars, passenger cars and containers;
--provisions concerning the construction of new railroad lines, highways and other important transportation projects.

These few examples are to illustrate the great impact on the long-term reproduction process of the transportation system and the national economy.

The long-term conceptional planning must disclose the dialectical correlation of the processes from their beginnings to the end and it must provide the decision-making organs with reliable data. Thus the long-term conceptional plans must be based on analyses covering sufficiently long periods. Through thorough study of the developmental factors, experience and new requirements, it will be possible to formulate realistic, mobilizing and efficiency-promoting tasks.

The following representations are concerned with certain theoretical aspects of long-term planning as a stage in the planning work. Aside from the principles applying to the five-year plans and annual plans, there are a number of special factors that must be taken into consideration in the elaboration of long-term plans. Long-term plans are characterized above all by the following three principles:

Safeguarding of
--continuity
--overall integration
--optimization.

/Continuity/ means--among other things--to insure a smooth transition between the individual five-year plan segments and not to permit any imbalance.

Experience has shown that it is very difficult to mesh the long-term plans with the current five-year plan. Frequently, there remains a large gap between the tasks of the last year of the five-year plan and the complex tasks of the following first year of the long-term plan, which in part results from insufficient consideration of the material possibilities and other concrete realities. It is therefore necessary to insure continuous annual feedback and also specification of the plans and tasks so as to safeguard continuity from the present to the objective pursuit.

Another principle is the enforcement of /overall integration/ of the long-term plans. Practical experience has shown that it is not sufficient to draw up and adopt programs or conceptions only for certain selected fields. We must also insure comprehensive coordination and systematic integration in the sector's entire reproduction process. Only in this way will it be possible to make an appropriate and optimal decision concerning the use and order or priority of the funds and of the public labor resources.

Finally, in regard to enforcement of the principle of /optimization/, it is important that we recognize maximum stable utility as the main criterion of every long-term plan. The objective is to meet the transportation needs with the lowest possible economic input. In this regard, we must not merely focus on certain individual aspects of efficiency; our decisions must be oriented toward overall integration. Thus it was justly resolved years ago to approve the modernization of the trolley lines as an optimal solution for suburban transportation in the GDR. Subjective proposals concerning expensive and uneconomical--albeit effective--monorail and cabin shuttle systems were rejected. To insure a proportionate and balanced development, the optimization of the GDR transportation system must be the primary criterion for all decisions.

In contrast to the five-year plans, the long-term plans of the transportation system cannot take into account /all/ details of the reproduction process. For example, the financial targets are not detailed in advance for 10 to 15 years. Consequently, it would not make much sense to draw up for the transportation system a net profit plan or plans detailing the individual employee's wages or salary. It is the qualitative aspects that determine the focus of the technical-economic tasks. It is imperative that we establish the main lines of development and identify the areas of main emphasis.

In accordance with the tasks specified, long-term transportation planning calls for special procedures and a special target nomenclature that must agree with the procedures employed for the five-year plans. It is essential that the tasks and objectives of the long-term plans can be expressed in terms of plan targets of the individual economic entities, since otherwise

it would be impossible to verify their implementation and they would thus remain ineffective. While verbal formulations concerning the orientation and focal points of transportation policy are important and necessary, especially in regard to the clarification of basic positions, they require target- and sector-related complementation and concrete specification of the tasks of the economic entities and thus of the collectives.

The following target groups are necessary in regard to isolation of objectives from the long-term plans:

--Volume of freight transport and passenger traffic;
--development and utilization of capacities;
--targets for science and technology concerning qualitative improvement of production;
--investments, construction shares, equipment, priority projects;
--demand for and consumption of energy and raw materials, broken down by key items; material input per M 100 of commodity output;
--demand for and utilization of public labor resources, manpower, high school graduates;
--commodity production, net output, labor productivity, capital input;
--valuta targets for exports, imports and services;
--areas of high transportation density in the national economy.

To identify qualitative changes of standards, it is necessary to include in the long-term plans targets that also appear in the annual plans and that are listed in the master summary sheet (e.g. freight car turnaround time). This is especially important, because the development of qualitative factors plays an increasingly significant role in the transportation system.

In regard to the procedural approach, one should point out that a crucial prerequisite for advance planning is the thorough analysis of past processes, i.e. an analysis that considers not only their individual developments, but also their interrelationship and general framework. Only in this way will it be possible to work out a complex, practicable strategy in which the significance of the individual tasks derives from the overall objective. Experience has shown that it is easier to determine what forces are to be concentrated on what targets than simultaneously to decide what consequences this will entail in regard to the postponement or abandonment of other tasks. For example, it is quite clear that a continuing concentration of road construction capacities in one bezirk [GDR administrative unit] is bound to entail a reduction of the rate of construction or of capacities in other bezirks.

In the system of transportation planning, the following long-term plans have proved successful:

1. Conception concerning the development of the GDR transportation system--a basic strategic document.

2. Long-term plan conception developed by the Ministry for Transportation for three five-year plan segments--the most important coordinating plan document, which serves as a general guideline for the transportation branches and bezirks.

3. Long-term programs for key objectives in the field of rationalization such as
   --electrification
   --seaport transshipment
   --application of microelectronics
   --expansion of the DR's double-track lines.

4. Master transportation plans of the bezirks and cities.

5. Developmental conceptions of the branches, combines and enterprises on the basis of basic guidelines concerning the main lines of development and the general framework in accordance with the principal plan documents.

It is essential that the entire conceptional work be centrally controlled in accordance with the documents concerning the development of the GDR economy so that each sector can be optimally integrated in accordance with the interests of society as a whole. Thus in domestic transportation, the division of labor among rail transport, motor transport and inland navigation must not be based on the development of the individual carriers; rather, it is based on the freight transport requirements of the national economy and is determined in consideration of the objective to organize the freight transport system as efficiently as possible. In this regard, energy consumption is an increasingly important factor. As is well known, the specific energy consumption in motor transport is three to four times as high as the energy consumption in rail transport. Thus a key objective is to carry out long-distance haulage by rail instead of motor transport.

In regard to the elaboration of long-term plans, comparisons with the international level are another means of formulating ambitious targets. Naturally, it will not always be possible to produce internationally competitive results in all sectors of the GDR transportation system. The crucial task is to try to realize the maximum efficiency attainable under the conditions prevailing in the GDR and to coordinate the measures taken in the gradual organization of a unified transportation system for the CEMA countries.

3. Development of the GDR Transportation System As a Result of the Conceptional Work in Preparation for the 1981/85 Plan Project

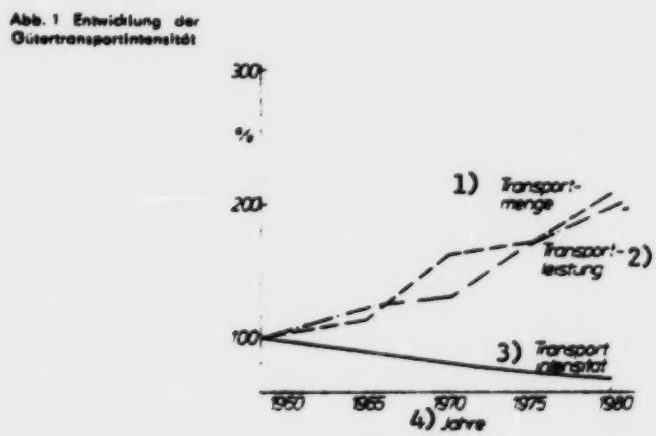
In the long-term conceptional work that is carried out--both on the ministerial level and in accordance with the "Decree on the State-Owned Combines, Combine Enterprises and State-Owned Enterprises" (GESETZBLATT [Legal Gazette] Part 1, No 38, 3 Nov 1979)--in the combines and enterprises,

the ascertainment and determination of the economy's requirements in regard to freight transport and passenger traffic represents a crucial target variable.

The 10th and the 11th session of the SED Central Committee established the main lines of economic development for the 1980's. Special emphasis was placed on the necessity to curtail the specific consumption of raw materials, energy and materials. For the national economy, transport costs are production input, which must be kept as low as possible. Thus, following up on the 10th session of the SED Central Committee, the Ministry for Transportation submitted "Proposals Concerning the Reduction of the Economy's Transportation Input."

In consequence of the continuous development of the national economy, the total volume of domestic transport increased 142.0 percent during the period from 1970 to 1979. The cost of this transport work is nearly equivalent to the cost of the electric energy consumed by the producing sectors. Consequently, in order further to intensify social production and to meet the socially necessary, absolutely growing transport requirements, it is necessary to curtail the transport requirements per unit of distributable end product, i.e. to reduce the transport intensity (Figure 1).

Figure 1. Development of Commodity Transport Intensity



Key:

1. Transport volume
2. Transport efficiency
3. Transport intensity
4. Years

The curtailment of the specific transportation expenditures is economically as important as the curtailment of the specific material and energy input. Through the "Decree on the Reduction of the Economy's Transportation

Input" of 26 July 1979, the Council of Ministers established the concrete targets for reducing by 3 percent the specific social expenditures on freight transport.

The implementation of the above-mentioned decree of the Council of Ministers is a significant intensification factor both for the freight-dispatching enterprises and for the transportation system.

Through the transport optimization in the ministries for
--coal and energy
--construction
--chemical industry,
it was possible to reduce the volume of transport services for selected types of goods.

Within the framework of these objectives, the target for the coming five-year plan for the period from 1981 to 1985 is to reduce the planned 1980 transport volume of 153 ton-kilometers per M 1,000 of GNP to at least 134 ton-kilometers per M 1,000 of GNP. This calls for further improvements in the economic transportation planning and for implementation of the resolutions concerning reduction of the transport volume in all sectors of the national economy.

These objectives can be attained only through close socialist cooperation between the transportation system and the transportation client. The conceptional and organizational prerequisites for the implementation of these objectives have been established. It is now necessary actually to meet the targets set.

At present, the public transportation system, including passenger traffic, accounts for approximately 20 percent of the GDR's total energy consumption and for two-thirds of the total consumption of diesel fuel. Thus the transportation system occupies third place among the energy consumers of the GDR economy.

The motive power used to propel vehicles accounts for 80 percent of the energy consumed by the transport sector.

The necessity to effect energy savings of 3 to 4 percent per year forces the transportation system to re-examine the division of labor among the different carriers. It will be necessary to accelerate the development of the profitable and energy-efficient carriers--inland navigation and rail transport--and to maintain at the same level or reduce the volume of motor transport (Figure 2).

Energy economy is an increasingly crucial prerequisite for the further development of the division of labor in the transport sector. Much more than ever, energy economy is the determining factor in regard to the efficient allocation of transport jobs to the various carriers. Aside from

Figure 2. Development of GDR Domestic Freight Transport

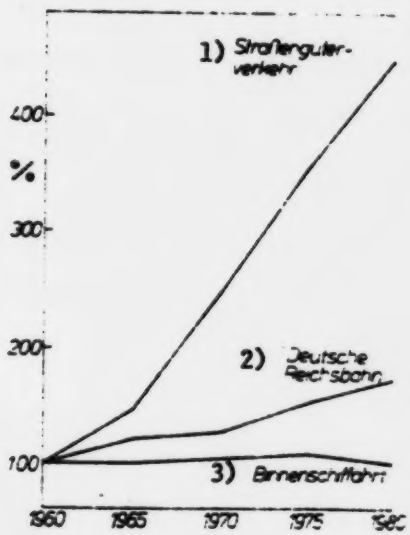


Abb. 2 Leistungsentwicklung im Binnengüterverkehr der DDR

Key:

1. Motor freight transport
2. German Railroad
3. Inland navigation

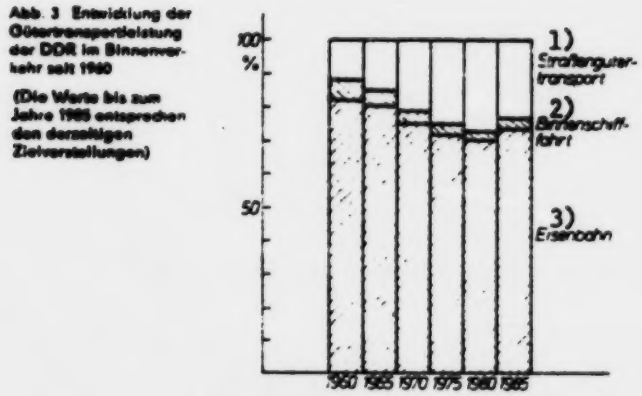
inland navigation, it is electric rail traction in particular that has turned out to be energy-efficient. Consequently, efforts are being made to expand as much as possible the capacities of these carriers. According to calculations, the energy consumption per 1 ton of freight hauled by motor transport, by rail, and by inland navigation can be expressed by the ratio 3 : 1 : 0.8. The directive passed by the Ninth SED Congress on the 1976/80 five-year plan stated: "It is the responsibility of the transportation system to meet the continuously growing demand of the population and the national economy in regard to passenger traffic and freight transport." This means that in order to meet the transportation and haulage requirements, it is necessary to establish the /economically most efficient division of labor/ among the various carriers. The establishment of an optimal division of labor is a permanent concern at all planning stages.

In the coming years, it will be necessary significantly to improve the efficiency of the railroad system and of inland navigation. Thus according to present plans, the share of rail transport in domestic freight haulage is to rise by 1985 to approximately 73 percent and the share of inland navigation, to approximately 3 percent. To meet these targets, the German Railroad will initially have to take over 10 million tons of goods from the

long-distance motor transport sector. By 1985, inland navigation—the most energy-efficient carrier—is to double the average annual increase attained during the period from 1976 to 1980.

Due to the performance increases effected by the individual carriers, it will be necessary more efficiently to utilize the available transportation installations and capacities. As a result of the intensified further consolidation of the material-technological foundation of the carriers German Railroad, maritime and harbor shipping, and inland navigation, the prerequisites for an optimal division of labor have been established (Figure 3).

Figure 3. Development of GDR Domestic Freight Transport Since 1960 (The values up to 1980 are in keeping with present targets)



Key:

1. Motor freight transport
2. Inland navigation
3. Railroad

As is the case in the freight transport sector, it is necessary to establish a more efficient division of labor in the passenger traffic sector. In regard to passenger traffic, the primary objective is to safeguard and qualitatively improve the commuter traffic for workers and students and the tourist traffic and to establish transportation links with new residential districts.

In accordance with the stipulations of the housing construction program, during the period from 1981 to 1985 new residential districts comprising a total of 450,000 apartment units must be linked up to the existing transportation networks, preferably by means of rail vehicles. The railroad will be developed in such a way that motor transport services over long distances can be taken over by rail transport. At present, studies are being carried out to ascertain to what extent buses can expediently be used as means of local transportation.

It is only through socialist rationalization and on the basis of the findings of science and technology that these objectives for the 1980's can be attained. Consequently, the research and development work of the transportation system focuses on socialist rationalization. In keeping with the role of rail transport and maritime and harbor shipping in domestic and international transportation, the scientific-technological work is primarily concerned with rationalizing these sectors. Among the focal points of scientific-technological work for the period from 1981 to 1985 are the following:

--Acceleration of the rate of electrification of the DR;
--accelerated equipment of DR tracks and stations with efficient blocking and telecommunications systems;
--rationalization of the seaport transshipment and throughput processes;
--continued expansion of the DR's double- and multitrack lines;
--mechanization of the DR switching yards;
--rationalization of motor freight transport by means of optimization.

In regard to freight transport and in the rationalization of the transshipment processes, the scientific-technological work is oriented toward reduction of transportation expenditures and toward increased utilization of reserves so as to improve transportation quality, reduce freight losses or damage, and increase the degree of mechanization of the transshipment work.

The scientific-technological work in the passenger traffic sector focuses on the following areas:

--Continued technological improvement of the passenger transportation and dispatching processes and preparation of the use of efficient technological devices;
--elaboration of complex, technical-organizational measures aimed at improving traffic safety, including the technical installations required;
--development of automatic reservation systems.

To attain the efficiency targets in regard to material and energy consumption, the following measures are planned:

--Increased use of electric traction by the DR;
--further development of the division of labor among the carriers in favor of rail transport and of the relatively increased use of inland navigation in mass freight transport;
--reduction of deadheading for all carriers;
--increased use of electric means of local transportation;
--use of microcomputers as on-board calculators to insure the most energy-efficient operation.

4. Summary Conclusions Concerning the Preparatory Work for the 1981/85 Plan

Through the variegated work carried out in the Ministry for Transportation, in the bezirk and city councils, in the combines and, in particular, in the research institutions, significant progress has been made in regard to definition of the crucial tasks of the transportation system for the period from 1981 to 1985. As a basic integrating document, the "Conception Concerning the Development of the Transportation System Until 1990" has been of great value. Furthermore, the results produced in connection with the work on the CEMA target program for the development of transport routes were incorporated in the 1981/85 plan project. Finally, the master transport plans of the bezirks and cities have served as a basis for the development of the locally controlled transportation system.

As a result of the development of the national economy, the transportation system will be confronted with the following tasks during the period from 1981 to 1985:

--In collaboration with the transport-intensive transportation clients, the specific transportation expenditures must be reduced--through optimization and norms--to the economically required level. The passenger traffic sector must make greater use of railed vehicles to meet the transportation needs of the population.

--To reduce the specific energy consumption, it will be necessary to accelerate the development of electric traction in the railroad system and in urban and suburban transportation and to establish an optimal division of labor among the carriers.

--The scientific-technological work and the rationalization efforts must be concentrated on the reduction of the specific transportation expenditures and on labor and working time economy. The individual transportation sectors must incorporate the latest scientific-technological findings in the five-year plan and the annual plans.

--The policy giving priority to improvement of the efficiency of the railroad system, of maritime and harbor shipping and of inland navigation will be pursued further.

Generally speaking, one can safely say that the successful development of the transportation system must and can be continued in the coming five-year plan period. The introduction of new technologies, the expansion and modernization of the infrastructure, the procurement of new transport containers and transshipment machinery, and the rationalization of transport, construction and industrial production require--aside from scientific analyses--above all the creativity and initiatives of the transportation workers.

8760
CSO: 2300

WEST GERMAN ANALYSIS OF GDR COMBINE SYSTEM DEVELOPMENT

Cologne DEUTSCHLAND ARCHIV in German Vol 13 No 9, Sep 80 signed to press 22 Aug 80 pp 929-942

/Part I of 'Analyses and Reports' feature article by Kurt Erdmann and Manfred Melzer: "The New Combine Decree in the GDR -- Possibilities and Limits of the Productivity Stimuli of the Newly Formed Combines." Subsequent parts will be translated and published in this JPRS series as they appear. A translation of the combine decree cited in footnote 1 is available in JPRS 75361, 24 Mar 80, EAST EUROPE REPORT: POLITICAL, SOCIOLOGICAL AND MILITARY AFFAIRS No 1774, pp 44-75. Translations of articles and laws cited in other footnotes are published in indicated JPRS issues of EAST EUROPE REPORT: ECONOMIC AND INDUSTRIAL AFFAIRS: Footnote 26, NEUE JUSTIZ article by Klinger -- 75167, 20 Feb 80, No 1981, pp 20-25; footnotes 34 and 94, EINHEIT article by Friedrich and Kroemke -- 75132, 14 Feb 80, No 1980, pp 15-26; footnote 42, GESETZBLATT Balancing Order -- 75995, 7 Jul 80, No 2021, pp 76-115; footnote 44, both GESETZBLATT pricing orders -- 76061, 17 Jul 80, No 2025, pp 18-41; footnote 59, WIRTSCHAFTSWISSENSCHAFT article by Cerisch and Hofmann -- 73083, 26 Mar 79, No 1872, pp 13-40; and four EINHEIT articles cited in footnotes 67 (by Koziolek), 68 (by Kroker and Friedrich) and 73 (by Kroemke) -- all published in 76104, 24 Jul 80, No 2026, pp 34-65/

/Text/ The "Decree on the State Combines, Combine Enterprises and State Enterprises," dated 8 November 1979,[1] provided a legal framework for the revision in the organizational structure of GDR industry and construction that had been taking place since 1 January 1978,[2] relatively quietly at first and then with a great propaganda display.[3] The GDR views this reorganization as a further step "toward improving management and planning in the present phase" of a "continued structuring of the developed socialist society."[4]

The economic leadership in the GDR is concerned with two things here:

1. The establishment of combines with improved internal structures is intended to bring together all production units of importance to a single product group (including manufacturers of means of production) and to centralize other industrial management tasks as well (such as marketing and research).

2. With these combines -- as economic units of a higher order -- the attempt is being made to make planning more practice-oriented and bring it closer to production, to eliminate previous functional weaknesses and to achieve generally better results.

Taken together, they represent a tremendous task which -- in view of the abundance of industrial management problems involved in developing the internal structure of a combine -- is considerably easier to formulate than to realise.

The purpose and significance of the organisational changes made also become especially apparent when set against the backdrop of legal provisions that have preceded these changes.

I. Legal Provisions Concerning Enterprise Organisation

1. Survey of Organisational Provisions of the 1950's and 1960's

During the development phase of the system of central planning and control in the Soviet Occupation Zone of Germany of that time, the enterprises that had been socialised since 1946 possessed no legal competence of their own. Managed by various forms of administrative authority (legal entities), they remained dependent economic units.

It was not until the start of the 1950's that changes in the direction of relative autonomy began to be made, especially in some large-scale enterprises. Introduction of the principle of economic accounting made 1952[5] a crucial date in the development of basic criteria for a relative legal and economic autonomy on the part of VEB's throughout the GDR. Apart from various shifts in the state management pyramid, the basic principles of VEB organisation remained largely constant in the 15-year period between 1952 and 1967. Subsequent changes in the general regulations on enterprise organisation then took place at shorter intervals, every 6 years.

The "Decree on Tasks, Rights and Obligations of the State Production Enterprise," dated 9 March 1967,[6] superseded a number of supplementary regulations concerning the role of the VEB that existed at that time, regulations that derived from the 1950's and 1960's. Nevertheless, "the state production enterprise" was in 1967 still "...the most important socially and legally autonomous unit of material production" and "a collective of socialist working people."

Regulations for "large-scale enterprises" or "combines"[7] -- though the latter were certainly not very common, they had been in existence since the 1950's -- were written into this 1967 decree as special cases.

The "Associations of State Enterprises" (VVB's), glorified by Ulbricht as so-called "socialist trusts" in the initial period of economic reform after 1963 (New Economic System of Planning and Management of the Economy), took over important leadership functions for the VEB's placed under their authority. Nevertheless, the period of validity of the 1967 VEB decree remained solely a blueprint stage for a VVB decree[8] which, to be sure, for a long time was treated in economic practice as

existing law. "The autonomy of the enterprises and the stabilization of their rights, particularly their participatory powers, were a special concern"[9] of this draft decree. Moreover, the formation of "associated industrial establishments and combines"[10] had constituted an important charge since the Sixth SED Party Congress in 1963. As the result of further reform stages in the late 1960's (Economic System of Socialism), various resolutions and decrees issued between 1968 and 1970 regulated in particular the position and function of the combine, whose importance as an efficient "type of socialist enterprise," with a new organizational structure "like that of a trust" encompassing its affiliated enterprises, became increasingly more prominent.

2. Concerning the 1973 Decree on VEB's, Combines and VVB's

The "gradual formation and development of productive combines" was understood "as an essential element in the comprehensive application of the economic system of socialism,"[11] especially since these "parts of the system" made possible an efficient assignment and effective use of "productive labor."[12]

Especially under the increasing pressure of a stepped-up mobilization of enterprise productivity reserves, the combine as an organizational form continued to be accorded a "key position" even at the start of the 1970's, despite a change of course in economic policy instituted under Honecker.

Based on the economic theories of Karl Marx, conceptions of a simpler planning and control system covering a smaller number of large enterprises instead of a large number of small and medium-sized enterprises had already led to a true "gigantomania" in the early years of the Soviet Union.[13] As early as April 1918, in the draft of a plan for the reorganization of industry and Russia's economic ascendancy, Lenin called among other things for "a rational amalgamation and concentration in a few large-scale enterprises from the standpoint of the most modern large-scale industry, and especially the trusts."[14] This "special affinity between central administrative management and large-scale enterprise"[15] has determined organizational structure in GDR industry and construction, above all since the efforts toward economic reform of the 1960's.

Almost exactly 6 years after the 1967 decree on VEB's was issued, it and subsequent special regulations on combines were superseded by the "Decree on Tasks, Rights and Obligations of the State Enterprises, Combines and VVB's," dated 3 April 1973.[16] This new decree established for the first time, as "a coordinated body of law,"[17] a common, comprehensive set of legal regulations covering all essential enterprise forms in the industrial and construction sectors.

But at the same time, the "legal consequences" had been "drawn from the style of management oriented toward centralization"[18]; The renunciation of essential principles of reform -- thus also of enterprise rights dating from the 1960's[19] -- and the heightened trends toward recentralization since the beginning of the 1970's were reflected in commercial law as well.[20]

Some of the rights that had been accorded the enterprises were simply taken away and not replaced, while the already large share of enterprise obligations continued to increase accordingly.

The VEB decree of 1973 comprised a total of 47 articles, broken down into 4 main sections: First, the principles; then the tasks, rights and obligations of, first, the VEB's; second, the combines; and third, the VVB's. The major emphasis, however, was placed clearly on the VEB's, which were sometimes treated as analogous to the combine, the "large economic unit" (enterprise planning and economic management, for example).[21] Ten special articles contained regulations governing the peculiarities of the combines.

In contrast to the evaluation of the VEB in 1967 as "the most important social and legally autonomous unit of material production,"[22] the VEB, the combine and the VVB were now characterized as equal "components" of a "uniform socialist economy of the GDR."[23] Noteworthy, however, was the absence in the 1973 decree of the term "legal entity," although the economic autonomy and the "legal competency" of VEB's, combines and combine enterprises was expressly declared.[24] It was only later that this "legal competency" was interpreted as the "status" of a legal entity.[25]

It is "primarily ambiguities" in the use of this term that are offered today as the reason for this change, ambiguities which at that time "had not yet been eliminated in connection with treatises on legal theory."[26] For various reasons, the institution of the legal entity was fully restored in the 1979 combine decree.

3. Decree on the State Combines, Combine Enterprises and State Enterprises, 1979

The 1979 decree on combines, issued a good 6 years later, concentrates primarily on the combine as well as the enterprises, parts of enterprises and institutions that are subordinate to the combine (38 out of a total of 43 articles). Only a few regulations (four articles) are concerned with those VEB's that do not come under a combine. It became necessary to include these enterprises as well -- it says rather abruptly in one of the few commentaries on the combine decree published thus far -- "because their number is very great,"[27] even though the 129 presently existing combines (industry and construction) account for the major share of the GDR's production volume, with circa 90 percent.[28] The 1973 regulations covering the VVB's[29] still apply to the few remaining VVB's, which are "dying out."

The still strong centralist trend in the GDR's economic policy can be perceived merely in the change of emphasis in the title of the decree, for taking the place of the differentiation among "Tasks, Rights and Obligations" of the enterprises is the general "Responsibility" of the combine toward the national economy, manifested in the simple designation of a decree on "Combines" by the GDR Council of Ministers, one which regulates "the most important groups of tasks in the realization"[30] of this responsibility.

In 1967, the VEB was the "the most important unit of material production," but 12 years later, the combine constitutes the "basic economic unit of material production."[31]

The decree is broken down into six main sections. The first two sections (Arts 1-23) deal with the status, responsibility and tasks of the combine and its subordinate enterprises or parts of enterprises. It must be noted here that the question of the status of combine enterprises had been the source of great dispute for a long time in the discussions leading up to the decree.[32] The second section in

particular (Arts 9-23) provides a more detailed description of the essential tasks of the combine (for example, planning and balancing, science and technology, material economy, economic accounting, finances and prices).

A third section (Arts 24-30) chiefly regulates management powers and emphasizes the areas of responsibility already found in preceding regulations (including the responsibility of the general director, management organization and the combine by-laws).

Only the relatively brief fourth section (Arts 31-34) specifies the "status, management and tasks" of those VEB's that are not subordinated to a combine.

Provisions for the establishment, designation, merging and liquidation (shutdown of operations) of combines and enterprises make up the content of the fifth section (Arts 35-40). They were not in the 1973 decree but instead refer back to a regulation dating from 1968.[33] A sixth and final section (Arts 41-43) includes jurisdictional provisions and final clauses.[34] A "Decree on Keeping the Register of the State Economy,"[35] adapted to the new organizational structure, did not appear until 10 April 1980.

4. Follow-Up Regulations Relating to New Five-Year Plan Period

One result of the structural reorganization that has been under way since 1 January 1978 is a number of amended provisions in the area of both general as well as specific regulations pertaining to the economic mechanism. Although, as has been noted, the new decree took into account when specifying the tasks of the combines "that specific legal regulations with detailed norms existed for a number of sets of tasks"[36] (some of those mentioned were planning, balancing, investment activity, material economy, finances, prices, foreign trade, work organization, production cooperation), the corrections implemented since 1979 by way of new regulations nevertheless cover these aforementioned sectors in particular, having been tailored specifically to the new combines.

Some essential follow-up provisions pertaining to the organizational shake-up are listed here. The main ones to be mentioned are the "Order on Planning the Economy, 1981-1985,"[37] and the new "General Guideline for Planning in the Combines and Enterprises of Industry and Construction,"[38] covering the same period.

The "Financing Guideline for the State Economy,"[39] in effect since 1975, was superseded by a new version with the same title, dated 21 August 1979,[40] specifically adapted to conditions in the new combines.

In addition to a series of special supplements to basic rules relating to the combine decree, also playing an important role are the following decrees and regulations: A new "Head Bookkeeper Decree," 7 June 1979;[41] a new "Decree on the Balancing of Material, Equipment and Consumer Goods -- Balancing Decree";[42] new regulations in the area of assuring quality -- "Decree on the Development and Assurance of Quality Products"[43] -- and, above all, new regulations in the area of pricing and price control.[44]

Not the least important are moves toward improving performance evaluation (Council of Ministers' resolution) by introducing new index figures (e.g., net production).[45]

Work is still in progress on the correction of other significant rules for the new combines. Besides the reworking of regulations on accounting and statistics, chief mention should be made here of a new version of the Contract Law which has been under discussion for some time. Reportedly, an effort is being made in general "to preserve a certain measure of abstraction" in the new Contract Law "in order to be able to allow for future developments."[46]

The GDR is by no means alone within CEMA in its efforts at concentration in the form of large-scale enterprises. Similar changes can be observed simultaneously in nearly all CEMA countries.[47]

II. Anticipated Advantages from Combines

1. Previous Problems and Weaknesses of the System

The economic leaders of the GDR had sought vainly in the second half of the 1970's to correct through improved planning methods some of the deficiencies in the recentralization model developed in 1970 and 1971.[48] However, the sought-after standardization of procedural methods that was urgently needed to counteract excessive control[49] was offset -- wherever it had actually taken place -- by new, more precise and more comprehensive plan balance sheets that had been added. Overbureaucratization had thus increased noticeably.

Efficiency in the use of production factors has continued to be inadequate,[50] since manpower is being wasted in processes that have not been sufficiently mechanized, raw materials are not being used completely and equipment is not being used to full capacity. There is hesitancy in retiring obsolete installations;[51] in investment activity there is an increasing number of unplanned projects which should actually not exist at all,[52] and there is an increasingly greater impact from rising costs[53] Investments are being prepared inadequately, and their realization is taking too long -- technical progress is ultimately being implemented only sparingly. Playing a major part in all this is the problem of a lack of willingness by enterprises to innovate, but under existing rules for the use of profits, they are given no lasting incentive for innovations or for taking risks. The methods of efficiency planning[54] are similarly proving inadequate, since in view of sharp price distortions, no meaningful measure of efficiency is possible with a large number of index figures.

More and more serious management deficiencies are showing up as a relatively new problem. GDR authors list the following conditions as its external signs:[55] increasing underfulfillment of plan index figures; disruptions in production; declining growth rates; insufficient satisfaction of demand; increasing downtime; a rise in overtime hours; increasing numbers of special shifts; stagnation in the innovations sector; greater and greater dissatisfaction among employees and increasing complaints. In turn, the reasons for this are functional weaknesses that involve serious consequences: an information system which is oriented more toward the needs of central management and neglects the other management levels; overlapping decisionmaking jurisdictions of central authorities; a lack of feedback in the area of plan preparation; lack of coordination of interbranch relations; disinclination on the part of superior organs to make decisions; and a lack of flexibility in adjustment processes in the event of disruptions.

Adding externally to these problems that are more or less inherent in the system is what is probably the GDR's principal economic problem: the increasing "foreign economic burden." Since the mid-1970's the GDR, which is short on raw materials, has been confronted by substantial increases in world market prices for raw materials and energy, without being able to raise prices for their export products in the same measure.[56] The price increases that can be expected at present and in the future have clearly brought the situation to a head.[57] Given a probably lasting decline in overall economic growth, serious efforts have to be made to increase exports -- even at the cost of a drop-off in domestic utilization.

2. Improvements Sought

In view of this plethora of problems, the GDR's economic leaders decided -- among other planning system improvements still under discussion[58] -- above all to form a substantially larger number of combines, thus at least achieving better performances by way of a cautious and partial increase in decisionmaking for their managements.

With the formation of combines, the effort is being made[59] "to combine those capacities which are part of a specific production complex and belong together formally in the national economy." "The combines are therefore also more than just the sum of the enterprises that are joined within them. The possibilities for division of labor and efficient production cooperation among the enterprises multiply their potential."[60]

Quicker successes with intensification -- or productivity increases via the modernization of existing installations while at the same time saving on material and manpower -- appear to be possible because they can be planned much better by combine management in close proximity to the enterprise than "from above" by central organs. It is also expected of the combines that they will work better with the ministries at the top level as well as bring about on the lower level -- through the general director -- a certain harmony between central objectives and selected enterprise objectives. This means, however, that their participation can produce shorter and more efficient channels of information as well as bring about more useful intersectoral coordination.

Thus, on the one hand, the general directors are in practice expected to help improve five-year planning,[61] effect a purposeful coordination of the separate planning operations that concern the combine as a whole and produce broad agreement between state conceptions and the actual production capabilities of the combine enterprises under them; on the other hand, they are supposed to tighten the management structure of the combines and simultaneously produce an improved internal organization -- for example, through a greater concentration of the processes that are oriented toward production preparation, production and marketing.[62]

The general director is thus accorded a dual function: He is the "minister's representative" and "entrepreneur" at the same time. It is an extremely difficult task to reconcile one with the other, especially since in general "the work of management cadre is presently considerably more complicated than it was even 10 years ago."[63]

According to Honecker, combine formation is "presently the most essential step in improving management and planning,"[64] because "the crucial phases of the reproduction process -- from research and development to project-planning and the construction of rationalization means and on to actual production, including subcontractor products that determine quality, and the marketing of products at home and abroad -- are merged economically in the combine."[65] The following expectations in particular are held for the combines:[66]

Use of the advantages of size, especially in production and marketing;

Purposeful coordination of the work performed by the enterprises belonging to the combine;

A better solution to subcontractor problems, through the absorption of appropriate enterprises as well as the more efficient use of materials;[67]

Lasting successes with rationalization, especially by increasingly retiring obsolete equipment and making better use of the new;

More efficient investments, through better preparation as well as quicker realization of projects;

Production of goods that meet demand and are of improved quality;

Expanded exports through the development of products capable of competing on the world market; and

A general acceleration of scientific-technical progress through increased in-house research by the combines.[68]

Just how concretely these expectations are reflected in practical economic policy is shown in the following remarks by the general director of the Carl Zeiss Jena Combine:[69]

"If all 129 of the directly subordinate combines in industry and construction succeed in achieving good economic results at the necessary pace and tempo, then our republic will have an additional several billion marks' worth of marketable products at its disposal each year. And these billions are the issue. Last year when the plan proposals were submitted, one-fourth of the combines came up with growth targets of 8 percent and more. Another group was in the middle, with between 5 and 7 percent. But there was also a large group that was below this."

This was reemphasized by Guenter Mittag at the SED Central Committee exchange of experiences with the general directors[70] in March 1980 in Gera:[71] "Combines, enterprises and entire industrial branches that are doing good work have proved that it is possible to raise labor productivity to average rates that are higher than previous normal levels. Of course, in some instances there are still differences in production growth."

This illustrates quite clearly that the better-known combines are developing much more favorably than most of the others. All the same, the combines pledged in 1980

to come up with an additional 2 billion marks' worth of production above the plan by economizing in the use of materials.[72] While in October 1979, only 12 combines agreed to increase labor productivity in 1980 over and above their planned production, there were 20 such combines by March 1980.[73]

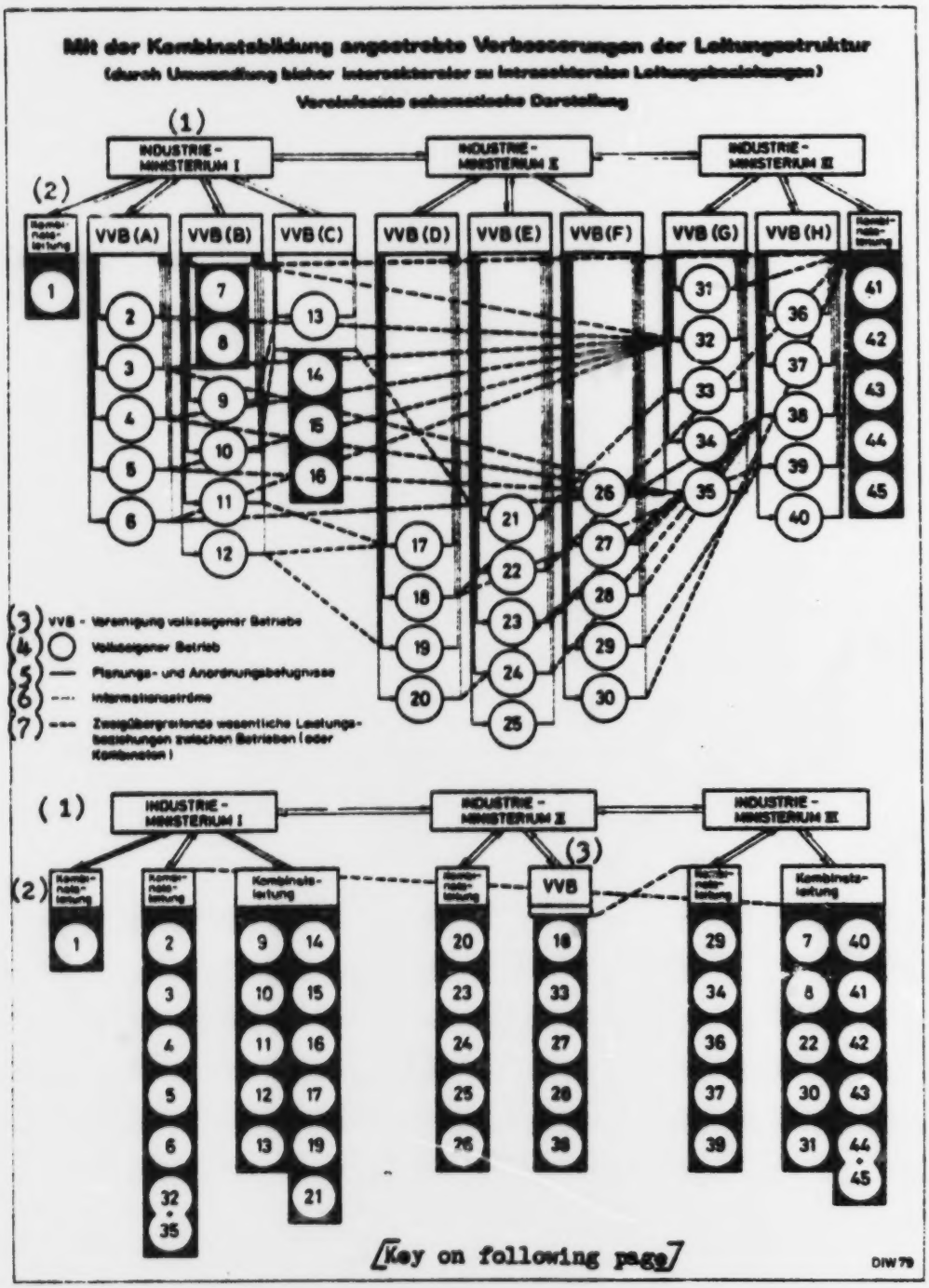
III. Revision of Economic Management Structure

1. Elimination of the VVB's

By reducing the multi-level character of the economic management system from what has been three levels (ministry - VVB - enterprise/combine) to only two (ministry - combine) -- thus eliminating the VVB -- the GDR is seeking to construct an efficient information and management system. For it has proven to be increasingly disruptive for the sphere of responsibility and decisionmaking of the VVB -- which has acted mainly as an administrative body as it is -- to be limited solely to the planning and management tasks of the enterprises under it, thus being removed from intersectoral relations that extend beyond the branch. And this led to increasingly more frequent discrepancies between the management and planning responsibility accorded the VVB and the balancing and product-group[74] responsibility split among various levels of authority.[75]

If they wanted to reduce the abundance of already steadily increasing coordination tasks involving various branches and fields, while simultaneously working to eliminate the splitting of decisionmaking powers among a number of authorities, new and larger, efficiently structured economic units with a greater degree of self-containment than the former VVB's had to be formed by way of integrational enterprise mergers. This kind of combine not only has the advantage of direct contact with the responsible minister, it also unites capacities that belong together organically by absorbing important subcontractor enterprises -- even outside the field. And this makes it appear possible to achieve uniform management of the entire branch and/or production entities that can be integrated: Interbranch coordination processes are thereby reduced, information channels shortened, decisions expedited, planning made more flexible and, finally, the overall economic management structure becomes more comprehensible. The central organs are thus hoping to facilitate planning and management tasks while at the same time being able to obtain better results by implementing plan coordination and other coordination processes with better-organized combines, and by transferring to combine organizations some of the plan-breakdown and balancing duties.

A greatly simplified chart (p 938), based on only 45 hypothetical enterprises under three ministries, is used to show that the incorporation of non-branch, essential subcontractor enterprises into the most suitable combine can bring about not only meaningful enterprise mergers but especially organically better-structured branches. For example, a consideration of necessary basic production relations between enterprises 12 and 19, as well as changes in the time schedule for planning, formerly required information from VVB(B) and Ministry I via Enterprise 12, as well as from VVB(D) and Ministry II via Enterprise 19, so that finally -- in the case of important groups of goods -- ministries I and II could reach agreement (via a balancing agreement, for example). The larger the number of interbranch production channels became, the more obstructive the time-consuming coordination processes proved to be -- proceeding through several levels. The formation of combines has now greatly



[Key on following page]

Figure 1. Improvements in Management Structure Sought by Combine Formation (by changing former intersectoral relationships to intrasectoral ones) -- Simplified Diagram

Key:

1. Industrial Ministry
2. Combine Management
3. VVB -- Association of State Enterprises
4. State enterprise [VEB]
5. Planning and directive powers
6. Information flows
7. Essential interbranch production relations between enterprises (or combines

simplified the management system: For example, enterprises 32 and 35 from Ministry III, which carried out the many different deliveries to enterprises belonging to the former VVB(A) in Ministry I, are incorporated into a combine of Ministry I. This combine is made up of the enterprises of the former VVB(A) plus enterprises 32 and 35, which have now been merged into a single enterprise.

2. Forms of Combine Reorganization

In general, quite different forms of combine organization are possible; for instance, the case where an already existing combine with 3 enterprises (14,15,16) absorbs additional enterprises from various VVB's belonging to the same ministry (9,10,11,12,13) as well as from various VVB's of a different ministry (17,19,21). Another case would be that an already existing combine switches with its enterprises (7,8) from Ministry I to Ministry III and is merged with another combine in III (41,42,43,44,45) as well as other enterprises that are closely related to the branch (31,40) and some that are foreign to the branch (22,30). It is also possible -- as a transitional solution, so to speak -- for closely branch-related enterprises (18,27,28) and enterprises foreign to the branch (33,38) to be added initially to a combine still managed by a VVB, so that a better-organized combine can be developed at a later date, one which would come directly under Ministry II.

Reorganization measures that have been put into practice show essentially the following five forms[76] of combines:[77]

(1) The classic combine with only a single enterprise (example: Leuna Works);

(2) A VVB was made into a combine, with or without absorbing other enterprises (examples: TAKRAF Heavy Machinery Combine; Wool and Silk Combine);

(3) An already existing combine absorbs other enterprises (examples: Zeulenroda-Triebes Furniture Combine; ESDA Hosiery Combine);

(4) Two or more combines form a single larger one, with or without absorbing other enterprises (examples: Robotron Combine, made up of the former Robotron, Zentronik and Office Machine Export AHB [foreign trade enterprise] combines);

(5) An already existing combine was placed under a different ministry as the center of a new combine (example: The Ruhla Watch and Clock Combine, previously administered directly by the Ministry for Machine Tool and Processing Machinery Building, was shifted to the electronics sector and assumed a management function in the new Microelectronics Combine).

A major role was played in virtually all forms by absorption and/or new formation of nonbranch-related suppliers of subcontractor products, from the producer of raw materials and semifinished products to the producer of highly specialized finished products.[78] This, of course, also caused many new problems because there was a tendency toward absorbing enterprises rather than giving them up, so enterprises with multiple supply relations were not necessarily assigned to the best possible sector.[79] Enterprises which change branches must also now deal with new coordination problems with regard to purchasers that do not belong to the combine. And finally, the tasks which combine formation conferred upon central organs have led to a number of new intrasectoral management problems which cannot be solved overnight.

3. Greater Decisionmaking Authority for the Combines

The restructuring that has been completed has had a positive effect on the combines' leeway to make decisions:[80]

(1) The broad cutback of VVB's transferred to the production side -- including the management bodies of the combines -- decisionmaking rights that had previously belonged to the middle management level.

(2) Just the expansion in size and the absorption of nonbranch enterprises have expanded the decisionmaking scope of the new and/or reorganized combines in comparison to the former VVB's (magnitude and breadth effects).

(3) Additional rights relating to the internal structuring of the combines -- regarding the transfer of capacities from the enterprises, for example -- have clearly enlarged the framework for decisionmaking by the top level of the combine at the expense of the individual enterprises (depth effect).

(4) The greater participation by general directors in coordination processes with the responsible ministers has produced a clear increase in the power of the combines.

The combine decree stipulates that the establishment of directly subordinate combines is the business of the Council of Ministers (Art 36); the responsible minister decides on the basic structure and any changes (Art 3), on new organizational schemes (Art 35) and on the combine by-laws (Art 29). It is especially important that the combine's general director (Art 7) be empowered to change functions and tasks of individual enterprises and/or transfer them to other enterprises, to establish new enterprise departments and/or capacities and shift production to other enterprises. Moreover, he determines (Art 7) which duties (for example, research, investments, marketing, market research, accounting, professional qualification) are to be centralized or assigned to specific combine enterprises. He bears full responsibility for presentation of the draft plan to the minister (Art 9); he

allocates the plan tasks to the enterprises (Art 10), and he maintains a check on their implementation.

A certain decentralization of decisionmaking can be seen in the fact that, in addition to planning duties, the general director performs state functions such as balancing (Art 11), pricing and pricing approval (Art 20), standardization tasks (Art 13) and duties relating to socialist economic integration[81] (Art 16).[82] Within the combine itself, the general director is supposed to develop many different entrepreneurial initiatives aimed at improving both the internal structure as well as the efficiency of the combine (Arts 12-22). He is personally fully responsible for combine development as well as the implementation of plan tasks; he may call in the directors -- appointed by him (Art 25) -- of his enterprises for consultation on important decisions (Art 5). This makes it plain that the powers of the general director have been expanded not only quantitatively but, more importantly, qualitatively -- especially with reference to internal combine organization.[83] It shows that crucial expectations concerning improvements in efficiency are linked to the increased integrational strength of a unified combine management. One of the essential criteria of the combine reorganization is the functions of the "socialist manager" of a combine in establishing an optimum of self-containment within the enterprise, including the insertion of missing "links in the chain." Taking on special significance at the same time is the question of the opportunities open to higher state authorities, particularly the industrial ministries, to interfere, or the question of the extent to which a general director is free of "picayune regimentation" (Liberman) on the part of central authorities. For it cannot be denied that a lack of clarity exists as to the scope of actual decisionmaking authority when it comes to the assigned state functions.

4. Functions of the Industrial Ministries

Interestingly enough, the subject of ministerial functions and rights has been treated with noteworthy understatement in public comment on the discussion surrounding combine reorganization in recent years. There have been unmistakeable and considerable differences of opinion about the "growing role of state economic management" and about the relationship between the superstructure and the base.[84] Also, Honecker's statement to the effect that the ministries should now concentrate on "main issues"[85] permits a constant reinterpretation of what the "main issues" are; the GDR literature on the subject concedes this fact.[86]

It was not until after the SED conference on combines in August 1978 that Singhuber, minister for ore mining, metallurgy and potash, spoke of his functions quite openly in a broadcast.[87] Following this, in April 1979 at the 10th SED Central Committee Plenum, were interesting and more detailed remarks by Honecker on new proposals on "state management activity"[88] developed by the ministers themselves.

Even before publication of the new combine decree, economic policy guidelines and details of more recent experiments in several "structurally determining" areas made clear the management powers of the responsible industrial minister as well as the limits of a combine manager's authority. The formation of "operational staffs" at the department manager level, responsible in each case for one of the combines subordinate to a ministry,[89] constitutes a vivid reminder -- in addition to other

central measures -- of the principles of the link between main departments of industrial ministries and their subordinate VEB's in certain organizational phases of the past.

The official guideline holds that the combine is not responsible for strengthening the "direct, organizing function of a ministry";[90] rather, the minister is ultimately "responsible for the comprehensive application of tested methods of socialist industrial management" or for "the initiation, implementation and supervision of cost and pricing work in the industrial sector."[91] All of these are primarily industrial management functions and consequently should belong more to the jurisdiction of a combine management than to that of a ministry.

The very general text of paragraphs 3 and 4 of Art 4 of the combine decree,[92] the pertinent article here, by no means precludes the possibilities for ministerial interference described by an SED Central Committee institute, especially since the "central economic management organs" are expressly charged with "establishing the conditions for a more effective management of the enterprises."[93]

In accordance with the basic principle of individual management, the combine decree (Art 24) holds that only the responsible industrial minister is empowered to issue directives to the general director; this does not include the "leading cadre" of a ministry, who are nevertheless obligated to intensify "work relationships"[94] with the combine on behalf of the minister.

In a critique of a new textbook on administrative law in the GDR, Panzer, one of the major GDR jurists, characterizes the ministries as "centers of economic systems," and as such they are the representatives of "special sector and branch interests" with particular "economic responsibility" toward the enterprises under them,[95] even if, in contrast to the USSR system, they do not operate according to the principle of economic accounting.

Nevertheless, the problems that have been discussed concerning the "establishment of a new kind of relationship between central state planning organs on the one hand and the combines on the other,"[96] or the "necessarily" resulting "qualitative changes"[97] in the overall economic management system, reveal existing ambiguities surrounding the question of the management jurisdictions of industrial ministries. One may suppose in general that the ministries will continue to have the right to assert themselves on important material problems all the way to the enterprise level. This is seen, for example, in the fact that there is still a definite number of combines whose production programs are completely predetermined by the minister, while others have a relative measure of autonomy in determining theirs.[98]

The principle of bipolarity[99] remains unchanged for the combine in accordance with the existing maxims for the VEB: on the one hand, the relative autonomy of an economic unit equipped with limited power; on the other, status "as an organic component of the overall socialist planned economy."[100] And last but not least, the present special emphasis on the role of the ministries has to be considered from this aspect. Their direction and control constitutes a traditional state "counterbalance"[101] to the large-scale enterprises which, although subordinate to the ministries, are tending toward greater autonomy because of their sheer numbers.

FOOTNOTES

1. GESETZBLATT DER DDR, Part I, 1979, No 38, pp 355-366.

2. Guenther Klinger: "The Combine Decree -- an Important Instrument in the Continued Improvement of Management and Planning," WIRTSCHAFTSRECHT, No 1, 1980, p 1.

3. Cf, for example, the conference entitled "Sed Central Committee Exchange of Experiences Seminar on the Development of Existing Combines and the Establishment of New Ones as Presently Essential Steps Toward Improving Management and Planning," 24-25 August 1978.

4. G. Klinger, loc cit (footnote 2), p 1.

5. Cf "First Implementing Regulation to the Decree on Measures To Introduce the Principle of Economic Accounting in the State Enterprises -- Provision for Legal Succession to Associations of State Enterprises," GESETZBLATT, 1952, No 45, p 287, and subsequent regulations.

6. GESETZBLATT, Part II, 1967, No 21, pp 121-134.

7. Ibid (Art 1), p 121.

8. "Draft Decree on the Tasks, Rights and Obligations of Associations of State Enterprises," DIE WIRTSCHAFT, No 13, 1967, Annex, pp 1-8.

9. Joachim Lieser, "Supplement" (to Klemens Fleyer's "Points of Law in Supra-enterprise Cooperation Under the New Economic System of the Soviet Zone of Occupation"), Klemens Fleyer and Joachim Lieser, "Centralized Planning and Law," Stuttgart, 1969, p 53.

10. Walter Ulbricht, "The Program of Socialism and the Historical Task of the Socialist Unity Party of Germany," speech to the Sixth SED Party Congress, SOZIALISTISCHE DEMOKRATIE, 16 January 1963, insert, pp 46,47.

11. Authors' Collective, "Political Economy of Socialism and Its Application in the GDR," (East) Berlin, 1969, p 697.

12. Klaus Brockhoff and Hansjoerg Buck provide a detailed description of efforts at concentration in the GDR and CEMA in the 1960's: "Economic Concentration and Optimization of Enterprise Proportions in Socialist Economies. Differences and Similarities with Situation in Western Market Economies," DEUTSCHLAND ARCHIV, Vol 3, 1970, pp 225-266.

13. Cf Karl C. Thalheim, "Principal Features of the Soviet Economic System," Berlin, 1962, p 15.

14. V.I. Lenin, "Works," Vol 27 (Feb-July 1918), (East) Berlin, 1970, p 312.

15. Karl C. Thalheim, "Concentration in the Other Part of Germany," Helmut Arndt (editor), "The Concentration of the Economy," Berlin, 1960, Vol 2, p 627.

16. GESETZBLATT, Part I, 1973, No 15, pp 129-141.

17. Authors' Collective, under direction of G. Klinger, "Commentary on Decree on the Tasks, Rights and Obligations of State Enterprises, Combines and VVB's" (East) Berlin, 1975, p 5.

18. Erika Lieser-Triebnigg, "A New Body of Organisational Law for the GDR Economy," DEUTSCHLAND ARCHIV, Vol 8, 1973, pp 826.

19. Cf Kurt Erdmann, "Renunciation of the Previous Model of the Economic System of Socialism," DEUTSCHLAND ARCHIV, Vol 8, 1971, pp 827,828.

20. Cf Erika Lieser-Triebnigg, "Commercial Law in the Shadow of Trends Toward Economic Recentralization," DEUTSCHLAND ARCHIV, Vol 4, 1973, pp 358,359.

21. Loc cit (footnote 17), p 119.

22. GESETZBLATT, Part II, 1967, No 21, p 121 (Art 1).

23. GESETZBLATT, Part I, No 15, p 129 (Art 1).

24. The previously cited commentary on the 1973 decree (footnote 17) expressly states that the economic units were "not referred to in legal intercourse by the term 'legal entity' because this term does not reflect accurately the differences in legal status of the socialist organs, enterprises and institutions which participate in economic and legal intercourse" (p 51).

25. Cf Authors' Collective, "Commercial Law for the Study of Political Science," Outline, (East) Berlin, 1978, p 66.

26. G. Klinger, "New Combine Decree -- Most Important Instrument of Economic Management," NEUE JUSTIZ, No 1, 1980, p 3.

27. Ibid, p 4.

28. Cf K.H. Arnold, "What Is the Situation as Regards the Future for the Combines?" BERLINER ZEITUNG, 19 May 1980. There were 37 combines in industry in 1973; 4 years later, there were 43. In 1977, the share of combines in industrial production amounted to around 30 percent. At the beginning of 1979, the 89 combines at that time accounted for around 72 percent of industrial production.

29. According to Art 43 of the combine decree, Arts 34-47 of the decree on VVB's, dated 28 March 1973, remain in force.

30. Hans Tarnick, "Concerning Regulation of the Tasks of Combines and Combine Combine Enterprises," WIRTSCHAFTSRECHT, No 1, 1980, p 8.

31. Art 1 of the combine decree.

32. Cf Manfred Melzer, Kurt Erdmann, "Problems of Combine Formation in the GDR -- Economic and Management Aspects," "GDR Combine Formation in Theory and Practice. Management -- Planning -- Innovation," FS ANALYSEN, No 8, 1979, pp 63-65.

33. "Decree on the Procedure for Establishing and Merging State Enterprises, 16 October 1968," GESETZBLATT, Part II, 1968, No 121, p 965.

34. Some general commentaries on the combine decree should be mentioned: "Combine -- Concentrated Strength," NEUES DEUTSCHLAND, 14 January 1980, p 4; G. Friedrich, C. Kroemke, "Combines -- Basis for Higher-Quality Performance," EINHEIT, Vol 12, 1979, p 1266; Heinz Martin, "New Combine Decree Helps Improve Management and Planning," ARBEIT UND ARBEITSRECHT, Vol 1, 1980, p 5; G. Klinger, "New Combine Decree...," loc cit (footnote 26), p 2; G. Klinger, "The Combine Decree...," loc cit (footnote 2), p 1; G. Klinger, "The New Combine Decree -- An Important Instrument in Further Improving Management and Planning," STAAT UND RECHT, Vol 3, 1980, p 195 (emended version from WIRTSCHAFTSRECHT, No 1, 1980). In addition, a number of articles on combine problems connected with the new combine decree have appeared since the end of 1979 in the following journals in particular: WIRTSCHAFTSRECHT, STAAT UND RECHT, WIRTSCHAFTSWISSENSCHAFT, EINHEIT, SOZIALISTISCHE ARBETISWISSENSCHAFT and DIE WIRTSCHAFT.

35. GESETZBLATT, Part I, 1980, No 14, pp 115-117. It supersedes a decree of the same title, dated 17 September 1970 (GESETZBLATT, Part II, No 82, p 573).

36. Hans Tarnik, "Concerning Regulation..." loc cit (footnote 30), p 9.

37. GESETZBLATT, Special Issue 1020 (order dated 28 November 1979); cf the advance notice in GESETZBLATT, Part I, 1979, No 42, p 400, containing a breakdown of parts a-q of Special Issue 1020.

38. GESETZBLATT, Special Issue 1021 (order dated 30 November 1979); cf GESETZBLATT Part I, 1980, No 4, p 40. In a departure from the previous practice in issuing "special issues" of the GESETZBLATT, both the "General Guideline" and the "Planning Order" are being sent under a special dispatching system directly to the enterprises, with exclusive use of a special distributor, "the EDP distribution system for official documents; it thus appears that they have been assigned a certain degree of confidentiality.

39. GESETZBLATT, Part I, 1975, No 23, p 408 (and a series of follow-up regulations).

40. GESETZBLATT, Part I, 1979, No 28, p 253.

41. GESETZBLATT, Part I, 1979, No 18, p 156.

42. GESETZBLATT, Part I, 1980, No 1, p 1.

43. GESETZBLATT, Part I, 1980, No 14, p 117.

44. Particularly the following: "Resolution on the Management and Organization of Work in the Area of Prices, 14 February 1980," GESETZBLATT, Part I, 1980,

p 58; and the "Decree on the State Control Powers and Tasks of the Prices Department Manager in State Combines, 14 February 1980," Ibid, p 63.

45. Cf "Better Evaluation of Performances," DIE WIRTSCHAFT, No 3, 1980, p 2.

46. "Conference of the Committee on Commercial Law," WIRTSCHAFTSRECHT, No 2, 1980, p 113.

47. Cf statements by Authors' Collective, "Systematic Economic Management in Socialist Countries," (East) Berlin, 1978; R. Yevstignayev, "Experiences of the CEMA Countries in Developing Enterprise Forms," SOWJETWISSENSCHAFT, GESELLSCHAFTSWISSENSCHAFTLICHE BEITRAEGE, No 3, 1980, pp 265-272.

48. Cf "Order on the Organization of GDR Economic Planning from 1976 to 1980," GESETZBLATT, Special Issue No 775a, and "Order on the General Guideline for Annual Planning for the Enterprises and Combines of Industry and Construction" -- Guideline, GESETZBLATT, Special Issue No 780.

49. Cf Gert Leptin and Manfred Melzer, "Economic Reform in GDR Industry -- Recentralization Without Plan," DEUTSCHLAND ARCHIV, Vol 12, 1975, pp 1282, 1283.

50. Cf Manfred Melzer, "Efforts Toward a More Effective Use of Capital in the GDR Economy," DEUTSCHLAND ARCHIV, Vol 1, 1979, p 46 ff.

51. Cf "On the Age Structure of Industrial Capital Assets in the GDR," Manfred Melzer, editor -- WOCHENBERICHT DES DIW, No 37, 1977.

52. Thus, Guenter Mittag was forced to note at the end of May 1978 "that sensitive economic disruptions result when, for example, investments in the billions are made outside the plan in this year alone." He proffers as a reason the fact that frequently the initial request is for a small investment, which is enlarged gradually once the project has been started. Cf Guenter Mittag, "Resolutions of the Ninth Party Congress Are Being Consistently Realized," NEUES DEUTSCHLAND, 27-28 May 1978, p 3.

53. GDR scientists point out cases "in which up to 50 percent of the price asked was proven to be excessive through a proper price check." Cf Kurt Matterne and Siegfried Tannhaeuser, "The Capital Goods Economy in the GDR's Socialist Industry," (East) Berlin, 1978, p 220.

54. Cf Klaus Maetzig, Carla Neumann, "The Improvement of Planning and Economic Accounting in Socialist Industrial Enterprises," WIRTSCHAFTSWISSENSCHAFT, Vol 8, 1975, p 1238 f; Georg Ritzsche, Horst Steeger, "Greater Effectiveness Through Effectiveness Planning," EINHEIT, Vol 3, 1975, p 283 ff.

55. Authors' Collective, "Management Organization in the Enterprises and Combines," (East) Berlin, 1976, p 368.

56. Cf Gerhard Brendel, Guenter Bode, "Development of World Market Prices in the 1970's -- Trends and Causes," WIRTSCHAFTSWISSENSCHAFT, No 6, 1980, p 711 ff.

57. Cf Erich Honecker, "From the Politburo Report to the 11th SED Central Committee Plenum," NEUES DEUTSCHLAND, 14 December 1979, p 5.

58. Cf Manfred Melzer and Angela Scherzinger, "GDR Economic System in Process of Reorganization? -- Economic Leadership Tolerating Increased Debate," VIERTELJAHRSHEFTE ZUR WIRTSCHAFTSFORSCHUNG DES DIW, Vol 4, 1978, p 379 ff.

59. Cf Rudolf Gerisch, Willy Hofmann, "Tasks and Problems of Combine Development Aimed at Increasing Economic Effectiveness," WIRTSCHAFTSWISSENSCHAFT, Vol 2, 1979, pp 129,130.

60. Karl Hartmann, "Great Responsibility of the Combines," DIE WIRTSCHAFT, No 9, 1978, p 5.

61. Cf Gerhard Scholl, "Problems of Further Improvement of Planning as Related to the Evaluation of Enterprise and Combine Performance and the Further Improvement of Economic Accounting," WIRTSCHAFTSWISSENSCHAFT, Vol 11, 1978, p 1324 f.

62. Cf Willy Hofmann, "Centralization of Functions in the Combine," DIE WIRTSCHAFT, Vol 10, 1979, p 16.

63. "The Manager and His Work in the Socialist Industrial Enterprise/Combine (Conference Report)," WIRTSCHAFTSWISSENSCHAFT, Vol 6, 1980, p 749.

64. "From the Politburo Report to the Eighth SED Central Committee Plenum," NEUES DEUTSCHLAND, 25 May 1978, p 4.

65. Guenter Mittag, "Use Advantages of Socialism To Achieve Greater Effectiveness," NEUES DEUTSCHLAND, 26-27 August 1978, p 3.

66. Cf Art 2 and Arts 12-17 of the new "Decree on the State Combines, Combine Enterprises and State Enterprises," loc cit (footnote 1), p 355 and pp 357-359.

67. For instance, the chemical industry is to make better use of petroleum and natural gas by refining these products to a greater degree; in ferrous metallurgy, sheet metals are to be made less susceptible to corrosion through galvanization and coating with paint and/or plastics; the nonferrous metallurgy industry, for example, is to save precious metals by improving the prefabrication of components used in electrical engineering. It is generally anticipated that the metal-processing industry will achieve savings in materials through more efficient prefabrication processes, also in pre-production phases. Cf Helmut Koziolek, "More Advanced Processing of Raw Materials," EINHEIT, Vol 6, 1980, pp 589,590.

68. Cf Herbert Kroker, "Our Combine in the Struggle for Scientific-Technical Progress," EINHEIT, Vol 6, 1980, p 581 ff. See also Gerd Friedrich, "Organize the Use of Science and Technology with a Goal in Mind!", EINHEIT, Vol 6, 1980, p 576 ff.

69. Bert Huber, "Pulse of the Times," Berlin Radio, 20 March 1980.

70. For details, see "With the Power of the Combines for a Further Major Rise in Production," (East) Berlin, 1980.

71. NEUES DEUTSCHLAND, 22-23 March 1980, p 3.

72. NEUES DEUTSCHLAND, 24 March 1980, pp 1 and 3.

73. Claus Kroemke, "The Socialist Manager and His Social Charge," EINHEIT, Vol 6, 1980, p 572.

74. Product group work constitutes cooperation -- according to specific standpoints -- or a division of labor among enterprises which manufacture similar products and/or employ the same technologies.

75. Walter Burian, "Deliberations on the Status and Further Development of Branch Management in the Management System of Socialist Industry in the GDR," WISSENSCHAFTLICHE ZEITSCHRIFT DER HOCHSCHULE FUER OEKONOMIE, Vol 3, 1978, p 105.

76. They are all shown in the chart.

77. Cf Manfred Melzer, Angela Scherzinger and Cord Schwartau, "Is the Formation of More Combines Making the GDR Economic System More Efficient?" VIERTELJAHRSHEFTE ZUR WIRTSCHAFTSFORSCHUNG DES DIW, Vol 4, 1979, p 369.

78. Thus, for example, machinery combines have their own foundries, the shoe industry has its own leather production facilities, metallurgy its own power plants and the electronics industry its own facilities for glass production, while electronics for ships was transferred to the shipbuilding industry.

79. Thus, for example, chemical installation construction is represented in both the Ministry for Chemical Industry (Leipzig-Grimma Chemical Installation Construction Combine) and the Ministry for Heavy Machine Construction and Installation Construction (Ernst Thaelmann Heavy Machine Construction Combine in Magdeburg).

80. Cf Manfred Melzer, Kurt Erdmann, "Problems of Combine Formation in the GDR," loc cit (footnote 35), pp 39-42.

81. With regard to cooperation with CEMA countries, the combine has the following rights and responsibilities:

"The right, jointly with the foreign trade enterprises, to submit proposals and suggested solutions for economic and scientific-technical cooperation;

"The responsibility to assure systematic fulfillment of obligations resulting from international commercial contracts and contracts under international law;

"The responsibility to coordinate the development of research and production with the responsible partners in the CEMA member states and to organize exchanges of experience;

"The responsibility, jointly with the responsible foreign trade enterprise, to conclude with partners in the CEMA member states commercial contracts covering production cooperation and specialization." Cf Guenther Klinger, "The New Combine Decree...," loc cit (footnote 26), p 199, [and footnote 34].

82. In addition, the minister may delegate his rights and duties to the combine management, confer with this body on important matters and prepare economic policy decisions (Art 4).

83. Cf Hans-Ulrich Hochbaum, Gerhard Siefarth, "Concerning the Management and Organization of Large Industrial Combines," WIRTSCHAFTSRECHT, Vol 4, 1978, p 216 ff.

84. Cf "On the Systematic Development of Socialist Production Conditions in the Continuing Process of Structuring the Developed Socialist Society in the GDR," "On the Systematic Development of Socialist Production Conditions," 23rd Session of the Scientific Council for Economic Research, 1 November 1977, Essays of the GDR Academy of Sciences, W 3, 1978, (East) Berlin, 1978, p 9.

85. NEUES DEUTSCHLAND, 12 February 1979, p 2.

86. Cf Karl-Heinz Kuehnau, "Central Management and In-House Responsibility -- Union of Management and Initiative," STAAT UND RECHT, Vol 1, 1979, p 13.

87. "The Television News Conference," GDR Television II, 6 November 1978 (RIAS Monitoring Service).

88. Cf Erich Honecker, "Toward the 30th Anniversary of the GDR," NEUES DEUTSCHLAND, (ND), 28 April 1979, p 4.

89. Cf Authors' Collective, "Basic Questions of Socialist Economic Management," (East) Berlin, 1979, p 182. Or a summary of statements from this work, by Kurt Erdmann, "On the Role of the Industrial Ministries in the GDR Reorganization," FS-ANALYSEN, No 5, 1979, pp 17-28.

90. Ibid, p 16.

91. Ibid, p 169.

92. Combine decree, loc cit (footnote 1), p 356.

93. E. Kuehn, R. Leissing, W. Salecker, "Agenda and Focus of the Fourth Session of the Joint USSR-GDR Economists' Commission," WIRTSCHAFTSWISSENSCHAFT, Vol 11, 1978, p 1355.

94. Gerd Friedrich, Claus Kroemke, "Combines -- Basis for Higher-Quality Management," EINHEIT, Vol 12, 1979, p 1274.

95. Wilhelm Panzer, "The Contract Law Textbook and the Substance of Commercial Law," WIRTSCHAFTSRECHT, No 1, 1980, p 23.

96. Joachim Kaden, "Economic Problems in the Formation and Activity of Large Economic Organizations in the People's Republic of Poland and State Combines in the GDR," WIRTSCHAFTSWISSENSCHAFT, Vol 4, 1980, p 485.

97. Gerd Friedrich, Claus Kroemke, loc cit (footnote 94), p 1272.

98. Cf Ursula Gabler, Erich Wichler, "Production Programs as Means of Managing and Planning Enterprise and Combine Production Which Is Effective and Satisfies Demand," WIRTSCHAFTSWISSENSCHAFT, Vol 5, 1979, pp 562,563.

99. Cf Wolfgang Foerster, "The GDR Economic System After the Early 1970's. Consequences for Industrial Management" -- Bruno Gleitze, K.C. Thalheim, Hannsjoerg Buck, Wolfgang Foerster, "The GDR Economic System After the Early 1970's," Berlin, 1971, p 112.

100. Ibid.

101. Cf the same authors, "Structures of Soviet Enterprises in Theory and Practice," "University Days, 1961," publications of the Berlin Free University. "Marxism-Leninism, History and Form," Berlin, 1961, p 209.

7458
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TRADE WITH DEVELOPING COUNTRIES DESCRIBED

Budapest FIGYELO in Hungarian No 42, 15 Oct 80 p 9

[Article by Arpad Orosz: "Trade with the Developing Countries, In Terms of Market Concentration"]

[Text] Our commercial relations with developing countries has increased dynamically in recent years. Our exports in 1979 came to 739 million dollars and our imports to 655 million dollars. It is in our interest to continue expanding economic relations with developing countries that assure favorable markets. Therefore it is a requirement that we shape economic cooperation in harmony with the characteristics of the partner developing countries and our domestic development tasks.

Proceeding from the increasing world economic role of the developing countries and the task of expanding nonsocialist exports, it is a realistic requirement that the long term rate of increase in mutual trade should exceed the average growth of our foreign trade. It is advisable to purchase a decisive share of those raw materials and energy sources on these markets which cannot be acquired from socialist countries. We must increase the imports of semifinished and finished products for the processing industry from developing countries, and simultaneously we must achieve a rapid rate of increase in our exports, primarily machine and food industry goods.

In the past decade, the Hungarian People's Republic maintained commercial relations with more than 80 developing countries. This led of necessity to where the scope of our activity-- --as compared to the performance capability of the Hungarian economy-- --proved to be too broad and unconcentrated, and the number of markets offering significant trade was small. This inevitably raised the question of establishing greater stability in the trade conducted with developing countries.

In Exports

Considering our limited resources available for developing economic relations, it is a realistic goal for our foreign trade policy to work for greater differentiation, for concentration of the material means available, and thus for increased effectiveness of economic relations. On this basis we were able to increase our exports primarily to rapidly developing countries (e.g., Iraq, Kuwait, Libya, Algeria, and Iran) which are located nearby and have the ability to pay. Here the prospects for expanding economic cooperation on the basis of mutual advantages are good, and in most cases the political relations also afford security for the development of foreign trade.

In these countries we can best increase our machinery deliveries and develop new markets for our agricultural and food products. In these markets the more burdensome, for us, elements of economic relations (like the ratio of deliveries conducted with credit extension) could also be reduced.

At the same time in these markets the competition among suppliers for meeting demand with ability to pay has increased, as well as the demands of the partners, and in some cases unfavorable trends may have developed for ourselves.

As a result of the greater differentiation and concentration of trade, Iraq, Syria, Kuwait, Iran, India, Libya, Algeria, Nigeria and Brazil have become our most important partners. In the past several years we have conducted with these countries more than two-thirds of our foreign trade with developing countries.

Table. Export, at contract parity, in million dollars

	1976.	1978.	1979.
1) Irak	88,8	199,8	167,6
2) Szíria	39,7	21,5	38,2
3) Kuvait*	35,0	36,0	83,7
4) Irán	51,0	37,2	37,6
5) Líbia	11,9	86,4	48,8
6) Algéria	33,5	49,6	48,6
7) Nigéria	7,3	24,0	25,8
8) India	20,3	18,9	21,1
9) Brazília	5,2	14,6	20,9
10) Nyolc ország összesen:	292,7	428,8	512,1
11) Teljes kivitel a fejlődő országokba	405,9	584,1	738,8
12) * Exportunk Kuvaitba, a Szaúd-Arábiába és az Egyesült Arab Emirátusba irányuló kivitel értékét is tartalmazza.			

Key:
1. Iraq
2. Syria
3. Kuwait*
4. Iran
5. Libya
6. Algeria
7. Nigeria
8. India
9. Brazil
10. Total for 8 (sic) countries
11. Total exports to developing countries
12. *Includes the value of exports to Kuwait, Saudi Arabia and the United Arab Emirates.

The most important export markets change from time to time. Their designation simply means that with these countries we have developed permanent market relations and it is in these places that we acheived our best results, and in the interest of further development in these countries we shall concentrate the various factors of economic cooperation production cooperation, mixed enterprises, and certain elements of technical scientific cooperation. (In 1972 the value of exports to these nine countries scarcely exceeded 80 million dollars and made up 43 percent of our exports to developing countries; as a result of rapid growth, the share of these nine countries in our exports came to 73.4 percent in 1976 and 69.3 percent in 1979.)

During the past several years, Hungarian exports to the developing countries have been transformed and the share and importance of the Near Eastern countries that export petroleum, as well as of certain African Arab countries, increased. The foreign trade enterprises turned to good account the new situation that developed after 1972 in the petroleum exporting countries, and adjusting to the increasing demand they increased deliveries to those countries.

The importance of the above mentioned nine countries is also expressed by the fact that in the past 3 years we sold them more than 80 percent of the machine exports to developing countries. It was also here that we developed the new buying market for our agricultural and food products, which is indicated by the fact that in 1976 a total of 67.8 percent of our agricultural and food products to developing countries went to these markets, in 1978 a total of 77.2 percent, and in 1979 a total of 84.4 percent.

Several conclusions can be drawn from all this. Among other things it can be stated that our foreign trade has made good use of the possibilities in export deriving from changes in the world economy. The conscious orientation of our exports and an appropriate production development policy have made it possible for us to stabilize the results we attained, and in fact develop them further. The value and importance of the export results is enhanced by the circumstance that the formation of an active balance has become possible and the demand for credit is small as compared to the dimensions of the export.

In Imports

In recent years imports from the developing countries have also been strongly concentrated. The role of five developing countries, Brazil, Iraq, Iran, Nigeria, and India, has grown significantly. The value of our acquisitions from the above-mentioned countries rose more rapidly than total imports from the developing countries. The value of imports from the five countries was 267 million dollars in 1976 and 386 million dollars in 1979. Brazil, Iraq, Iran, Nigeria and India have supplied in recent years about 60 percent of our imports from the developing countries. It was from these countries that we received 100 percent of our petroleum purchases and considerably more than 60 percent of our agricultural and food product imports. Consequently, the transformation of the markets also took place in imports.

Under the Fifth Five-Year Plan we started the rational concentration of our foreign market activity on markets affording possibilities for favorable trade. The selections have proved correct. In addition to the above named countries, the following are also of importance to us: Egypt, Lebanon, Pakistan, Angola, Mexico, Argentina, Venezuela and Jordan. Over the medium term, Indonesia, Malaysia and Thailand may provide considerable markets for us. Under the Sixth Five-Year Plan the concentration of trade with the developing countries will be moderated in all certainty, and there will be about 20 to 22 markets on which we will be able to conduct a considerable amount of activity.

Machines and Food

In the growth of Hungarian export under the Sixth Five-Year Plan, the machine industry as well as agriculture and the food industry may receive a bigger role.

In harmony with the development directions of the machine industry the following may be taken into account in the growth of machinery industry: elements of public health systems, complete hospitals, medical equipment; educational systems, complex agricultural, water management and food industry facilities, telecommunications system elements, which include telephone centers, transmission technology and terminal equipment, amplifying chains, and microwave equipment. Other possibilities may also be used for the development of machine industry exports. Thus, among other things, a demand is evident for bauxite-alumina and aluminum industry equipment, and we can

count on supplying equipment for power works. In supplementing the export of buses we can also take into account assembly plants, and complete maintenance and repair plants. We are counting on the export of light bulb manufacturing and medical industry equipment. We are also planning to export complex communication and guidance technology systems for gas and oil pipelines to various markets.

To establish the basis of our machine industry exports we need to occupy ourselves with the development of several well selected areas like complete facilities, factories, plants, plant parts, manufacturing systems, autonomous production lines, repair and service plants for which, according to our experience, there promises to be a lasting demand on our most important markets.

The most important buyers for our agricultural and food industry products are certain petroleum exporting countries, Kuwait, Saudi Arabia, United Arab Emirates, Libya and others. Export development requires a continuous market presence and the strengthening of market research and discovery activity. A dynamic increase in the export of agricultural and food industry products requires significant efforts from both the producer and foreign trade enterprises, more flexible adjustment to special demands and greater undertaking of risks.

In the development of our imports the developing countries may be regarded as important acquisition markets in the future also for petroleum, iron ore, copper, tin, raw phosphate, raw cotton, wool, raw cowhides, coffee, cacao, fodders of plant origin and other semifinished and finished industrial products and consumer items.

6691
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DISCUSSION OF FIVE-YEAR PLAN VIEWED

How Scholars View It

Budapest FIGYELO in Hungarian No 41, 8 Oct 80 p 3

[Article by I. W.: "As the Scientists See It"]

[Text] The expanded session of the presidium of the Hungarian Academy of Sciences [MTA] was an important stage of the social debates of preparing for the Sixth Five-Year Plan. Janos Joos, state secretary for the National Planning Office [OT] spoke in his introductory remarks about the present state of the planning work and about the significance of the Sixth Five-Year Plan. He emphasized that the Sixth Five-Year Plan is open in character, which makes it possible to conform to the changing conditions. The economic policy obligation of the plan being prepared is also much more strict than before because the pressured ways which have developed in the people's economy are forcing us in these directions. He also indicated that during the plan's time period we will have to minimize our use of external resources, and the standard of living will have to be preserved. It follows from this that the basic and sole reserve of growth is the intensive and efficient economic operation, increasing labor productivity, and rational organization of material and energy management.

It will be necessary to work out a few programs of key significance in the plan. For example, the programs of energy saving and waste material recycling, centrally managed technological development of production, measures for frugality in public spending and housing construction, elementary education and health care programs which will affect the infrastructure. He especially emphasized the significance of the medium-range scientific plan for scientific research for reaching the goals of the Sixth Five-Year Plan.

Requested by the government, the MTA's presidium worked out a written opinion and suggestions about the plan's conceptions. Academician Kalman Szabo, chairman of the working committee organized for this purpose, spoke about its content. The working committee considers guidelines of the Sixth Five-Year Plan to be a significant step forward in planning work also from viewpoint of methodology and content, and accepts and supports its main goals. He emphasized that, thinking also of the time period after economic equilibrium will have been achieved, the technological development concepts and innovational ideas which will determine the longer range economic growth will have to be developed. The majority of observations and proposals cover the interrelationships of the National Medium-Range Research and Development Plan [OKKFT] with the Sixth Five-Year Plan.

Interpretation of Economic Equilibrium

The most important ideas voiced in the comments contained the interpretation of economic equilibrium, and its implementation in the plan, as well as the possibility and necessity of coordinating the medium-range and long-range development ideas; laying down the foundations of the system of social consequences of the plan's goals and the sensitive points of this; completeness of the action campaign programs and their main directions; concrete reflection of the world's economic conditions in the plan's materials; the tasks of establishing and developing progressive technology.

The speakers agreed that the main goal is to arrive at equilibrium. However, during the course of interpreting what that means, differing ideas were voiced. One person commented that reestablishing equilibrium must not limit implementation of the vitally important tasks of economic development because this would further increase the distance by which we lag behind the forefront of international development. He proposed that efforts should be made over a longer period of time and at a slower rate to create economic balance. Another person commenting claimed that economic balance must be handled on two levels: with slow growth when the structural change must be accomplished. He considered this a forced but necessary path, and then at a rate consistent with dynamic growth. Many commented that the efforts to create equilibrium must be accompanied by noticeable improvement of quality, the conditions of which today are not yet satisfactory. The efforts for organizing the best management of resources must be strengthened and the conditions regulating this must also be organized better than before, so that it should really be possible to increase the efficiency of production. The debate's participants suggested that in the future the plans of enterprises and councils should receive greater significance in shaping the economic policy goals contained in the national economic plan. The independence of economic operating organizations will have to be increased in this area also, improving the quality of planning work. This can be one of the assurances that the activities of economic operating organizations will be in better and better harmony with the alltime requirement system of regulation, and that these will be able to flexibly conform to the changing economic conditions.

The National Economic Plan and the People

In connection with the social requirement system of the Sixth Five-Year Plan, scientists emphasized from many angles that the plan's people-centered character must be strengthened. They pointed out that holding the level of real incomes can be considered only as a contingency goal, [but] if the conditions of economic balance and work make it possible, progress must be made in this area also. They suggested that studies must be conducted about society's sensitivity. It must be found out how it can be correctly influenced without fundamental violation of the sense of fairness. Much emphasis was placed on some tasks in the infrastructure, to develop it possibly faster but mainly more selectively (public health care, child care, etc) than the growth rate of the national income. More attention to the family's economic role was also discussed.

Several people mentioned that more attention must be paid to increasing the productivity of intellectual work and to providing incentives for it, to selecting

the scientific and technological managers, to encouraging and supporting the enterprising type of people.

Attention was called to developing the plan and the economic policy goals by relying even more on the energies latent in community activity. Many comments were made suggesting additions and specifications of the priorities defined in the plan. Mentioned were, among other things, the tasks of raw material management, protection of agricultural land and the household plot opportunities related to this. [There were comments about] more refined use of the hydrocarbons, development of gene chemistry, improvement of the agricultural machinery production, etc. There was a comment according to which the plan's economic policy concept has the character of resolution and this is not sufficiently reflected in the specific action programs, and when the plan is ultimately defined these must be without a doubt better determined.

Some of the comments covered the predictions concerning world economy and the international technological-scientific growth. They emphasized that the effects of these will appear in the plan's material, but they mentioned that such a document of informative value should also be included in the material of planning work.

Representatives of the technological sciences spoke harshly of the fact that in our country the introduction of progressive technology is still running into significant obstacles and this is a serious circumstance from the viewpoint of creating our competitiveness in a world laden with crises. What is needed in this area is not bigger investments but smarter management. Care must be taken to also strengthen the personnel conditions for this, because the opinion is that certain signs of devaluation can be observed in our technological intellectuals.

The conferences' participants thought highly of that effort of the government to involve practically the entire society in the complicated activity of planning, including the representatives of science. Academician Janos Szentagothai, the MTA's chairman emphasized that the Academy far-reachingly supports the government's goals concerning the Sixth Five-Year Plan, and assured the planners of science's constant and active support.

Deputy prime minister Lajos Faluvegi, the chairman of OT answered the questions which were raised. He said that the government builds on the close cooperation between science and the economic management, not only in preparing the plans but also in implementing them. He said that the government will evaluate the action proposals the Academy offered for working out the Sixth Five-Year Plan and will build them into the plan.

How Enterprises See It

Budapest FIGYELO in Hungarian No 41, 8 Oct 80 p 3

[Article by Gy. V.: "(and) As the Enterprises See It."]

[Text] Requested by the government, the presidium of the Hungarian Chamber of commerce also debated the guidelines of the Sixth Five-Year Plan. Gyula Kovacs, deputy chairman of OT also participated in the debate.

Several of the people commenting mentioned that the open debate was being held a little too late because decisions have already been made in a number of basic questions of the medium-range plan.

One important circumstance must be taken into consideration, that the degree of freedom of planning work and the economic policy's maneuvering ability is at the present time being restricted by some quite severe conditions. These are: the opportunities within CEMA, namely the import opportunities, the loans from abroad which we can finance, and the requirement of maintaining the standard of living which we have achieved. The viable economic policy concept will have to take into consideration these three limiting factors, the characters of which can be considered as objective.

Because of this, fewer development resources will be available than in the past, and the national income's demand for import will have to be moderated in such a way that 1 percent increase in the national income will be followed by about 1 percent increase in exports. This can be accomplished first of all by increasing the value-added content of production (which includes the utilization of imports). Preconditions for this are modernization of the product structure, decreasing the specific material and energy consumption and improving the marketing.

The Importance of the Domestic Market

According to some opinions the plan concept starts out from a not sufficiently realistic evaluation of the present situation and of the situation of the enterprises. This does not change the fact that the plan's basic direction is right, and the majority of those commenting shared this position. The guidelines unevenly treat the development strategies of the individual branches and subbranches of the national economy.

The plan stresses improvement of the foreign trade balance and emphasizes export orientation and improvement of the foreign market situation as the main method of this. While recognizing the unconditional correctness of this priority, we were reminded in the debate that, in the past similar situations and difficulties have developed on the domestic market. Increasing the ratio of export in production and limiting import opportunities more may again cause difficulties in fulfilling domestic demand. Attention was called to the fact that together with the slow growth of domestic consumption, the structual composition and selection of supply have increased significance. Under such circumstances a decrease in selection causes a greater degree of dissatisfaction feelings than in the case of the faster rate of increase in the standard of living. The significance of the domestic market must not be underestimated.

According to some of the comments, efforts must be made in the work of the enterprises, first of all to efficiently exploit the existing opportunities, because this is the precondition for not stopping the growth of the national economy in spite of the slowdown in quantitative growth. Technological development will have a big role, but in this we will have to concentrate on product development requiring less equipment, rather than on manufacturing developments.

The economic policy's limiting factors also affect the activity of the enterprises, and do so in the sense that they often hinder the cutback or elimination of

unprofitable production. Contrary to the enterprise's intentions and interests, continuation of the production of certain products is often necessary in the interests of the national economy.

Regrouping the Means

Numerous comments emphasized that modernizations of the product structure requires continuous growth, but now those are the very enterprises in a difficult situation which grew dynamically in the past. These enterprises, or the majority of them, due to their loan repayment obligations and to the changed regulatory conditions, have lost their ability to obtain credit and cannot continue to modernize their product structures, or can do so only at a slow rate.

The suggestion was made that greater opportunities must be created for regrouping the means among industrial branches and among enterprises, and in order to activate this. Perhaps it would be expeditious to also examine the possibility of using interest conditions which provide better incentives. Attention was called to the basic benefit possibilities and to taking advantage of the opportunities concealed in the recently established Interinvest. This undertaking could be the beginning of forming additional investment companies [sic].

Some comments mentioned that in the period of consumption's slow growth rate it is especially important to increase the flexibility of commerce. But in this sphere the enterprising opportunities are very limited even though it is commerce which is in direct contact with the consumer, the market, and thus its reaction also could be quick. But the commerce's means are insufficient for enterprising, for example for industrial production.

The proposal was also made that not only the income derived from export, but the enterprise's total income should be the source of repaying high risk export-developing investment loans. It is important for the enterprises to be able to count with some degree of certainty on the effects of income regulation.

Implementing the requirement of normativity was [also] the topic of discussion. According to some opinions the normative requirements expressed in price and income regulation cannot be applied to all industrial branches. According to the opinion of others the condition of differentiation and selective development is the very implementation of normative requirements. Relaxing normativity and obtaining preferential considerations would have the consequence of again having to shortchange the dynamic enterprises, that is, the ones which have the resources and which require even larger resources in the interest of supporting the less efficient enterprises.

The risk of exporting has increased as a consequence of using the flexible exchange rate policy, because months may elapse between delivering the merchandise and arrival of the payment for it and in the meanwhile there may even be several changes in the foreign currency exchange rates, in practice upward revaluations of the forint. It would serve to minimize the disadvantage or risk of loss deriving from this if the so-called factoring were introduced, as was proposed. The essence of this activity is that the financial institution would purchase the enterprise's account receivable demand after subtracting from it certain interest and risk fees; thus the enterprise would then in essence be able to receive the value of the goods sold at the time delivery is made.

The Chamber's debate provided ample room for discussing cooperation between the producing and the foreign trade enterprises. It was mentioned that implementing the producer's presence on the market assumes the further expansion of export rights and also the development of forms of association. There is a need for a variety of enterprise- and enterpreneurial formats in conformance to the characters of the merchandise and of the market.

That part of the guidelines dealing with modernization of the enterprise organizations was also a topic of debate. The breaking up of certain trusts and major enterprises, or making some of their departments independent was criticized, saying that this generates uncertainty and the manufacturing experience accumulated in the major enterprises cannot be used to the best advantage.

Others have pointed out that experience shows that the economic advantage of major enterprises over the smaller enterprises cannot be proven.

It is expeditious to break up those large organizations which did not implement the concentration of resources and which form a unity only from the administrative and management viewpoint. The methods and opportunities of setting up small enterprises and its economic, institutional and legal conditions must be worked out as soon as possible. In the opposite case the wish of establishing small enterprises will remain only a wish. For example—as some people suggested--it would be expedient to examine the possibility that large enterprises should also be able to set up small enterprises.

The internal organizational development of enterprises justifies the strengthening of independent accounting by the profit centers of factories and plant locations. But this effort of the enterprises is greatly hindered by the financial record keeping and accounting regulations now in force, as was pointed out in the debate.

Those commenting on the regional development policy approved of the intent expressed in the plan, that the population's migration into the cities must be moderated. In this connection the practice was criticized, according to which the megye organs take away the municipal and town contributions paid, respectively, by the enterprises and producer cooperatives.

8584
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GUIDELINES FOR ECONOMIC REFORM DISCUSSED

Warsaw ZYCIE GOSPODARCZE in Polish No 41, 12 Oct 80 p 6

[Article by Barbara Wisniewska and Marek Misiak: "Approaches to Reform"]

[Text] The first meeting of the members of the ZG [Main Administration] of the Polish Economic Society, working on the report on the directions of economic reform in Poland, took place on 7 July 1980. At that time it was decided that the basic guidelines of reform should be to give a strategic nature to central planning and to increase the independence of enterprises. Proposed changes in organizational, management, financial and price structures, and planning methods, must be subordinate to these guidelines. As a result of this meeting the president of the Polish Economic Society [PTE] used letters to contact one hundred well-known specialists, teachers and practitioners, with a request for the writing of a proposal for changes in the individual elements of reform. The file with the proposals sent in numbers around 1,000 pages. The events of August and September intensified work on reform under the conviction of its extremely urgent need in the face of the economic crisis and the dissolution of ties between the government and society. Therefore a second meeting of the members was held on 15 September to discuss these guidelines, with due consideration of the most recent experiences.

The PTE chairman, Prof Jozef Pajestka, chaired the meeting. At the beginning he thanked the members of the committee for the proposals they had sent in. Prof Jan Mujzel presented a broader substantial introduction to the discussions.

As J. Mujzel stated, the current situation contains three new elements important for economic reform:
--the position which the personnel in factories have attained;
--a deep process of restoration which has begun throughout the social and economic life of the nation; and
--the rise of considerably more purchasing power in the economy, with simultaneous production restrictions and, among other things, deep economic disproportions along with obligations for holding prices, presents the economy with an unusually difficult situation.

In addition to taking advantage of foreign credits under these conditions, the economic policy must adopt a course of shifting the production apparatus and scarce material resources from investment to supplying the market and exports wherever possible. This situation also results in essential conclusions for the content and scope of economic reform.

First of all there must be authentic progress in management efficiency. Society and factory personnel are not going to, will not and cannot tolerate a condition in which there is a lack of progress in efficiency for a long period of time.

Secondly, changes in our social relations will create a new situation for labor and decisions reforming the economy. It is obvious that these decisions are extremely difficult, and not only and not mainly from the technical and economic point of view, although this is very important. An unusually strong correlation is developing between the reform and the functioning of the economy and the role and position of individual community, plant, industrial subbranch groups and other groups. Such a situation engenders tremendous resistance to all changes which are thoroughly definitive and consistent. Mobilization of the conservative forces against progressive reforms is a natural phenomenon for Marxists.

However, the new social situation creates certain premises in this field. We may definitely count on the fact that changes which have occurred and are occurring in the form of democratization of our social relations will create conditions and forces capable of breaching the previously insurmountable resistance and barriers.

Third, the matter of participation is becoming a key factor. The problem discussed even in the economic community for years, between the proponents of so-called managerial orientation on the one hand and those of freedom of action on the other, has been decided by life itself. Today there are no real possibilities for an evolution of our system to take place in Poland except through participation. The processes taking place in the trade-union movement resolutely establish in the order of the day the need for an intense formation and development of various forms of share and participation of workers in the management of the economy. This involves both representative institutions and autonomous institutions in factories, as well as in the Sejm and people's councils.

Then Prof Mujzel discussed the means and instruments of central management of enterprises and other economic organizations. The situation with respect to management by directives has always played a substantial role in the evolution of the system of the functioning of the economy. Therefore it is not possible to follow the path of systems changes except by increasing the autonomy of enterprises and other economic organizations, and thus putting definite limits on directives for planning and management. However, at the present time the economic policy must implement every resource and instrument to counteract the tottering of the balance and supporting improvement in the market situation and limiting the inflationary gap. This should be assisted by a change in the previous climate of relations between the government and society. Some emergency solutions must also be anticipated, because otherwise no concept will be able to stand confrontation with life. Thus, while assuming benefits from the instrument of central management, which directives are, during a period of transition, there must also be intensive and simultaneous preparation of conditions for reform.

J. Mujzel presented three tangible matters from this viewpoint, the first of them being called by mutual agreement the problem of price activation. This means that inflationary pressure can appear in different ways and that efforts must be concentrated mainly on counteracting its most destructive forms, reducing confidence in pro-efficiency activities and blocking the road to systems changes. Therefore there must be a broad presentation of possibilities and solutions which will allow the inflationary processes to be given the nature of "civilized" inflation. This cannot be achieved without price activation, despite social barriers in the previous management system.

The second problem involves the regulation of distribution (materials, raw materials, products) usually associated with directives for production and supply. These are the basic instruments in the traditional system of the functioning of the national economy. Preserving these directives may completely block progress in reform in both central planning and in methods of management of economic organizations. In the opinion of Prof Mujzel, a solution to this problem will help identify indispensable areas for regulation. Here there is a great deal of inertia, routine and habit which can completely smother any progress. Therefore a critical and selective relationship is necessary with respect to every directive instrument and form of regulation used. The time horizon of these directives is closely associated with this matter, since regulation does not have such a ruinous effect on the efficiency of an economic organization where the time horizon for using directives has been successfully extended. This involves the degree of stability in supply for, let us say, the course of a year.

The third problem is the incentive system. How can regulation of incentive for efficiency be introduced into the new system? It is undoubtedly possible to make some improvement in indices so that they do not destroy motivation or efficiency on the same scale as in the past. But how can this be done under conditions of a lack of equilibrium?

In the opinion of J. Mujzel an alternative regulation can become a kind of monopsony based on a producer selling scarce products through one sales organization or one commercial organization. In this way the latter would become a monopsony of placing orders, coordinating assortment and so on. In many cases this could significantly limit the area of regulation and simultaneously guarantee effective central control.

However, formulations connecting wage funds with efficiency will probably lead to some kind of evolution from the so-called increment formula to a share formula. Wider application of this depends on price arrangements, proper formation of the financial system and strengthening the developed system of autonomy. This will mean that the entire fund developed for consumer and developmental purposes will remain at the disposal of the personnel and economic organizations. The share of the state in the income prepared (including collective consumption) would be realized by means of suitable financial instruments. The latter (taxes, credits and so on, not to speak of prices) would also be instruments employed flexibly to realize the central plan.

Despite differences of opinion in many individual matters and various approaches to their solution, the participants in the discussion evaluated the system up to now very critically and unanimously supported authentic reform of the economic system and the need to put it into force as rapidly as possible. The need for rapid, although well prepared, fundamental changes was closely related to the current situation in the country, and the restoration of social confidence in the government was recognized as one of the major necessary conditions for the success of the reform, thus confirming the opinion of J. Mujzel on the complexity and difficulties of this task. They stressed that emergency action preceding the reform and systematizing the economy could have great significance in restoring confidence.

The point of departure in work on the reform should be acceptance of matters dealing with labor and enterprise autonomy.

In this respect the representatives of the industrial and academic communities adopted a similar stand. Let us first listen to the representatives of industry:

T. Migdal stated: "I am one of those who conduct talks with enterprises. Thus I know just how difficult things are because 'we have directed' the thoughts of society toward what should be done, but without pointing out that what should be done is what we are managing economically."

One condition for achieving relatively rapid improvement in the economy is assuring the personnel of an effect on results. However, T. Migdal stressed that this matter is associated, among other things, with changes in the central planning system which assure cohesion in indices at all planning levels. "Without this there is no basis for starting to make changes."

T. Migdal asserted that a new organization is needed from top to bottom. It is not possible to organize enterprises and associations wearing the same hat, because again inconsistency may develop between organizations of the central authorities and lower organizations. Let us recall that attempts made to modify the system have fixed responsibility for a few or a larger number of indices prescribed by directives. At this time there are already over one hundred of them. And there is no way "of interpreting" such a large number of indices prescribed by directive in language understandable by the members of the KSR [Workers' Self-Government Conference].

T. Jaworski said: "The incentive connection is undoubtedly the factor in the effectiveness of the system. Therefore model solutions and the matter of participation must be taken together. An increase in the self-government of economic units constitutes the first condition for systems solution, while the second is based on the fact that these solutions must somehow 'force' the participation of personnel in management. This is why there must be a clear definition in the model solutions of both the role of the management of economic organizations and the role of the representative organizations of personnel. A knowledge of the model solutions and of the mechanisms determines the share of personnel in applying the system."

L. Balcerowicz conceived this problem in a different way. He stated that the position in the reform projects discussed by J. Mujzel (prepared in the Planning Institute), with its strong emphasis on directives and its weak one on enterprise independence, is disquieting. A condition for reform to succeed, regardless of preparing a good project, is devising an economic policy to achieve at least a relative market balance. But with an extensive application of directives, that is, an instrument proper for a directive-type administrative system, it is easy to justify preservation of developed structures of administration known, among other things, from subbranch-ministry orientation. But are these structures capable of renouncing, for example, certain investments? As is well-known, they have a great effect on the situation in the market and in exports. It is necessary to determine whether what only appears to be a technical problem, of the selective investment type already mentioned, is not more deeply conditioned by ramifications in institutional structures. Changes in them can indeed be spoken of in the sense of reducing the number of industrial branch-type ministries or their personnel. But this is not the point. The basic condition for "nongovernment" influence is a lack of total dependency of an economic organization on the center. From this point of view changes in an economic organization are secondary. On the other hand, changes in the key link, in this case in the central administration, is of essential significance. This is the leading link on which most others depend.

It is possible to limit nongovernment influence on economic organizations from the very moment of arranging the economy before the reform. L. Balcerowicz acknowledged that many directives can be replaced by activities of a different type, for example, government contracts and agreements. In exchange for certain obligations from economic organizations, of the type

of changing the production or assortment structure, central organs can guarantee an economic organization definite financial resources based partially or completely on the rate of return.

Recalling well-known cases from the past, often mentioned in this proposal was the conclusion of contracts between central organs of state or economic administration and enterprises. The discussions emphasized that the experience of other socialist countries (for example, Hungary) support a reduction in directives. These and other difficulties well known to us (in supply for example) will not be solved mainly by reducing the number of directive indices, but by devising activity to reduce prime costs and improve efficiency. Only in this way can the social costs of economic development be significantly reduced and coordination in the economy guaranteed. However, a great deal of misunderstanding has accumulated about this matter.

The opinion still often voiced about the need of retaining directive tasks in the area of markets and export production is a misunderstanding. This idea surfaced in various statements in which some participants (including S. Jedrychowski) recalled the results of the pre-congress discussion held on the so-called economist Thursdays, on the thorough groundlessness of separating market and export production and of opposing their supply and cooperative production, as well as production for the needs of domestic investments. Such opposition produces deplorable results.

Prof Waclaw Wilczynski treated this problem in a broader way, reflecting on the extent to which project work known up to now fulfills the basic criteria which the new system must meet. In the opinion of Prof. Wilczynski, the first such criterion is a guarantee of credible premises for decision and proper economic choice at all levels, the highest and the lowest. From this viewpoint we must reflect on whether maintaining the developed organizational structures guarantees a rational choice in the sphere of planning and management. W. Wilczynski recalled that this is a matter of structures generally judged as favoring special interests.

The second criterion is closely associated with the first, but requires separate treatment because it refers to the basic industrial link, the enterprise, and more precisely stimulators to reduce prime costs in the enterprise. This matter includes a great deal of vagueness, intelligible from consideration of other dilemmas, such as those occurring in the price sphere. However, if we adopt a long-range price control in the future, if prices are still set exclusively on the basis of cost calculations, if we retain directives here and there, it will be difficult to expect enterprises to function efficiently for the purpose of reducing time costs. But this is a critical matter.

In the opinion of Prof Wilczynski, the connections between standards of value and the basis for price formation should be considered differently in project preparations. It is exactly the connection between gross

measurements and the principles of price formation based on free cost calculation which have resulted in the tremendous inflation of costs and outlays.... If we do not succeed in creating a general tendency to reduce prime costs, we will also be unsuccessful in balancing the economy, and will not reach any market balance in any section."

"It is also possible," W. Wilczynski continued, "to allege that somehow profits would work more effectively in reducing prime costs than added value [excluding material services]. But what kind of profit? Up to this time profit has appeared exclusively as a surcharge on growing costs. On the other hand, we have little knowledge of profit as something which occurs as a result of reducing prime costs. This category is least understood in enterprises, because an increase in profits leads to its verification, also entailing a price reduction. Enterprises fear this like fire for generally well-known reasons. Therefore we must create conditions for increasing profits by means of reducing prime costs. This is not yet found in systems solutions. This matter is also of capital importance in considering the 'construction of a systems proposal in the area of wages and connections with the economic results of an enterprise in such a way that it would actually lead to a balance, to obtaining a surplus in the social product produced by the enterprise above what it paid for'."

Prof Wilczynski is convinced that this problem must also be looked at from the point of view of the economic education of society:

"We must clarify the essential basis of economic independence, the idea of the enterprise which pays workers as a function of what they actually produce. After all, this is a field in which there is inconsistency between the trade unions and our pay ideas. Trade unions always aim at identical pay in all possible enterprises and plants, and take a very dim look at price differentials as a function of economic results. But we must inevitably follow the path toward wage differentiation."

All of the participants in the discussion came out in favor of considering the social and political aspects of proper incentive, and strongly emphasized the moral and ethical aspects of this problem. A proper and intelligible connection between wages and wages could liberate a great deal of reserve in economic initiative among working personnel, engineering and technical cadres and in all employees. Otherwise bilateral connections between obligations accepted and a gradual balance of the economy will not be possible. But this is also the condition for adequate solution in the matter of retail prices, along with the natural release of reserves in agriculture and further progress in food production.

At any rate the reform should be preceded by changes in [materials] supply prices and corresponding legislation (a bill on worker autonomy in the enterprise, planning and so forth).

We have selected a few threads from this very broad discussion in the conviction that it is essential to employ outstanding economists in economic reforms. Enterprise autonomy and personnel independence dominate in this approach.

Taking part in the 15 September meeting were: Leszek Balcerowicz, Tadeusz Jaworski, Stefan Jedrychowski, Tadeusz Migdal, Jozef Pajestka, Erwin Plichcinski, Mieczyslaw Rakowski, Andrzej Tymowski, Waclaw Wilczynski, Stefan Wisniewski, Zbigniew Wiszniewski and Tadeusz Wojciechowski.

The meeting of the PTE Main Administration took place 3 days after the meeting of the commission discussed above. The Administration listened to the information about the work of the commission up to now and, after discussion, approved the directions and schedule of further work on the report of economic reform guidelines. In their discussions they emphasized that reforms cannot be treated in a technocratic manner or in a narrow economic manner, and that a purely instrumental approach is not enough. Assuming that this independence will continue in our country, the reform should guarantee a suitable system of functioning of enterprises and of central institutions.

There were particularly sharp expressions against incomplete or simulated reform. The economist community will not underwrite a reform which is not thorough and comprehensive and treated seriously. The commission which is to prepare the reform faces an exceptionally important social responsibility. Here the economic community also wants to feel authentic joint responsibility.

The Administration adopted a motion to prepare the report during the next month, and after preliminary discussion in the commission and the ZG plenum, to transmit it particularly to the government and to the commission of the Political Bureau formed to carry out reforms.

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DEVELOPMENT OF EFFECTIVE TECHNICAL-MATERIAL SUPPLY BASE

Bucharest ERA SOCIALISTA in Romanian No 18, 20 Sep 80 pp 12-15, 51

[Article by Prof Dumitru Fundatura, technical director of the Computer Center of the Ministry of Technical-Material Supply and Control of the Management of Fixed Assets]

[Text] "Special attention must be devoted to expanding our own raw materials basis, intensifying research activities, and exploiting the existing reserves useful mineral substances throughout the country, including ores that are poorer or situated in locations that are more difficult to exploit." Nicolae Ceausescu, speech to the Second Congress of Peoples' Councils.

It is well known that in recent years the party and state leadership has adopted a group of highly significant measures to improve the management, organization, and planning of the economy, with profound implications in the technical-material supply domain.

The fact is that supply and distribution are essential components in the process of producing material goods. It is not merely one point in the circulation of means of production, nor solely a regulator between production and consumption, which would prevent production without need or need without coverage, but rather a dynamic economic process which strongly influences the superior utilization of all the material resources available in the country, and the creation of the largest possible volume of useful products from the utilization values brought into productive consumption.

All New and Reusable Resources in the Economic Circuit

First and foremost, a good technical-material supply implies an expansion and development of our own raw materials and energy basis, a diversification of the resource inventory, and an intensified flow of supplies and economic relationships among vendors and customers; in other words, it means a speed-up in the circulation of means of production in the economy. One of the concrete ways in which this can be achieved, is to further increase the reserves of useful substances discovered and made available for exploitation, as well as to increase extraction from actual deposits. According to 1985 forecasts, net coal production will reach 85-88.3 million tons, of which 85 percent will be lignite and 15-16.5 million tons will be bituminous shale; in addition, we will extract 12.5 million tons of crude oil, 26.5 million cubic meters of methane gas, and so on. The production of

non-metallic substances will be developed in accordance with the needs of the national economy. During the next five-year plan, sulfur production will increase 6.1 times, and that of kaolin and dolomite 1.4 times; the production of clays, bentonite, graphite, and so on, will also be substantially increased. This will create conditions for increasing the volume of resources in material balances, so that the needs of the national economy and users can be met in scientifically established proportions and with a degree of maximum certainty. It will also improve the structure of the electric power balance; of the total electricity produced (88-90 billion kWh) in 1985, nearly 60 percent will be from plants burning coal and bituminous shale, and 20 percent from hydroelectric plants.

The interests of the national economy demand that during the coming years we place in evidence new resources which have not been used or have been poorly used until now; these will be new resources of radioactive ores, rare and scattered metals, titano-zirconifer alluvials, rare earths, potassium salts, and so on, as well as new forms of primary energy (solar, geothermal, wind, and so on). It is forecast that by 1985 we will replace 2.5-3 million tons of fuels from new resources.

A dominant trend at the present stage, and one which will have to be stressed in the future, is the sustained promotion of materials that can be obtained in Romania, that have properties equal to or even superior to those of conventional ones, and that can successfully replace traditional, imported, and more expensive materials, such as non-ferrous metals, rare metals in industrial production (gold, silver, platinum), alloy elements, and so on, all of which are increasingly difficult to find on the world market.

An important source for expanding the raw and other materials basis is represented by local resources. The use of plaster of Paris to build separating partitions in buildings, of reeds and canes as construction materials, of branches, bark, and forest deadfall for the fabrication of various products, and so on, can reduce the pressure on the central fund of materials, especially of those that are in short supply, making it possible to distribute a larger portion of the existing materials to priority sectors of the economy. In this respect, a high responsibility is carried by local organs, which as good stewards and administrators of their counties and localities, must act more decisively to discover all the resources in their areas, that are likely to directly or indirectly strengthen the material strength of the economy, and to contribute to the coverage of our consumption needs.

The expansion and judicious management of our own raw materials and energy basis is intimately associated with the superior exploitation of all our available material resources. As established by the 12th Party Congress, by 1985 it will be possible and necessary to increase the exploitation indicators of basic raw materials and energy by 32-34 percent, to bring the coefficient of metal extraction in the production of milled goods to 86 percent, to reduce metal consumption quotas in machine production by at least 20-23 percent, and to reduce by at least 21-23 percent the index of primary energy consumption in industry.

All these measures are aimed at a rapid growth in the supply of production with domestic material resources, as well as at strongly reducing importation by limiting it solely to those materials and products for which resources or technical methods do not exist in Romania. "Without assuring the material basis," stated Nicolae Ceausescu at the Workshop of the Central Committee of the RCP on 29-30 May of this

year, "we will not be able to properly achieve the production that we need. That is why I once more draw your attention to the fact that we will not proceed to develop production on the basis of importations. We will first of all have to secure for ourselves the raw and other materials that we need, that we can and must provide, and only then will we proceed to develop production."

In order to reach the quantitative and qualitative parameters projected for the 1981-1985 period, there is a stringent need to achieve all the production levels stipulated by the 1980 plan. But the failure to meet the extraction plan for crude oil and coal, the delays in placing in production and exploiting the new copper mines, the failure to provide adequate quantities and qualities of certain ores, including clay, as well as the failure to produce other materials and goods, creates a difficult situation for the proper start of the next five-year plan. All levels of forces -- enterprises, centrals, ministries -- must be concentrated to overcome the present situation, recover arrears, and fulfill the rates prescribed by the plan. Thus will we avoid subjecting the national economy to additional efforts for covering in other ways that which our industry can but does not offer because of persistent shortcomings in production activities.

A particular role in the intensive exploitation of our resources is played by the recovery and industrial processing of materials derived from production and consumption. Stressing the importance that local organs must assign to such matters, Nicolae Ceausescu pointed out during the speech he gave before the Second Congress of Peoples' Councils, that these organs "have the duty to intensify their work in fully recovering and exploiting the large reusable resources existing in all of Romania's counties and localities. Recovery activities must assure at least 40-50 percent of the domestic needs for iron, non-ferrous metals, textile fibers and filaments, mineral oils, and other raw materials." This practically inexaustible activity must become constant so as to truly become a more important source for covering the needs of the national economy, and for increasingly counteracting the limited nature of our resources and the difficulties in procuring some others from the world market. The significance of the recovery and industrial processing of reusable materials can be illustrated with numerous examples. For instance, it takes 10 times as much time to produce one ton of bulk cast iron, than to collect, process, and deliver one ton of ferrous metals scrap; similarly, the investment cost to collect and handle steel scrap is less than one-tenth of the investment cost necessary to build capabilities for extracting ores and producing bulk cast iron. In the paper industry, the production of one unit of cellulose requires 2.6-5 man-days, whereas the same amount can be obtained from recycled paper in only 1.9-2.1 man-days. These examples obviously show the causal relationship and the economic effects created in the most diverse fields of activity, by the recovery and recycling of materials.

The collection, processing, and utilization of reusable materials introduce significant substance gains, not only in the balances of the respective materials, but also in those of ancillary ones, upstream or downstream of the technologies of the products involved. For instance: in aluminum production, energy consumption is reduced 20-fold through the use of recovered metal, 6.6-fold in the case of copper, 6-fold for iron, 3.6-fold for zinc, 2.5-fold for lead, and so on. In other words, a much larger amount of products necessary to the national economy can be produced with the same amount of electric power.

The actions organized in Romania converge on the exploitation of an increasing volume of reusable resources. But the pace of these actions is still slow and the area they encompass still limited. A broad range of reusable resources awaits to be reintroduced into the economic circuit. Among these are ashes and slag, plastics, light bulbs, fluorescent tubes, abrasives, lids and corks, and so on. A major cause for this situation is that a continuous flow from production site to site of usage has not yet been organized for reusable material resources for which we already have processing techniques and for which users have been established.

A second cause is that inventory and storage processes have not been organized for resources for which research has not yet been finalized, and for which technical processing methods have therefore not yet been established.

Experience has shown that the focus for locating, sorting, collecting, and exploiting reusable material resources is at the enterprise in which they are produced. The material records kept by each enterprise must establish in detail the destination of each gram of reusable material. Moreover, a close correlation of material balances with income and costs budgets, and the use of the financial leverages offered by the economic-financial mechanism, must assure the complete recovery of expenses incurred in the purchase of raw materials, including the total recovery of the material resources resulting from the production process. Under this proposal, income and costs budgets could not be closed with positive results without the financial return obtained from the full exploitation of secondary material resources in each enterprise.

From Achieving Physical Production to Respect for Contracts

The large volume of means of production that is being used in the economy, and the considerable growth in economic relations among supplier and user enterprises, imposes more than ever a rigorous respect for the obligations undertaken by signers of contracts; any deviation or failure to respect these obligations entails a chain reaction in the enterprises involved with the guilty party, and harms the material balance of the plan. That is why a rigorous respect for plan and contractual discipline, and the achievement and delivery of physical production in the quantities, qualities, and terms established in assignments and purchase orders, are economic tasks of the first order and of the highest responsibility.

Collective management organs in ministries, centrals, and enterprises, and workers' collectives in enterprises and economic units, have adopted technical and organizational measures which will assure that plan tasks and contractual obligations are respected to the letter, and that in many cases the assumed obligations are even surpassed (for coal, ores, products of the construction materials industry, lumber, and so on). A large number of violations of contractual obligations still persist (for refractory materials, tires, electric motors, and so on), which place user enterprises in difficult positions, endangering the continuity of their production. For instance, back orders for deliveries of refractory materials (bricks, concrete, porous pipes, furnace lining materials, and so on) from the Muncitorul-Cristian enterprise and from the refractory products enterprises of Pleasa, Alba Iulia, and Brasov, have caused the steel combines of Galati, Hunedoara, and Resita to exhaust their stocks of such materials, creating a constant insecurity of supply with negative repercussions on the production process.

Respect for the plan and contractual discipline is not an elective task which can be left up to the decision of one of the parties, but rather a legal obligation on whose fulfillment depends the normal conduct of socialist production relationships among enterprises. It is thus also a matter of ethics, of mutual support, and of good collaboration among various workers' collectives, so as to achieve common goals, while encouraging and vesting their interests in the completion of the tasks established in the plan for socioeconomic development and the economic contracts signed on the basis of this plan.

The completion and delivery of physical production are of critical importance in assuring the correlation which exists, and must exist, between plans and contracts. There are times however, when breaks between plans and contracts lead to a failure to fulfill the latter. During the first quarter of this year for instance, 32,000 electric motors of 0.25 MW and more have not been delivered as contracted, while the producing enterprises fulfilled their tasks both in terms of produced goods and in terms of net production. This discrepancy arises because the plan tasks are established in terms of MW, whereas the contracts stipulate a specific number of motors of various powers, so as to meet the needs of customers (for tooling and installations, for starting production capabilities, and so on). Some manufacturing units tend to give priority to large motors, and thus fulfill their plan tasks with a smaller number of motors while failing to meet their contractual obligations.

These circumstances raise several problems: to begin with, they create discrepancies between plan and contractual tasks, thus violating legal provisions and bringing losses to the economy. Moreover, they impair collaboration between production units and customers. The upshot of all this is that the plan must be considered as being fulfilled, with all the consequences that follow, only after all contractual obligations have been fully honored. A contradictory situation is otherwise created, in which the supplier enterprise, by failing to respect its contractual obligations, prevents its customer enterprises from fulfilling the plan, even though it fulfills its own plan tasks. The problem is even more acute when the failure to respect contractual clauses delays the start of production capabilities, thereby causing a failure to produce the volume of resources stipulated in material balances, and consequently a failure to fully cover the needs of customers.

The achievement of physical production is a basic, fundamental principle of the new economic mechanism, which assumes first of all that all items of the plan are completed on schedule. We cannot have more material goods than the ones we create, and we cannot derive benefit from more than we achieve through our own work. The fact that the new economic mechanism has not been understood or has not been implemented as seriously and strictly as necessary in some enterprises, is actually demonstrated by the failure to provide some products stipulated in the plan and in economic contracts. It would appear that some management staffs in enterprises and centrals, as well as some economists, consider the new economic mechanism as a different form of the old regulations, rather than a principle of economic existence, a new management concept, and a new form of participation in the nation's socioeconomic development. This explains how some enterprises, such as Unirea-Cluj Napoca, Aversa-Bucharest, and others, have fulfilled their value plan for overall production and production of goods, while carrying some lags in physical production, which they consider as small, insignificant, unimportant, without realizing that they cause a chain reaction failure of physical production in other enterprises.

The new economic mechanism and its principles and effects must not be regarded as isolated problems for each enterprise, and as the sum of private, individual economic mechanisms at the level of the national economy. In the words of Nicolae Ceausescu, "we must all understand and act in unison to implement the very important principles of the new mechanism, which must truly play an active role in the mobilization of all the workers' efforts for the conduct of economic activities with the best possible results." At the national level therefore, the effects of the new economic mechanism represent the conjugated effort of workers in all fields of activity.

The vast action undertaken to standardize products is of essential importance for the judicious utilization of material resources, for the responsible and very demanding stewardship of the national wealth, and for proper technical-material supply. The purpose of this action is to restrict the very large number of inventory items, models, types, and dimensions of products, subassemblies, and parts moving through the economy.

Analyses have shown that the broad diversification of models has not always resulted in better quality, in meeting a wider range of utilizations, or in better product reliability. Both in industrial production and in construction and installations, designs as well as manufacturing technologies have often specified different choices and qualities of materials for the same product or project, even though some of them required greater costs and more complex techniques. Eight brands of steel for instance are used in manufacturing piston pins for automobiles and tractors, even though their operating conditions allow the use of a single brand. "We must decisively curtail," Nicolae Ceausescu has said, "the anarchy that reigns in the use of all sorts of materials, parts, and subassemblies, which hinders production, hinders maintenance and repairs, and pushes us toward totally unnecessary importations." The state and party leadership has asked the responsible ministries, centrals, and research and design institutes to apply the new standardization steps beginning with the second quarter of this year, and to use them as the basis for formulating next year's plan.

Very positive economic results follow the restriction of product model ranges and the adoption of standardized product inventories. Some of these results are: superior utilization of production capabilities and machinery, together with a lower number of manufacturing technologies; higher mass production of parts and subassemblies, and application of advanced technologies for manufacturing and assembly; reduced consumption of materials, fuels, and energy per unit product, and the possibility of formulating rigorous consumption standards; sustained quality of products, parts, and subassemblies, taking into consideration the functions that they will have to fulfill in operation or during consumption; simplified operations and reduced maintenance time for machinery, tooling, and installations, as well as the formulation of highly efficient technologies for reconditioning and reutilization of used spare parts.

In full swing, the standardization action has resulted in about a 50 percent reduction of the models and dimensions analyzed so far, which in turn has already made it possible this year to substantially improve the supply inventory. At the same time and consequent to this fact, the number of suppliers will also be reduced,

thus helping to simplify economic relationships for supply and distribution, establish permanent connections for delivery, increase reliability and effectiveness, and reduce the costs of supply, handling, storage, and transportation operations.

Improved Forms and Methods of Technical-Material Supply

One of the highly significant measures taken by our party and state leadership, has been aimed at a gradual transition to forms and methods of technical-material supply which will assure a greater efficiency in this economic process. Considering the judicious territorial distribution of production forces, the multiplication of points of production and consumption, and the constant increase in the volume of means of production that are being introduced into the economy, the organization of a territorial network of bases and warehouses has been undertaken, along with the creation of a system of county bases for technical-material supply, as a principal link in the flow of a large volume of raw and other materials from suppliers to users. The major advantages of this system are primarily to be felt in bringing the supply sources of raw and other materials closer to consumers; determining specific areas of supply which will simplify economic relations among parties, and assuring rational and effective supply flows; optimizing transportation by assigning consumers to the closest suppliers; fully utilizing transportation capabilities and using the most suitable means of transportationn in each case; establishing the shortest routes for supply and transportation so as to reduce the time necessary for the latter; reduce distances covered, handling, sorting, loading, and unloading operations, and costs required by these activities; concentrating the available stocks in enterprises, bases, and warehouses, thus creating optimum conditions for a unified administration of technical-material supply processes, and especially for efficiently redistributing stocks as a function of the needs that arise at any given time; concentrating excess stocks so as to reintroduce them into the economy; sorting and resorting stocks at each step depending on concrete user needs; and so on.

Added to these advantages of course, are those associated with the concentration of space and storage capabilities, and of machinery, tooling, and installations specific to these activities; their improved utilization through maximum possible loading, and the introduction into the economy of released installations; improved use of workers and reduction in their numbers; concentration of investment funds and their redirection toward the most efficient solution to problems in this field, such as: creation of high -- 12-15 meters -- storage, greater mechanization in storage and delivery activities, superior safeguarding and preservation conditions for stored materials, elimination of spoilage, and so on.

To be sure, this organizational solution is only one step, the first step, in improving the organization system of technical-material supply. It must be continued and developed so that, as the secretary general of the party has indicated, "the bases from which materials are transported -- especially for construction -- will be as close to their destination as possible in the respective county." The first action would be to finalize the inclusion into a single system, into a unified network, of the bases and warehouses that are currently under departmental jurisdiction (Ministry of Agriculture and the Food Industry, Ministry of the Metallurgical Industry, Ministry of the Machine Building Industry, and so

on), thus eliminating parallel operations of similar networks of bases and warehouses, most of them with identical inventories of parts and materials. Because of this, the economy still has scattered stocks of materials with poor possibilities for gathering and redistribution.

The analyses that have been conducted and the experience that has been accumulated have demonstrated that the temporary needs of users (3-4 tons of a given material) can be met solely from the circulation from stock of a single ton, when the stocks happen to be held by a single authority, at a single location. The economy is thus relieved of a significant volume of frozen materials, which are returned to the economic circuit through the current supply traffic. At the same time, all the other advantages mentioned above will be reflected in higher efficiency indicators through a continued concentration of all bases and warehouses in a unified organizational system.

One more point deserves to be made here. In the Report of the 12th Congress of the RCP, Nicolae Ceausescu indicated that: "River transportation will grow 2.0-2.2-fold through the introduction of powerful and specialized ships, as well as through the opening of the Danube-Black Sea Canal. We will also begin construction of the navigable Bucharest-Danube Canal, which will provide a direct water connection between the nation's capital, Black Sea ports, and countries of Central Europe." This prospect presents new possibilities for building and locating river warehouses -- either as harbor warehouses, or as supply and transit warehouses -- as well as storage areas along the two canals. The intensified river transportation along the Danube, as well as the transportation on the Danube-Black Sea Canal, and later on the Bucharest-Danube Canal, will attract a large volume of raw and other materials to these routes and will make it necessary to devise new supply systems for users in the neighboring areas. The completion of the warehouse network will have to consider the definition of a zone in which water transportation and combined transportation (railway and automotive) will allow a steady supply flow in a short time, with low transportation and supply costs. Estimates show that nearly all the Danube plain and Dobrogea will come under the influence of this vast system of transportation and supply; in practical terms, all the suppliers and users who maintain supply and delivery economic relationships, and who are located in a zone bounded by Tulcea-Galati-Braila on the east, and by the curve of the Carpathians on the south-south-west, will be the major beneficiaries of this traffic. And we must not overlook the fact that this system of supply and transportation will carry a large volume of materials and products, thus flattening traffic peaks in railway and automotive transportation in the Danube plain.

It therefore becomes necessary to define appropriate types of river bases and warehouses, their circle of coverage, and their system of service, mechanization, relationships, organization, and so on, in order to benefit from all their advantages as soon as actual utilization circumstances allow it.

Under the present conditions of constant progress in science and technology, improvements in technical-material supply must be achieved through the industrialization of this activity and through its more intensive introduction into the production efforts of enterprises and economic units. We therefore find it particularly necessary that a number of activities of a productive nature be gradually transferred to supply and distribution areas, thus relieving technical manufacturing processes of operations which involve the preparation of raw and other

materials intended for production consumption. Some of these operations are the cutting of materials in fixed and multiple lengths according to production needs, shaping of some materials, simple or combined shaping, preparation of standard mixtures (when they do not require technologies specific for some manufacturing processes), routine cleaning and assembly, reconditioning of parts and subassemblies, and so on.

The experiments conducted so far by some supply organizations (such as the county bases in Cluj, Brasov, Prahova, Bucharest, and so on) and some enterprises, have had favorable results which argue in favor of more extensive transfer of operations of a productive nature to technical-material supply activities. These concrete results have been a reduction in fabrication times because preliminary operations are carried out while materials are still in the supply warehouses of enterprises or bases; the relief of production workers from operations preliminary or secondary to fabrication, and better utilization of working hours, thereby increasing labor productivity; the reduction of supply and storage costs, and the assurance of a continuous, complete, and comprehensive flow of supplies to production, of raw materials and materials ready to be introduced into fabrication.

By taking over these operations, the technical-material supply activity is expanded, complemented, and better defined in its direct connection with production, thereby becoming integrated completely and efficiently into the productive circuit.

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COST REDUCTION KEY ELEMENT IN INCREASING EFFICIENCY

Bucharest REVISTA ECONOMICA in Romanian No 42, 17 Oct 80 pp 7-8

/Article by Gh. Sica: "Cost Reduction, a Major Imperative for Growth in Economic Efficiency"/

/Text/ The new economic and financial mechanism, putting the accent on the priority that must be accorded to the intensive factors in economic and social development, establishes the production cost as a defining criterion of economic efficiency. An economic category of great importance, springing from the requirements for applying the law of value and for the law of timesaving, the production cost constitutes the "barometer" of the economic activity in the production units.

In all the stages of development traversed by the Romanian economy, the cost discipline has been strengthened both by planning the cost-reduction tasks and by improving the content and the techniques of substantiation and analysis. In recent years, steps have been taken that have led to the elimination of some elements of net income from costs, which distorted their economic content, thus permitting the enterprises to mobilize themselves, by means of their own effort, to reduce costs and increase labor productivity, that is, permitting them to operate on the factors that are at their disposal in order to fulfill the tasks for reducing the level of expenses. It is a question of abolishing the tax on production funds, which represented in fact a form of redistribution of net income, of removing from costs and bearing directly from financial results the land tax, the unproductive expenses (fines, penalties, demurrage) and so on.

At present, it can be stated that, from a viewpoint of the content of costs, here in our country they reflect embodied labor and labor for itself, and the elements of net income that still exist in costs for practical reasons (contributions to social security, interest on current loans and so on) are situated in terms of percentage at a normal level (5-10 percent). At the same time, on the basis of a program approved by the government, the introduction of advanced methods of calculation and recordkeeping of costs (the normative method, the standard method, the machine-hour-cost method and so on) into the enterprises will permit the prompt following of

the evolution of the level of costs, including the adoption of preventive measures that result from this and, at the same time, the matter of knowing as early as the first days of the next month the net output achieved.

Complete Fulfillment of the Program of Measures

As a result of the steps taken to riase the degree of technical equipping of the enterprises, to improve the technological processes, to reduce material consumptions, to orient production toward assortments with a high degree of processing and utilization of raw materials, to increase production and labor productivity, significant reductions in production costs have been achieved. Thus, savings of about 47.4 billion lei were obtained in national industry in the 1966-1970 five-year period and over 85 billion lei (including 61 billion lei from the reduction of material expenses) in the 1971-1975 five-year period, and according to estimated data, nearly 117 billion lei, including more than 70 billion lei from the reduction of material expenses, will be achieved in the five-year period that we are concluding.

The achievements confirm the fact that where steps were taken and there was constant concern for fulfilling these synthetic qualitative indicators of the plan good results were also obtained. Thus, the savings achieved from the reduction of the production costs obtained in 1979 as compared with 1978 in national industry, under comparable conditions, total about 8.7 billion lei. Many enterprises in the machine building industry, the metallurgical industry and light industry and units in other industrial branches helped to obtain this volume of savings.

However, not all the enterprises, industrial centrals and ministries have taken decisive steps to create the conditions needed for reducing the production costs to the stipulated level. Consequently, it is necessary that, in the part of the year that still remains, actions be taken to make up the lags and create the conditions for completely fulfilling the tasks for the whole year. The matter of accentuating and thoroughly studying the qualitative aspects in the process of economic growth constitutes the essential coordinate that must manifest itself in production activity. In this framework, each leu advanced by society must be managed in such a way as to bring a maximum of net income, satisfying the requirements of expanded socialist reproduction, a sure way to carry out the policy of raising the people's standard of living. This concept is concretized in the directives adopted by the 12th RCP Congress, which provided a higher rate of growth of national income (6.7-7.4 percent) than that of national product (6.0-6.6 percent) and, at the same time, that 80 percent of the increase in national income is to be obtained through growth in social labor productivity. Under these conditions, the total expenses per 1,000 lei of commodity output in national industry in the 1981-1985 five-year period will have to fall by 7-8 percent in comparison with 1980 and the material expenses by 5.5-6 percent. The calculations show that, in industry alone, by fulfilling the objectives established by the directives, savings of about 175

billion lei, including more than 100 billion lei in material expenses, will be obtained.

In order to give consistency to the actions for reducing the expenses per unit of product, as early as 1974, "Programs of Measures for the Reduction of Production Costs," an integral part of the sole national plan, were institutionalized. Practically, these programs should contain all the ways specific to an economic unit with regard to mobilizing the internal reserves on as wide a basis as possible, should be exhaustive, laid out according to sections and shops with final and intermediate dates for materializing the measures, with precise responsibilities, evaluated from the viewpoint of the economic effect and, especially, followed systematically to be put into practice.

Although some economic units now possess a certain experience and have results in implementing the cost program as a management tool in the economic and technical processes, others are limiting themselves to drawing up the program in a formal way. For example, the "1 Mai" Enterprise in Ploiesti is promoting in the manufacturing sections the elements of the production costs (both the direct expenses and the indirect ones) and is seeking systematically to materialize the measures. As a result, the production costs have been reduced continually, with the enterprise keeping practically within the provisions of the plan.

Although from a methodological viewpoint the problem of costs is, in general, in agreement with the new economic exigencies, from the analyses made in enterprises and centrals it resulted, despite declarative appearances, that the activity of reducing the production costs has not risen in all cases to a suitable level but has been confined to one or more overall calculations made in the chief accountant's sector. At the same time, the technical plan has not supported organically, with necessary solutions, the planned volume of savings, with the programs of measures for cost reduction sometimes having a general character. The "Grivita Rosie" Central for Refineries and Chemical Equipment, the Tirgoviste Combine for Special Steel, the Oltenia Mining Combine, the Craiova Chemical Fertilizer Central, the Galati Iron and Steel Central and so on are in this state. These units have not managed to reduce the costs this year to the planned level but, on the contrary, have exceeded them by far, especially due to growth in the volume of material expenses per unit of product achieved. This is why it is necessary to strengthen the plan discipline for production costs, to eliminate formalism in preparing and following the programs of measures for reducing them, in making plan calculations according to products and updating them, so that they become concrete tools for managing the activity of the enterprises.

The promotion of the advanced methods of recordkeeping and calculation of costs is still being done at an unsuitable rate. Naturally, in the initial phase, the advanced methods of calculation and recordkeeping require more work, suitable vocational training and exemplary preparation of the general

framework for application. But, once introduced, the advantages are obvious. We are referring particularly to the normative method, that of standard costs and that of machine-hour cost, which would also permit, besides strict cost discipline, more effective knowledge of the net output--a requirement of the new economic and financial mechanism. In adopting one of the methods or another it is necessary to take into account the character of production, the specific character of the technological processes, the length of the manufacturing cycle, the complexity and the nomenclature of the products, the volume and the structure of the unfinished production, and other conditions specific to each production unit.

Utilization of the Available Resources

The party and state documents from recent years dwell on the necessity of reducing production costs in an organized way, of accentuating the actions for economizing on social labor. From the efficient use of worktime, the strengthening of technological discipline, the raising of the degree of effectiveness and quality in decisions, to the application of the processes for optimization in intraplant transportation, in the scheduling of production and so on, there is a wide range of factors that can be mobilized in the cost-reduction field. We point out that in matters of organization of production and labor there still are significant reserves that can be drawn into the economic circuit, that can help to reduce material expenses and costs. The raising of the quality in designing new products and in redesigning obsolete products also constitutes an important, virtually permanent way to economize on social labor.

The way in which the technical documents are drawn up influences strongly the level of material expenses and costs. The technical departments in centrals and enterprises can also make a decisive contribution in this way to the reduction of material expenses and costs. So, for example, at the Sacele "Electroprecizia" Enterprise, through the redesigning of the asynchronous electric motors of 4-7.5 kilowatts, in the main, savings of over 500 tons of metal, a part of which was copper and aluminum--scarce materials--have been achieved in the part of 1980 that has passed.

A special accent must be put further on reducing the specific consumptions of raw materials and supplies, and especially of metal and wood. This through a technical-material supply based on strictly necessary calculations both quantitatively, dimensionally and qualitatively, as well as through the systematic reduction of the specific consumptions per unit of product--through the promotion of advanced technologies, the redesigning of products and the improvement of the structure of production. In the same context, a special accent must be put on raising the coefficient of utilization of raw materials, on reintroducing reusable materials into the production circuit.

The method of technical analysis of value makes an important contribution to the growth of economic efficiency, both by reducing the production costs

and by raising the use values of products. Specific to this method is the fact that it starts from the idea that economic efficiency depends firstly on the quality of the productive conception and only secondly on the technical and organizational conditions for execution. According to this concept, the optimum of the constructive solution must be achieved under the technical and organizational production conditions existing in the economy at a given time. The economic priority of the phase of conceiving the products in relation to the manufacture proper results from the fact that it also conditions to a considerable extent the degree of utilization of the possibilities offered by the stage of development of the production forces, by the contemporary scientific and technical revolution.

We are of the opinion that it is necessary to reexamine the level of the different rates and quotas of increase that unjustifiably inflate the material expenses at present. We are referring particularly to the rates of the specialized transportation enterprises, the quotas of the technical-material supply bases, the rates contained in scientific research contracts and others. At present, they have overlarge profitabilities in relation to the effort exerted and inflate the material expenses of the producing enterprises, reducing accordingly the net output.

One action with great economic and technical significance requested by the party and state leadership was that regarding the typification of materials and semiproducts. This action must lead normally to the economization of social labor, to the growth of efficiency. However, there are cases when for some customers the typification has influences on the level of material expenses. The "1 Mai" Enterprise in Ploiesti, for example, blames such influences. Clearly, complex and elaborate analyses, proposals that also lead to the growth of economic efficiency for the customers who are supplied with typified products, are necessary in such situations.

The new economic and financial mechanism requires solid knowledge of each unit's contribution to the process of creation of national income, that is, of the component elements of the net output, as well as of all the aspects connected with the characterization of economic efficiency. Management of the economic units in the current stage is inconceivable without complex, prompt and accurate information, which would be the basis for substantiating decisions of an economic or technical order. The full affirmation of self-management and the distinguishing of the favorable effects of self-administration in the context of the new economic and financial mechanism are achievable only in the case in which the collective leadership body will investigate and utilize as fully as possible the reserves for reducing the production costs.

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LOCAL RESPONSIBILITY FOR CONSUMER GOODS SUPPLY EXAMINED

Bucharest REVISTA ECONOMICA in Romanian No 42, 17 Oct 80 pp 12-13

[Article by Dr Gheorghe Teodorascu and Dr Ioan Georgescu: "Greater Powers To Manage on a Territorial Basis the Supplying of the Population"]

[Text] Socialist trade is one of the fields of social life in which the working people's participation in decisions is finding itself a wider and wider framework for manifestation. Stressing this aspect of the evolution of our socialist society, the secretary general of the party, Comrade Nicolae Ceausescu, stated at the Second Congress of People's Councils: "The people's council must supervise the whole supply, regardless of what ministry it belongs to. It must know what needs to be given to it, must seek to receive high-quality goods, must be responsible and must arrange that these goods reach the citizens on time and in good condition."

The creation of an institutionalized framework for participation by the consumer in contracting, along with industry and trade--through the creation of councils of consumer representatives in all counties and municipalities--confers a new quality on the act of contracting, with the final recipients of the consumer goods being directly involved in establishing the commodity supply for the locality or county that they represent. At present, over 10,000 working people in various age and income groups and professions belong to councils of consumer representatives that operate within the county or city trade directorates of the people's councils.

In this way, one of the basic principles of the new economic mechanism is materialized--namely, the allocation of material and live-labor resources only for the production of goods that these representatives of the population's real demand indicate as necessary.

So that the flexible mechanism created is transformed into a new quality in supplying consumer goods to the population, it is necessary that maximum attention be devoted to each stage of preparation for and performance of contracting--each sequence of the complicated gearing--starting with the chairmen of the county councils for supplying the population.

Responsibility for the Act of Contracting and Preparation for it

The experience of just one edition of the fair of samples of consumer goods--the final moment of a laborious activity of preparing for contracting--brings out the fact that, despite the extensive organizational efforts just before and during the fair, it achieved only partically its main economic function of contracting for the commodity supply for next year, due to the fact that some absolutely necessary premises were not provided, such as knowledge by producers of the raw materials that they will have next year, of the degree of acceptance of new products, and so on. In order to ensure the unitary coordination of all these precontractual stages, as the experience of other socialist countries also shows, it seems extremely useful to perpetuate the activity of the commission for organization of fairs of samples.

The entire activity of forming the collections of samples for contracting, starting with the approval of new products, the preparation of the exhibition list--exclusively from new products--and the coordination of all the producers of consumer goods in providing the samples on time and in good condition are only a few of the tasks that devolve upon the organizers of fairs of samples for contracting.

At the time of presentation at a fair for contracting, the new product must have demonstrated its viability through confrontation with consumers, through trial sales. In this regard, too, all the conditions provided are at the disposal of the producers, namely:

1. The county trade bodies have express tasks along the line of organizing together with the enterprises that produce consumer goods display expositions and fairs, by means of which the degree of acceptance of new products by the population is verified.

2. For the products obtained under conditions of small series and one-of-a-kind items there is the possibility of recovering the production expenses to the extent to which they fit into the higher classes of quality.

3. The satisfying of the need for small articles for home use, to supplement the assortment offered by large-scale industry, is done on a county level by small-scale industry, which can and must harmonize the structure of its manufacturing list with the local structure of the demand.

4. The display stores of industry and the cooperative system can justify their existence only insofar as they actually concern themselves with introducing and bringing out new products of the producers that they represent, studying the population's real demand both in their own county and in the other big cities in which display stores of the producers operate.

These are only a few of the organizational premises from which it is possible to start in the joint trade-industry actions of preparing for contracting. The initiatives of county trade directorates like those in Sibiu, Mures and Timisoara, which have performed in recent years interesting actions for promotion of sales and presentation of new products, prove that there are wide possibilities of carrying out efficient actions of prospecting and promotion.

The very decisions on approving new products must pass through the filter of the opinion of the final recipient--the consumer. To this end, it is possible to consider that, besides the representatives of industry and trade, the consumer representatives be invited to the approval activity. For example, in the People's Republic of Bulgaria the collection of models of garments, before being exhibited for contracting, is sent for advice to a "council of expert artists," formed of specialists of light industry and domestic trade, members of the Union of Plastic Artists and youth and women's organizations. Coming to the contracting with an image based largely on the local demand, the county's representatives (the trade directorate, the commercial enterprises, the council for supplying the population, the council of consumer representatives) will be able to formulate, under conditions of minimum risk (the risk of supplying hard-to-sell goods), the need for the commodity supply for the locality or county that they represent.

From "Plan Positions" to a Complex of Needs

While these are the exigencies with regard to formulating the demand for goods, it is necessary that attention also be devoted by producers to the other side of the contractual mechanism--to formulating the supply.

It is a question of orienting the production of consumer goods by starting from a known configuration of the population's complex of needs. By a complex of needs we mean a qualitatively new understanding of the population's needs, turning from offering and, respectively, contracting for the commodity supply according to commodity-science groups--wool cloth, cotton cloth, leather footwear, nonleather footwear and so on--to groups of objects (outfits and sets) that satisfy many needs in a harmoniously correlated way. Examples can be numerous, starting with the possibility of simultaneously buying fancy leather goods (handbag and belt) matched with seasonal footwear, or a topcoat-hat-scarf and so on, going to a complete kitchen (home appliances, kitchen furniture and chine, integrated into a functional system of objects in good taste) or even an apartment furnished to order.

Naturally, the offering of such a complex service can have an extremely significant effect on the population's budget of time (the time spent on shopping) as well as on the manner of satisfying a need from a qualitative

viewpoint. The utilization of the powerful economic tool that economic contracts and, respectively, plan discipline in correlating, harmonizing and modularizing into systems the various parts of the population's complex of needs constitute can have a maximum economic and social effect on the production of consumer goods.

Naturally, such an intricately correlated industrial supply takes more work of conception and multidisciplinary consultation--like that done by the Center for Industrial Creation of the Ministry of Light Industry (research on the market, sociology, anthropology, design, management, data processing, technical design of products and so on).

In would be unrealistic for us to regard as possible the centralized planning of the relations of industrial cooperation between all the enterprises that produce consumer goods (over 20 enterprises collaborate just to make a man's suit), but it is possible to study the possibility of coordinating through the county trade directorates and the industrial centrals groups of industrial enterprises that work together to achieve the complex supply--the industrial transposition of the complex of needs.

In practice, one often encounters the opposite tendency of producers to avoid cooperation, even at the risk of using for consumer goods a single raw material (just plastic, just wood, just glass, just metal). The small plastic articles for home use that, in the absence of metal reinforcement, wear out very rapidly constitute the most graphic example. The avoidance of cooperation between producers also has repercussions on the possibilities of diversifying the supply by creating combined glass-metal-wood-plastic articles, a field in which modern design has a big say.

However, these difficulties--be they objective or subjective--of the industrial producers of consumer goods can be overcome with much flexibility by the units of small-scale industry, provided that the Centers of Creation of UCECOM [the Central Union of Artisan Cooperatives] and other similar institutions offer models of products approved, as we said earlier, by competent specialists. Otherwise, small-scale industry, instead of contributing to the reuse of materials, is transformed into a waster of raw materials (see the "kitsch" products of wood, metal, plastic and textiles existing in some "display" stores of the cooperative system).

According to the tasks assigned along the line of coordinating small-scale industry by the Congress of People's Councils, the local bodies of state power can step in promptly and effectively to orient small-scale industry's production in conformity with the population's real demand, conferring also an educational role on its supply of consumer goods, guiding the demand toward high-quality products obtained even from reusable materials.

Control of the Flows of Goods by Means of Flows of Information

Of course, management and control of the distribution of a commercial assortment of over 300,000 goods raise important problems of information through the industry-industry channel (for collaboration, the

industry-trade channel (for contracting) and the industry-trade-consumer channel (for knowing the real demand).

And the existence of a catalog of products, according to groups of goods, according to sets of grouped goods, seems to be a main requirement in meeting this need for information--catalogs that can and must simultaneously fulfill three functions: that of information about the seasonal supply, including new items, that of a reference document for orders, and that of control, offering the parameters for the qualitative reception of the product. As a complement for information about the new items in the supply, it is possible to organize, in conformity with the regulatory framework in force, county expositions and fairs for presenting the consumer goods produced in a county or many adjacent counties, through the joint efforts of the county trade bodies and of national and local industry. In addition, it is possible to organize actions for bringing out and testing the new products through the display stores and the specialized boutique-type stores and their correspondent for metal and chemical goods.

At present, there is a highly developed network of display stores: 536 of light industry, 935 of the food industry, 988 of agriculture, 159 of forestry economy and construction materials and 1,621 of the artisan cooperative system. All these precontractual actions must be spaced out in such a way as to permit compliance with the provision of the law on economic contracts that stipulates: "In the case of products for which on the contracting date the assortments, types, dimensions or other characteristics necessary for executing the assumed obligations are not specified, the parties will stipulate the dates for presenting them, which will not be able to exceed 6 months before the date of delivery." All the more when it is a question of contracting proper--done in recent years during the fairs of samples--there is posed the problem of providing the legal period for preparing for manufacture.

Viewed in this context, the problem of contracting in August for the first half of the next year creates "from the go" delays in preparing for manufacture. Naturally, since the contracting for some groups of goods is not finished during the fair of samples but also continues in the following months, the delivery dates will also be shifted accordingly and, instead of arriving in the stores at the start of the season, the commodity will arrive at the end of the season, when in fact, according to the legal norms in force, the clearance of seasonal goods has to begin.

Starting from these considerations, it seems much more efficient to organize the fairs of samples in the first half of the year, in order to be able to fulfill under conditions of good spacing in time the function of contracting for the next year. The precontractual actions would be spaced out in time in accordance with this new date: the preparation of the collections of samples, the preparation and distribution of the catalogs of products, the holding of the county expositions and fairs of samples, the testing of new products in display stores. The performance of the precontractual actions in a proper way presupposes the suitable instruction of the

salespeople both about the characteristics of the new products and about the methods of studying the demand and of testing the products.

The correlated, extensive utilization of the methods of studying the demand must permit the identification of the structure of the population's demand, of the choices about the new products in a proportion of 90 percent before the opening of the national fair of samples, with the latter yielding the last corrections in the commodity supply forecast by the county trade directorate together with the people's council (the forecasting commission).

The producers of consumer goods in the GDR, which created for themselves centers of the market-research industry in order to orient the production of durable goods, possess good experience in organizing the industry-trade-consumer information flows. Starting from the three major objectives of the present--the easing of housework, the saving of energy and the saving of raw materials--there are studied the possibilities of applying technical progress to the production of durable goods, along the coordinates of the assortment evolution existing on a world level and of the domestic demand.

In order to simplify the operations of contracting and, at the same time, in order to diversify the supply on the domestic market in Czechoslovakia the utilization of a single collection both for deliveries to the market supply and for exportation was established.

Through the amendments made in Law No 58/1968 for organizing and operating the people's councils, there is specified their responsibility both with regard to drawing up the plans for economic and social development on a territorial basis and with regard to organizing, guiding and supervising the fulfillment of the plan targets, including with regard to steadily supplying and properly serving the population, developing and diversifying the range of products and services and improving their quality.

In this way, the distribution of the commodity supply and of the trade network according to localities, in conformity with the specific character and the structure of the demand, the development of small-scale industry, in accordance with the local requirements, and the control of contractual discipline in supplying the goods to the population in terms of delivery dates and quality are concentrated at the level of the management on a territorial basis both of the powers with regard to evaluating as accurately as possible in terms of volume and structure the population's demand within the framework of the plan and of the factors that provide for the implementation of the plan. The utilization of this democratic framework for managing trade and services on a territorial basis creates premises for dealing with the relations between the producer of consumer goods, trade and the consumer with more competence, responsibility toward the citizens, and firmness.

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CONSERVATION FACTOR IN ELECTRIC, THERMAL ENERGY PRODUCTION

Bucharest ERA SOCIALISTA in Romanian No 17 5 Sep 80 pp 11-13

[Article engineer Ioan Muntean of Sibiu: "Efficiency in the Production of Electrical and Thermal Energy"]

[Text] The program-directive for research and development in the field of energy, as approved by the 12th Party Congress, has as a fundamental objective our country's attainment and surpassing in the shortest possible time the best achievements in the world with regards to energy consumption per unit of national income.

Given the fact that the electrical energy branch consumes an important amount (approximately 21.5 percent in 1976) of the total amount of primary energy consumed in the country, it is understood that any savings in this field can make a noticeable contribution to attaining the established objectives. For that reason, the program-directive asks the researchers, specialists and all workers in the national electro-energy system "to work in the direction of continued improvement and exploitation of this system, ensuring the complete use of the energy and thermal potential, the simplification of the energy distribution network, the creation of autonomous zones and the growth of safety in the operation of the entire system."

In the electrical and thermal energy branch, expenditures for fuels and water, as well as for the electricity used within the branch itself, represented in 1977 approximately 51.3 percent of total production expenditures, while in 1978 this figure reached 53 percent. We should note from the very beginning that these figures reach those levels, among other things, because of the relatively low level of efficiency in the conversion of primary energy into electricity. Although in our country the level of efficiency grew from approximately 33 percent in 1974 to nearly 37 percent in 1976, it is still lower than that achieved in other countries. Thus, the large losses of energy, approximately 63 percent, in the process of producing electricity are a cause in the high level of fuels in the cost of the electricity and contribute 20.5 percent to the total energy loss of the country.

The result is that if we find the appropriate solutions to reduce the principal element of production costs in the electrical power stations, costs for fuels, electricity and water, we will contribute to the achievement of the fundamental objective of the program-directive. First, let us examine the specific conditions in our country regarding the trend to reduce or to increase production costs in the thermo-electrical power stations. We are faced with a continuing increase in the costs of fuels for the production of thermo-electrical energy since efforts are being made to replace natural gas with coal and the price for a conventional ton of coal is approximately double that for gas. In the future, this trend will be accentuated so that, according to forecasts, in 1985 the percentage of thermo-electrical energy produced on the basis of coal will be 55 percent of the total, compared to only 26.2 percent in 1976. while that produced on the basis of hydrocarbons will fall to 20 percent instead of the 57.1 percent of 1976. We should also add the fact that, because of the particular nature of fuels, thermo-electrical energy produced on the basis of hydrocarbons has a lower specific and technological level of consumption than that produced on the basis of coal. Thus, in 1977, the production of one MWh consumed 291 kgcc in the case of power stations using gas and 362 kgcc in the case of those using coal. The result is that in order to stop the increase in the costs of thermo-electrical energy, under conditions of replacing hydrocarbons with coal and of the increasing prices for fuels throughout the world, it is absolutely necessary to adopt a technology that will ensure the production of electrical energy at a much higher level of efficiency than that attained in the condensation-type thermo-electrical power stations installed at the mine entrance.

The conservation of primary energy and resources represents the priority exigency in stopping waste. At the same time, it is necessary that the concepts of exclusivity, unilateral action and specialization in the sense of producing solely electricity be replaced permanently by the complex and complete use of primary energy. Moreover, the idea of a technology without residues and of a production cycle that is as closed as possible is ever more present in scientific literature. On the international level, new methods are being elaborated for the organization of industrial production based on the maximum use of raw materials and energy resources. For that reason, it is the specialists' job to confront, correlate and assemble the available knowledge for the purpose of using it in a superior, integrated manner in the interest of the economic and social development of the country.

It is a positive fact that in our country the average consumption of fuel for the production of energy in the thermo-electrical power stations has continually fallen, from 341 kgcc/MWh in 1970 to 314 kgcc/MWh in 1976, along with a decrease in technological consumption itself. At the same time, energy losses in the electrical power network were reduced.

Keeping in mind the continuing intensification of the electrification of technological processes in the economy and the replacement of hydrocarbons with coal to a significant degree in the process of producing thermo-electrical energy, we must expect that in the coming 5 to 6 years the amount of fuel consumed to produce electricity will approach 30 percent of the total consumption of primary energy in the country and, therefore, the electrical energy sub-branch will noticeably influence the indicator for "energy consumption per unit of national income." This is the source of the importance for critically examining the technological process that today dominates the production of thermo-electrical energy, the means of transporting it from the place where it is produced to the place where it is consumed, the technology of producing thermal energy in large urban areas, the transportation of fuels and so forth.

We are not saying anything new in stating that we must have the appropriate production facilities in order to move to new, more evolved industrial structures.

In the field of the combined production of thermal and electrical energy, we have in Bucharest a model of large proportions: three heat-supplying thermo-electrical power stations belonging to the "Electrocentrala" Enterprise in Bucharest and which, beginning in 1975, have production capacities exceeding 900 MW and 1,300 Gcal/h of steam drawn from the turbines. This model was in the experimental phase for over 10 years and encompasses a vast network for the transportation and distribution of industrial technological steam and hot water for heating. Along with the broadening of the heat-supplying systems and the gaining of rich experiences in the exploitation of these forms of combined production of thermal and electrical energy, we find a spectacular and continuing decrease in the specific net consumption of fuel.

In seeking new solutions that will lead to the reduction of fuel consumption, the collective at the enterprise completed technical modifications necessary to permit classical turbines built to operate on the principles of condensation and steam in-take, to operate during the cold months (October-April) on the basis of counter-pressure. This experiment, with special results with regards to the safety of operations of installations and powered equipment, suggests the idea of building some heat-supplying electrical power stations using counter-pressure turbines in the large cities in our country, with them operating according to the model set by the sugar factories, that is, seasonally, during the majority of the 7 cold months operating with all the powered equipment and during the warm season just with some of them.

This type of power station is especially interesting today when, in accordance with the energy policy promoted by the party, the new thermo-electrical power stations can only use solid fuels (coal). And, coal, especially

lignite, contains large amounts of waste material which implies significant expenditures for transportation in the case of moving it great distances via railroad. In replacing the classical powered equipment in the heat-producing electrical power stations in the large cities throughout the country with counter-pressure turbines, we can ensure the economic competitiveness of using coal at long distances from the place of procurement. The cooling equipment of the classical heat-producing electrical power station is characterized by especially low use indices with regards to the solution we are calling for here. At the same time, we note that the volume of investments for this equipment is comparatively larger, involving more building and occupying an important amount of land.

Along the same idea, it must be said that the volume of cooling water for the power stations using counter-pressure turbines is merely approximately 10 percent of that of the classical power station, total investment expenditures are reduced by over 4 percent and the amount of construction is reduced by 15 to 18 percent. The result of the above is that the heat-producing counter-pressure turbine power station presents a series of economic advantages of special important now and in the future.

It is said that technology is an historical phenomenon. Actually, during an earlier stage (1950-1960), for economic reasons (the need to conserve investment funds for the construction of electrical power stations, the need to conserve primary energy for the production of electricity, the need to increase safety in the operation of the energy system and so forth) a certain technology was selected in the construction and operation of the national energy system, making necessary the interconnection of the system, an action that was achieved.

Currently, in our opinion, a similar problem is facing Romanian energy specialists, which also is based in economic reasons. The conservation of primary energy in the production of electrical and thermal energy for the large municipalities in the country and the growth of safety in supplying consumers can be achieved under the new conditions by modifying the building and operating technologies of the national energy system. At this time, it is necessary to have a partial decentralization of the production of electricity at the national level and a centralization at the local level (at the level of municipalities and the areas around them) in the production of thermal energy, using the adequate technology at certain heat-producing electrical power stations of modest power (150-400 MW), equipped with several high power counter-pressure steam turbines (50-150 MW). This solution goes along with the directives established at the 10th Party Congress that in the future we must keep in mind the fact that in some fields and branches of production small and medium sized enterprises can use local resources with relatively lower investments, with their construction being justified from an economic point of view.

Given the advantages of large-scale production, many of those who are involved in the optimization of the size of economic units are in favor of large units as a guarantee for higher profitability. A similar thought also probably existed when our large condensation-type thermo-electrical power stations were sized. If we take into account six of the thermo-electrical power stations that use coal (Doicesti, Isalnita, Mintia, Paroseni, Rovinari and Turceni), we find that at their final capacity their average power is over 1,200 MW.

The concentration of electricity in the large thermo-electrical power stations cannot be a rigidly applied rule. The optimum size of a thermo-electrical power station as a rule falls within the general regulation regarding economic industrial units, with it being dependent upon the combination of the internal technological process, the distance over which fuel must be supplied, the costs for investment and use and for the transport of electricity and thermal energy, and so forth.

Here are several aspects that invite reflections upon future solutions for our country's energy situation. Let us refer, for example, to the losses of electricity in the electrical power network. Reported as part of the total amount of consumption, in percent, these losses are continually decreasing. In physical terms, however, they are still at approximately four billion kWh per year, or at a level equal to the country's electrical energy production in 1955 (4.37 billion kWh). In 1977, in the 4.1 billion kWh loss, nearly four million tons of lignite was additionally consumed, or approximately 35 percent of the country's lignite production that year.

In a close examination, we find that there are several very industrialized counties that locally produce a negligible amount of electricity compared to the amount they consume. In this situation, for example, are Brasov, Cluj, Sibiu and Timis counties. In Sibiu County, which has the greatest electrical production capacity of the four counties named, last year only ten percent of the energy consumed in the county was produced locally. The result is that this county, like others in a similar situation, gets its electricity from far away, via 400 and 220 kV high tension power lines and the corresponding transformer stations, which involves, on one hand, important investment expenditures to build these installations and, on the other hand, use costs, including losses in the electrical power network. We can also add that the energy losses in our country's electrical power network are much greater than those in other countries.

The processing of statistical data shows that in Romania to get one MW of power out of an electrical power station it is necessary to build 511 meters of high tension power line (220 and 400 kV), and for each kilometer of this line it is necessary to install and electrical transformer station of 1.67 MVA. And, in very high tension lines there is an approximate 20 percent of the total energy losses in the electrical power network.

Along with the construction and use of the condensation-type large thermo-electrical power stations which, as we showed earlier use fuel at a maximum rate of efficiency of 35 percent, in some municipalities with populations between 100,000 and 300,000 (like, for example, Baia Mare, Brasov, Cluj-Napoca, Sibiu, Timisoara and Tirgu Mures) solutions have been adopted to produce thermal energy (industrial technological steam and hot water for heating) in thermal power stations, again with low levels of efficiency (40 to 60 percent) and numerous personnel.

What we have said until now shows the existence of a contradiction between the macroeconomic optimum and the microeconomic optimum. The construction of large condensation-type thermo-electrical power stations having low levels of efficiency and very high tension lines and stations, which require important amounts of investment funds and the consumption of large quantities of energy-intensive materials (cement, steel, copper, aluminum, isulators), turns out to be a doubtful solution at best. This is even more so since in other countries, as we have shown, thermo-electrical energy production is done with much higher levels of efficiency and, at the same time, with smaller energy losses in the network.

The struggle for energy cannot and must not confine itself to the discovery of new resources of fossil fuels. To an equal degree, this struggle involves the process of exploiting, transforming, transporting and using energy, with the existing reserves in each area being huge. We also noted the fact that from a strategic point of view it is preferable for us to use investment funds on a priority basis in the area of transforming energy (in the heat-producing counter-pressure turbine equipped thermo-electrical power stations). This strategy will permit the reserves of primary, classical and nuclear energy that are found underground in our country to become available to future generations for use.

Under the new conditions in our country, where there is a transition from the burning of hydrocarbons to the burning of solid fuels in the thermo-electrical power stations, the energy field is objectively confronted with a series of unusually complex technical-economic problems. For that reason, energy solutions can only be analyzed in a systematic manner. With regards to the criterion upon which decisions will be made regarding energy installations for the production of electrical and thermal energy, we feel that it must always be "the rate of economic efficiency of the fixed assets." According to this criterion, it is opportune to draw up a program to build heat-producing counter-pressure turbine equipped electrical power stations that use lignite in all the large municipalities and cities in the country. They will substantially reduce the current consumption of hydrocarbons, will

ensure maintaining the specific level of consumption of fuels for the production of electricity at approximately the current level, will contribute to avoiding the pollution of the cities and will make a contribution that is not at all negligible to improving the indicator for "energy consumption per unit of national income."

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MEASURES TO INCREASE LIVESTOCK PRODUCTION

Bucharest REVISTA ECONOMICA in Romanian No 41, 10 Oct 80 pp 9-10

/Article by Nicolae David: "Priority Aims and Requirements for Increased Livestock Numbers and Production"/

/Text/ Because of the role and importance of the products the zootechnical sector supplies the national economy, the extent and quality of its development are indicative of the degree of intensification, modernization and effectiveness of contemporary agriculture. The priority given to development of zootechnology within general agricultural development is the very thrust of our party's and state's agrarian policy, both now and in the next five-year plan especially.

Transition of Romanian zootechnology to a new and radically better quality will be ac-accomplished by two essential methods that are well known but so far inadequately used: (1) increasing the numbers of livestock and improving the structure of these numbers, and (2) increasing the average outputs per foddered animal.

As the documents of the 12th Party Congress specify, the numbers of the main species of livestock will have to reach over 8 million cattle, 14-15 million hogs, 20-22 million sheep and goats, and over 60 million laying poultry by 1985.

A radical leap in increasing the average yields per animal (which must reach 3,500-3,700 liters of cow's milk, 4.6-4.8 kg of wool, and 225-230 eggs in the state sector of agriculture in 1985) is an even more important problem than the increase in numbers. In this area we still have marked lags behind the requirements, the existing conditions and the results of other countries' agriculture. In 1978 on the national total an average milk yield of only 1,908 liters (2,833 liters in state agricultural enterprises and 1,467 liters in agricultural cooperatives) was obtained per foddered cow, a quite unsatisfactory level that has been sharply criticized several times by the party secretary general, Comrade Nicolae Ceausescu.

As the calculations show, if even the present number of milch cows in Romania produced an average yield like that of the state agricultural enterprises, society would benefit by an additional output of more than 24 million hectoliters of milk (115 liters more per capita). This would favorably affect both the supply of the public and the economic effectiveness of the agricultural units.or, as Comrade Nicolae Ceausescu said, a mere 10 percent gain in the average weight upon slaughtering would mean an additional output of 120,000-150,000 tons of meat, improving the supply of the public and incresing the surpluses for export.

Really scientific organization of the process of livestock reproduction is essential both to increasing the numbers and to stimulating the growth of the average yields per animal.

Qualitative Changes in Organization of Livestock Reproduction

Since the process of livestock reproduction is an essential component* of the animal husbandry system the agricultural units especially, as well as the other responsible elements in agriculture, should give it a real priority.

The number of young obtained and weaned from a brood female at a birth primarily depends upon reproduction. From this standpoint the growth rate of the number of livestock, the possibilities of selection and improvement, the number of livestock with which the fattening centers can be populated or which can be delivered for slaughter, the quantity of meat obtained annually from a brood female, the regularity of the meat output, etc. are direct or indirect effects of the extent, quality and method of organizing reproduction. Meanwhile the cost of an animal at birth or weaning (a calf, lamb, piglet or 1-day chick) primarily depends upon the fertility of the brood animals and the way the young are maintained in the period from birth to weaning.

It would be a mistake to judge the importance of organizing livestock reproduction solely by the number and cost of the young obtained. It is a peculiarity of the zootechnical sector that economic reproduction is involved with the natural reproduction of the livestock, and technical-organizational defects in natural reproduction adversely affect the economic process of reproduction and the general economic process of the unit as well. Actually, without constant improvement of the natural reproduction of the livestock the reproduction process in zootechnology is disturbed, because females that do not conform to the normal reproductive cycle of the species and breed produce a limited number of young. Production gradually declines, the animals become sterile as well as unproductive and have to be rehabilitated, and large expenditures of feed and other materials are made in relation to the output obtained. Labor productivity falls off, and the maintenance and exploitation of the animals become uneconomic. Results can also be unsatisfactory if too many or too few sires are maintained in a herd in relation to the number of brood females, or if the artificial insemination technology is defective. All this calls for due attention to scientific organization of livestock reproduction in view of the species and category of the livestock, the technology used, the maintenance system, condition of the existing shelters, etc.

In bringing out the need of definite measures for better organization of livestock reproduction, Comrade Nicolae Ceausescu pointed out that the process should be conducted with great competence and by no means left to chance: "The technological process providing for births and attainment of the proper birth rate must be controlled weekly."

Optimal livestock reproduction, a process whose essential features must be integrated in a true system of interdependences and correlations, requires introduction and observance in practice of the following series of measures:

- Planned mounting of all brood females and young reaching the reproduction age;

*I devoted the study published in REVISTA ECONOMICA No 33, 1980 to the other basic component, namely livestock feeding.

- Grouping or spacing of the mountings according to species, purpose of breeding, agricultural area, technology used etc.;

- Precise organization of the mountings and maintenance of the pregnant animals, in order to raise the indices of mounting, fertility, gestation, birth and proliferation;

- Every provision to obtain as many young a year as possible from a brood female (to raise the fertility index);

- Interbreeding and industrial crossbreeding in units where the technology does not require pure breeding;

- Very careful breeding of brood young and their rational and efficient use to replace the rejected brood animals, to increase the number of brood animals, or for sales to other units;

- Regular checking of female young and adult females to determine the dates of mounting and rejection as exactly as possible;

- Preparation, by every unit with a zootechnical function, of the plan for mounting and births and strict conformity to its provisions;

- Organization of the information system concerning mountings, gestation diagnosis, births, slaughterings, transfers to other livestock categories, deliveries of livestock, production, selection etc.

Consistent application of all these measures, which are the main content of organized reproduction, can lead only to increased livestock numbers and production and improved economic effectiveness indices in all agricultural units with a zootechnical function.

The qualitative leap necessary in livestock reproduction depends upon proper organization of the special reproduction farms. The directives to organize lying-in facilities on all cow farms are highly important for this purpose. They are to be installed in a part of the barn, and hygienic and servicing measures are to be taken to ensure proper birthing and care of the calves. The brood young will be raised on specialized farms, which will keep the entire number of calves until the first birthing and will not eliminate the unsatisfactory animals until after the first birthing.

The mounting and calving plan must make more allowance than before for correlation between the seasons and the physiological cycles, and most of the births are to take place in spring. Moreover the planning of the mountings and births is to be differentiated according to the agricultural area, the technology used and the local natural and economic conditions. While in the suburban and dairy supply areas births can take place regularly throughout the year, in the other areas they must be directed so that 70-80 percent of them occur in spring, by the month of May. The advantages of spring calvings include a higher birth rate of cows, birth of healthier calves and their more intensive development, lower disease and death rates of calves, better use of the green mass on natural or cultivated pastures, attainment of optimal slaughtering weight at a younger age, greater total quantities of milk (because the peak of the lactation curve coincides with maximum production of green mass), prolonged lactation and higher yields per animal at lower unit costs.

Better Organization of Selection

One way of rapidly increasing livestock numbers and production is to modify the system for selection of the animals by raising the entire number of female young until the mounting age and making the selection only according to the yield obtained in the first cycle. This provides for a greater number of brood females, a greater output of milk and meat, and a broader base for selection of the animals.

The interdependence between milk and meat production is the essential and sometimes contradictory problem in cattle raising. Most breeds of cattle raised throughout the world have a mixed specialization, producing both milk and meat. It may be said that milk production necessarily involves an output of veal and of milk and meat from rejected cows, while meat cannot be produced with as great economic effectiveness as milk can. The figures show the direct correlation between the output of beef and the proportion of cows and heifers in the total number.

The output of veal depends upon the number of calves fattened, the age and weight at which they are slaughtered, and the average daily gain in weight during fattening. The amount of meat from the adult (rejected) cattle depends upon the average slaughtering weight of the animals and the number of adult animals slaughtered annually or, more precisely, the percentage of replacement of the dam and the way the selection is organized.

In Romania the bovine species (maintaining its milk function) is and will be in growing demand to increase meat production. Among other things, this calls for a change in the specialists' views on organization of reproduction and promotion of programs to intensify exploitation of the animals for meat production. For cattle, outside of the methods common to all species (such as increasing the total number, the average daily yield and the average slaughtering weight, industrial crossbreeding, fattening the rejected animals for slaughter, etc.), certain particular methods of great economic significance and urgency are also important, such as:

- Retaining the entire number of female young for reproduction (regardless of their prospects as milk producers) until the first lactation;

- Lowering the average age at the first lactation;

- Leaving an average interval of no more than 365 days between mountings;

- Raising the percentage of annual rejection of cows to 20-25 percent, and using as a main criterion for selection the cows' own performances at first birth in various periods in the first lactation.

Of all these technical-organizational measures, retaining the entire number of female young for reproduction until the first lactation and raising the percentage of annual replacement of cows are the most dynamic and effective.

Retaining the entire number of heifers for reproduction calls for generalized selection of the milch cows according to their own performances in the first or second lactation, that is the interval between birthing and the first mounting, the interval between birthing and the time gestation is diagnosed and the date of conclusion of lactation. Their own performances in milk production are also analyzed (quatitatively and qualitatively), and the final decision is made concerning retaining them on

the farm, selling them to another farm as brood animals, or sending them for slaughtering after the first or second birthing. The higher percentage of annual replacement of the dams serves a twofold purpose: First, the selection is intensified and consequently the dams are improved more rapidly in regard to milk production or mixed production and, second, the adults are slaughtered at an age when the body weight and the quality of the meat are the most effective.

Increasing the proportion of heifers in the number of dams to 25 percent and the index of rejection of adults to 20 percent (compared with the present situation, where only 10 percent of the adults are rejected annually and only the heifers needed to replace the rejects are raised) increases the dams' contribution to beef production by about 2 times (See table).

Amount of Beef To Be Obtained Annually (Per 100 Cows) by Different Selection Systems

1 Selecție în				
2 Explicații	3 U/M	4 Sistem tradițional	5 Sistem nou	6 Procentul în sistemul nou față de cel clasic
7 Ponderea junincilor în totalul efectivului de taurine	%	10	25	250
8 Indicele de reformă la vaci	%	10	20	200
9 Greutatea totală a vacilor reformate anual	kg.	17 3.000	18 000	200
10 Indicele anual de natalitate	%	80	90	113
11 Viței obținuți anual	nr.	18 80	90	113
12 Greutatea totală a viților la naștere	kg.	2000	3 150	113
13 Vaci reformate după prima fătare	nr.	—	5	—
14 Greutatea vacilor reformate după prima fătare	kg.	—	2 500	—
15 Total carne obținută la 100 vaci	kg.	7 800	13 650	200
16 Diferența în plus în noul sistem de selecție	kg.	—	7 850	—

1. Selection in
2. Explanations
3. Unit of measure
4. Traditional system
5. New System
6. Percentage in new system compared with traditional system
7. Proportion of heifers in total number of cattle
8. Index of rejection of cows
9. Total weight of cows annually rejected
10. Annual birth rate
11. Calves obtained annually
12. Total weight of calves at birth
13. Cows rejected after first calving
14. Weight of cows rejected after first calving
15. Total meat obtained per 100 cows
16. Additional difference in new selection system
17. Kilograms
18. Number

Compared with the 7,800 kg of meat on the hoof that can be obtained on the average per 100 cows by the traditional system of selection and reproduction organization, the new system of selection increases the quantity of meat to 15,650 kg. The favorable effect of the new way of organizing selection is not confined to meat production but also enhances milk production by increasing both its total (due to the increased number of cows) and the average yield. The cows are exploited with maximum economic effectiveness up to about the fifth lactation, or until they are 8-9 years old.

In view of the great advantages of the new system of organizing reproduction and selecting the animals, the party and state administrations decided to generalize it. In reference to this problem Comrade Nicolae Ceausescu said, "Neither a heifer /vitea/ nor a heifer about to calve /junince/ will be rejected. We shall not make the selection until after a calving, and we shall determine which animals are to be rejected and which remain for reproduction according to the milk yield." And in June 1980 amendments were made to Law No 40 of 1975 on Raising and Fattening Livestock whereby stock breeders were required to retain all heifers and raise them for reproduction and to take all measures to raise the heifers under the best conditions until mounting and to provide for mounting of all heifers with suitable breeds characteristic of the respective area. It is prohibited to slaughter the heifers unless in quite exceptional cases (incurable diseases rendering them unfit for reproduction) and only with the approval of the competent organs.

In a future discussion we shall take up the problems arising in connection with improvement of the livestock breeds in order to increase the livestock numbers and outputs.

5186
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END

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25 November 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2066

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25 November 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2066

CONTENTS

ALBANIA

Inefficient Use of Construction Machinery Deplored
(Editorial; BASHKIMI, 26 Sep 80) 1

CZECHOSLOVAKIA

Government Press Secretary Criticizes CSSR Economy
(Frantisek Kouril; SVET PRACE, 29 Sep 80) 3

HUNGARY

External Economic Balance, Rate of Exchange Policy Examined
(Werner Riecke; FIGYELO, 15 Oct 80) 7

Agricultural Prices Set for 1981
(MAGYAR MEZOGAZDASAG, Nos 35, 39 1980) 12

Machines, Chemicals, Services
Agricultural Products

Role of Material Incentives in Agriculture Weighed
(Benedek Toth; NEPSZABADSAG, 23 Oct 80) 27

Cooperative Leaders Express Mixed Views on Regulators
(Istvan Kapronczai, Laszlo Szenay; MAGYAR MEZOGAZDASAG,
1 Oct 80) 31

Pharmaceutical Industry Exports to Developing Countries
Reviewed
(FIGYELO, 1 Oct 80) 34

 [III - EE - 64]

POLAND

Worker Self-Government Meetings Reported
(TRYBUNA LUDU, 4 Aug 80; ZYCIE WARSZAWY, 15 Aug 80)..... 36

Chemical Works in Bydgoszcz, by G. Smulska
Poznan Agricultural Vehicles Plant, by Dariusz Piatkowski

Causes of Foreign Indebtedness Discussed
(Stanislaw Gruzewski; POLITYKA, 18 Oct 80) 42

Forthcoming Average Sale Prices To Be Increased by 30 Percent
(Krzysztof Krauss; ZYCIE GOSPODARCZE, 14 Sep 80) 48

ROMANIA

Impact of Energy Conservation Demands on Agriculture Seen
(Gh. Budoi; D. Toma; CEREALE SI PLANTE TEHNICE, Jul 80)... 54

INEFFICIENT USE OF CONSTRUCTION MACHINERY DEPLORED

Tirana BASHKIMI in Albanian 26 Sep 80 p 1

[Editorial: "Let Us Make Better Use of Heavy Machinery in Construction Work"]

[Excerpts] The party has constantly called attention to the inadequate work which has been done in raising the indices for the utilization of machinery by means of better organization of work and extending the life of the machines. Despite all the efforts, the indices of utilization have not been achieved, especially in regard to the volume of work of bulldozers and excavators. As a result of these shortfalls, 1.4 million cubic meters have not been excavated. Shortcomings in the technical preparation of machinery for handling the loads and poor organization of work are factors in this area.

Despite the frequent analyses and the criticism, work is not being done on two full shifts. A bulldozer and excavator work an average of 12 hours a day, a transport tractor, 9.9 hours, and a dredge, 10 hours. Work is not done in two shifts in the high tension construction enterprise in Tirana, in the construction and installation enterprise in Tirana, in the "Josif Pashko" combine in Tirana, and in the construction enterprises in Elbasan and Durres. Bulldozers do not work at the same speed in all enterprises. In some, such as the brick factory in Sarande, the brick factory in Diber and the cement factory in Fushe-Kruje, the volume of work achieved by the bulldozers is less than 60 percent.

The technical condition of the 0.15-0.25 cubic meter excavators and the self-loading excavators is unsatisfactory. They have not worked more than 60 percent of the planned time and some of them have not worked at all. The utilization of these machines is poor in the construction enterprises in Erseke, Durres, Pogradec, Librazhd, Sarande, Shkoder and Vlore. The problem of the production of hydraulic pumps should be resolved without delay. The ORMN [workshop for the repair of construction machinery] in Durres is responsible for this situation. It not only exceeded the deadline for repairs by 2-3 months but it also executed poor quality capital repairs. There are many complaints from the enterprises under its jurisdiction. Such a situation in regard to the work in this enterprise demands that the Ministry of Construction make the guilty parties responsible for their acts and take measures to prevent their repetition in the future.

Machines are utilized with different results from one enterprise to another. In the industrial construction enterprise in Fier, the construction enterprise of the "Steel of the Party" metallurgical combine in Elbasan, and the

NSHMN [state enterprise for construction and installation] in Durres, the 1 cubic meter excavators have excavated from 50,000 to 40,000 cubic meters, in the Fierze hydroelectric power plant, in the construction enterprise in the port of Durres, in the brick combine in Tirana, they have excavated less than 30,000 cubic meters. The differences are more emphasized in regard to the 0.5 cubic meter excavators. An excavator in the NSHMN in Durres excavates 29,000 cubic meters while an excavator in the "Steel of the Party" metallurgical combine in Elbasan, the construction enterprise in Sarande, and the construction-installation enterprise in Ura Vajgurore does not excavate even half of this volume.

It is unacceptable that these types of excavators are not utilized in two shifts because of poor organization of work with means of transportation in the construction enterprises in Elbasan, Durres, Sarande, in the construction-installation enterprise in Tirana, and the "21 December" construction enterprise in Tirana.

It is intolerable that the work front for the utilization of machines is not prepared and that 35.6 percent of the machines are operating in units without assigned tasks in regard to volume! Several times, machines have gone to the Lushnje construction enterprise and found that the work front has not been prepared. This has also happened in the enrichment factory in Bulqize, and it is known that their transportation has been costly.

In order to raise the level of utilization of machines it is necessary that the measures stipulated be followed exactly so that the planning and distribution of the machines can be done with precision and that the organization of work for the execution of high quality technical services and the speedy elimination of defects will be improved scientifically.

CSO: 2100

GOVERNMENT PRESS SECRETARY CRITICIZES CSSR ECONOMY

Prague SVET PRACE in Czech 29 Sep 80 p 3

[Article by Engr Frantisek Kouril, press secretary of the CSSR Government]

[Text] Even the richest countries of the world worry about how they will be able to manage their fuel and energy problems in the next few years, where they will find new sources of energy, and how they will be able to reduce energy consumption in production and households.

The West German minister of education stated, for example, that the subject of fuel and energy saving will be introduced as part of the compulsory curriculum at all school levels. According to him, it is necessary to implant the idea of saving fuel and energy in the minds of young people in the same way as the older generation was taught to cherish bread.

Numerous cases can illustrate how much fuel and energy difficulties are affecting the economy of the Western countries. American President Carter in one of his speeches called it even patriotic for the American citizen to avoid using his car one day a week or to lower the thermostat in his apartment to save energy.

I could go on to illustrate through additional facts that the world economy is undergoing serious transformations which we, a country with a developed foreign trade, must respect and integrate into the structure of our national economy. More specifically, in to our long-range plans and especially in our daily activities or, as some say, in our philosophy of life.

Not only has the supply of fuel and energy become much more difficult. But to a great extent and in many instances many times the world market prices have increased unfavorably affecting our economy. For the same amount of imported fuel, energy, raw materials and foodstuffs we must today export comparatively more products of ours than was the case in the past. This fact, when our rate of production is slower, reduces our resources needed for capital construction and modernization of production, and also contributes to the impoverishment of our domestic market.

What does it mean to adjust ourselves to this new situation and to the trends and processes which the world has been experiencing for several years? It means,

in the first place, to reevaluate and upgrade the criteria with which we evaluate the results of our enterprises and individuals, and to use much more effectively and inventively our domestic resources, as well as imported fuel, power, raw materials and foodstuffs.

At first sight it seems that all these are well known things. We hear of these measures at meetings and discussions and almost everybody agrees with them. The difficulty is, however, that these obvious demands are not fully implemented everywhere in our daily work. Let us take a look, for example, at some of our construction sites.

Much waste material, broken bricks, panels, remnants of lumber, cables, metallic materials and concrete can be seen littered around. On all these things we spent manpower for which we had to pay. All these materials and products required fuel and energy, and often really hard work by our people in various branches. And the construction sector is no exception. In all branches we can find flagrant cases of bad management and waste of materials and products which were expensively produced in our country or for the import of which we must pay dearly.

The rise in world prices of fuel and power, raw materials, and foodstuffs eats away more and more of our national income. This is also one of the reasons why we must now consider more carefully how we should use funds earmarked for construction and the development of production and try to foresee to what extent these expenses will be justified. This is a question of utmost importance which is the subject of great attention everywhere. In Japan, which I had an opportunity to visit, we were given an explanation based on enterprise cost-accounting regarding why the Japanese invest primarily in the modernization of production. The reason is that such a move guarantees higher productivity of labor and a better quality of products. Only then is everything else being considered. Administrative buildings from which the Japanese manage the actual operations are for this reason mostly modest and equipped strictly for reasons of efficiency. Our economic managers sometimes still follow a directly opposite view. Funds earmarked for capital construction are used for constructing ostentatious administrative buildings. The consequence is that there often is no money for technical equipment and the improvement of working conditions. Another questionable practice is to organize new construction so as to increase the number of jobs rather than to save on manpower. This leads to a situation that in many places we work no more than one shift and the highly efficient and expensive equipment is idle for most of the day.

In the next five-year plan we will reduce the number of new construction projects and will concentrate our energy and money on the faster completion of unfinished construction. Compared with the Sixth Five-Year Plan, we should limit the construction of new housing units and pay greater attention to the renovation and modernization of old apartments. We will no longer have the liberal and benign attitude we have had so far regarding the destruction of old buildings.

Experience has taught us to have a new look at the usefulness of certain projects which we have introduced into our country following the examples of some foreign firms and which are still under construction. It is a question of whether we should copy construction of projects suitable for subtropical weather which in our harsh climatic conditions require many times more money for heating, illumination and salaries of sales clerks.

To adjust ourselves to different and more demanding conditions existing in the world economy and to hold our own ground in the new situation requires a better utilization of domestic resources which naturally concerns, in the first place, our agriculture. Land, in the same way as working hours at the disposal of our society, is our greatest asset. It is necessary to state that our peasants as far as the utilization of land is concerned have achieved remarkable results in recent years. It is not easy to obtain food for our citizens when demand is growing constantly. However, the fact that the imports of grain, and especially of fodder, are growing at a faster rate than the export of our traditional products, namely, sugar, hops, and malt in recent years is disturbing. Contrary to original expectations, we will export fewer of our traditional products during the Sixth Five-Year Plan. However, the imports of grain will probably double. Instead of the originally anticipated 4 million tons of grain, we will import approximately 8 million tons. At the same time it is not necessary to offer illustrations showing that we still fail to fully utilize our own possibilities and that we subscribe to the idea that when the worst comes to the worst we will be bailed out by importing what we need. This applies not only to fodder, but also to vegetables and fruits. Last year, for example, we produced enough plums which in many cases remained unpicked on trees. In the spring, however, we imported dried plums from Yugoslavia as a delicacy.

Consequently it would be wrong to pose everything so as to suggest that all the difficulties and complexities of our economy were the result of a messy economic situation in the world, of the difficulties in obtaining fuel and energy, and the rise in world prices. To a great extent all this is also a result of our own shortcomings, especially of the low output and quality of labor, complacency and also the result of the low qualification of managers. For this reason, beginning next year, we will introduce in the management of our national economy steps which, even if not a miracle remedy, will encourage individuals and enterprises to achieve better economic results and provide products with which we will be able to compete.

Our republic and its economy are not an isolated ship which can ply a capricious course on the economic ocean. Even if we can rely on the market of the socialist community, it is not in our power to change the trends and pressures affecting us. It is imperative that we take cognizance of these new trends and pressures, and follow the example of other countries and quickly adjust ourselves to the new situation.

The goals which we have set ourselves will constitute a challenge to all able brains and hands. Their aim is to achieve the prosperity of our national economy whose power and ability is in the last analysis a basis and guarantee of a multifaceted development of our society.

1277
CSO: 2400

EXTERNAL ECONOMIC BALANCE, RATE OF EXCHANGE POLICY EXAMINED

Budapest FIGYELO in Hungarian No 42, 15 Oct 80 p 3

[Article by Werner Riecke: "External Economic Balance and Rate of Exchange Policy"]

[Text] Changes in the world economic environment and the domestic regulator system constantly pose new problems in connection with the foreign rate of exchange. There are at least three main types of conception about the foreign rate of exchange. Foreign exchange can be regarded as a commodity and the rate of exchange can be regarded as its price. In the final analysis the price of a commodity is determined by the costs necessary to produce it. If we project this onto a supplementary unit then the price of the exchange would be a limit rate of exchange. We can also regard the rate of exchange as an element linking two types of money. Then the rate of exchange is a quotient of the purchasing power of the two moneys, in accordance with the theory of purchasing power parity. Finally we can start from the position that the momentary supply and demand have a great effect on the price of a commodity and the rate of exchange should be selected so that the demand for foreign exchange (import) and the supply (the foreign exchange receipts for export) should coincide as much as possible. This would be a balance rate of exchange. These conceptions actually exist, naturally not in this very simplified form.

The world market causes a part of the uncertainty accompanying the setting of the rate of exchange--the changing business cycle situation, inflation, floating rates of exchange and protectionist aspirations. But we create the other part of the uncertainty ourselves. When it comes time for changes in the financial regulator system it is difficult to determine what rate of exchange would best suit the new situation and our economic policy goals and how the economy will react to these changes in the future.

Devaluation or Markup?

The principles of competitive domestic price generation introduced this year and our unsolved foreign economic problems require an examination of rate of exchange policy in broader interdependencies.

At first approach devaluing the money (or, what we will treat as equivalent hereafter, maintaining the rate of exchange level while our export and import prices increase more quickly than the domestic price level) has an effect toward improving the foreign trade balance. As a result of devaluation the profitability

of export does increase and this can make the enterprises interested in increasing foreign market sales while the rising import prices encourage greater thrift. But many dispute this argument. The chief counter-arguments are:

--A large part of our imports cannot be replaced with domestic products and thus one cannot expect a substantial reduction in demand for imports as a result of an increase in import costs. At the same time the increase in import prices increases the domestic price level.

--The majority of our enterprises can increase export sales--primarily on the short run--only at the expense of domestic sales and this is not necessarily in the interest of the enterprises because the foreign market poses much greater demands than the domestic market.

--The increase in import prices caused by devaluation (or the failure to have a markup), which also affects the price of domestic products following the import price, increases the material costs of the enterprises and thus the higher export profitability achieved by the devaluation can only be temporary.

According to this argument a markup of the money is the effective tool against the import of inflation, because it does not endanger the external balance just as devaluation does not improve it. The Hungarian National Bank is concentrating its rate of exchange policy on protection against external inflation. A markup rate of exchange policy protecting against the import of inflation stands close to the theory of purchasing power parity. According to this theory the tools more suitable for restoring the external balance are those which ensure in some way that the domestic use of the national income increases at a smaller rate than that of production.

But it seems necessary to examine more closely the interdependence between inflation and the rate of exchange, in harmony with the operating price mechanism, especially its effect on the foreign trade balance. Let us presume that world market prices, and our export and import prices together with them, increase by 10 percent and so there is a markup of the forint by the same 10 percent. We thus fully protect the domestic price level from world market inflation. It would seem that the profitability position of exporting and importing enterprises has not changed.

But there are not only external causes for the increase in the domestic price level; it is also affected by an increase in internal costs. The price of both free price products and products with officially fixed prices will increase if the increase in costs reduces profitability. There are many causes for cost increases of domestic origin--the low efficiency of investments, which is one characteristic of excessive accumulation and the poor composition of accumulation, the lax costs management of the enterprises, the high ratio of fixed costs, etc. We must add to this, however, that the factors mentioned do not lead to inflation by themselves but only if the supplementary money needs of them are satisfied.

What sort of products have their prices influenced by cost increases of domestic origin? According to the new price mechanism prices in the competitive sphere develop as a function of foreign prices and the rate of exchange. Thus the inflation of domestic origin has its effect exclusively in the noncompetitive sphere, where

an enterprise conducting autarkic price generation--taking into consideration the calculation principles applying to profit--has the opportunity to pass on the costs. This causes a change between the relative price levels of the competitive and noncompetitive spheres which turns domestic demand toward the competitive products. This relative price change increases import and the domestic demand for exportable goods and at the same time decreases demand for products which do not take part in foreign trade. In addition, the domestic prices of goods produced by enterprises following the export price develop as a function of the rate of exchange and the prices obtained in export while the material costs of these enterprises are increased by acquisitions from the noncompetitive sphere, thus the profitability of exporting enterprises constantly deteriorates if the rate of exchange policy fully compensates for the external price increases. It is obvious that a restoration of the external balance would be better aided by domestic price changes which increased the prices of competitive products to a greater degree than those of noncompetitive products.

Price Mechanism and Rate of Exchange

Of course the case described above is very simplified. Naturally the believers in a markup do not work out their proposals for a solution in regard to the above case. According to Tarafas, "The degree of the markup is determined decisively by the difference between the average external and domestic price level increase." But this "rule of thumb" has two problems. In the first place it is tacitly presumed that the magnitude of the relative price of the foreign exchange is economically justified and produces only nominal changes in the rate of exchange. This is equivalent to the hypothesis that the value of the rate of exchange corresponds to the limit rate of exchange. In the second place, since the mechanism described above continues to operate if we take into consideration the domestic price level increase when changing the rate of exchange, it appears that we should start from the increase in export prices and from the changes in the domestic price level when setting the upper limit of the markup.

According to the price mechanism introduced on 1 January 1980 many enterprises--primarily in the machine industry, chemical industry and light industry--adjust their domestic sales prices to the prices obtained in export, which is to say they develop the profitability of domestic sales so that this should not be greater than the profitability achieved in sales for export, presuming that the export price income makes up at least 5 percent of the total price income of the enterprise. This mechanism serves two goals; in the first place the world market price ratios are realized for the users domestically also and in the second place it prevents the domestic market from being more favorable--in regard to prices--for potential exporters. This is a two-edged sword because an enterprise whose export profitability is satisfactory does well but it can put into an impossible situation those enterprises the export of which is realized with only minimal profitability. The rate of exchange determines the border between these two groups of enterprises.

Enterprises belonging to the second group can do two things, either try to achieve a price increase in exports which will put them in a better situation, but this is a hopeless undertaking without improving the quality of products, increasing competitiveness and organizing advertising and an international reputation--all of which would require that profit which the enterprise is still trying to attain;

or--and this is the second path--the enterprises affected can reduce their export sales until they go below the 5 percent limit and thus liberate themselves from the rules of competitive price generation. But the latter solution cannot be used in the case of enterprises where export has great weight in total sales. These enterprises may vegetate without profit until something happens. But this no longer depends on them. Naturally one could now make the argument that cutting back uneconomical export and a greater differentiation among enterprises are among the goals of the new regulator system. But improving the foreign trade balance is today one of the most important tasks. If increasing export which is profitable with the given rate of exchange proves to be insufficient for this then export must be made profitable for a certain number of enterprises. An appropriate rate of exchange policy offers itself as a tool. But we must note that a greater expansion of export will be accompanied by increasing limit costs--primarily on the short run.

If we do not reckon with the possibilities and dangers hiding in competitive price formation when setting rate of exchange policy this could again have two alternative consequences. Either--contrary to our economic goals--export will not increase to a satisfactory degree or the new price mechanism will be forced into the background and there will be a one-sided maximalization of export interest the exaggeration of which will have an unfavorable influence on both efficiency and the balance. In this case, sooner or later, an interest in a quantitative increase of export will become the ruling factor and the economic units will find it worth while to export everything. But this will disorder the internal economic links so it will become necessary to import more and more--according to an article by Tibor Bogyo. An appropriate rate of exchange policy is one condition for having our enterprises turn toward export under the influence of market forces and so that economic policy will not have to choose the path of a one-sided maximalization of export interest.

The Responsibility of Decision Makers

Naturally it does not follow from what has been said that only devaluation is capable of restoring the external balance. The arguments made for a markup also have their justification--at least in part. This is especially true in regard to inflexible import demand and the capacity limits on export expansion. But import demand is inflexible not only because a large part of our imports consists of products which cannot be replaced by domestic production but also, to a large extent, because in the case of products which potentially could be replaced the domestic enterprises do not have the enterprising spirit and dependence on the market which would prompt them to try import replacement production.

Even in export devaluation is capable only of ensuring greater profitability; a substantial increase in export can be expected only if the enterprises run into marketing limits domestically.

A devaluation of the forint has an effect in increasing the price level. But a return to the domestic price stability of before the world market price explosion does not seem possible in the near future anyway. In Hungary also prices are "inflexible downward"--every major price adjustment proves this. The enterprises and consumers are slowly learning to live with an increasing price level. Under these conditions what must be achieved is for the price level of the noncompetitive

sphere to increase less than that of the competitive sphere and for us to strive ever more strongly to eliminate the causes of inflation of domestic origin. It follows from what has been said thus far that the rate of exchange policy to be followed does not derive automatically from the changes experienced or to be expected in export and import prices. The rate of exchange policy must be embedded in the entire system of measures aimed at restoring the balance. From this viewpoint that rate of exchange policy seems most useful which starts from ensuring or increasing export profitability. This must be linked to holding back domestic demand by economic and not administrative methods and to tightening up budgetary restrictions on the enterprises, in other words to a restrictive monetary and credit policy. The latter would also decrease the effect of the internal causes of inflation.

When making decisions pertaining to the rate of exchange one must take into consideration all the more important factors affecting the price level, import demand, export supply and domestic use. What makes this difficult is that in the changing world economic environment measures and goals affecting the external and internal balance must be reviewed several times a year. The new price mechanism certainly ensures that the enterprises will react much more sensitively to changes in certain financial regulators. This increases the possibility of control, but it also increases the responsibility of the decision makers.

8984
CSO: 2500

AGRICULTURAL PRICES SET FOR 1981

Machines, Chemicals, Services

Budapest MAGYAR MEZOGAZDASAG in Hungarian Nos 35, 39, 1980

[Article: "Council of Ministers Resolution on Agricultural Price Measures Effective 1 January 1981"]

[Text] A joint communique of the National Price and Material Office, the Ministry of Agriculture and Food Industry and the Ministry of Finance regarding changes, effective 1 January 1981, in the purchase price of the means and materials as well as services used in agricultural production and the producer (purchase) price of agricultural products.

Based on the resolution of the Council of Ministers, the agricultural purchase price of the means of production and materials used in agriculture will go up in line with the rise in industrial producer prices and import prices since 1 January 1980. During this year, these price rises are largely refunded by the budget on a temporary basis in the form of a compensation by trade organizations that market products with a fixed agricultural purchase price ceiling (agricultural machinery, fertilizers, pesticides, herbicides and industrial feeds). This year's energy price rises are largely compensated by subsidies paid out in proportion to last year's energy use and a 1 forint per kilogram price subsidy paid for poultry.

In order to ensure that agricultural producers are sufficiently aware of the rising price of the means and materials used in production and are therefore able to manage them more sensibly, these temporary refunds will cease as of 1 January 1981. At the same time, the purchase price of the most important means of production and materials will change as follows.

The purchase price level of agricultural machinery will increase at an overall rate of 2 percent. In particular, the price of domestically manufactured machines will go up an average of 1 percent, in line with changes in industrial producer prices. Some machinery prices will remain unchanged, some will go up and some will go down.

In the area of agricultural machinery imported from capitalist countries, there will be an average price rise of approximately 7 percent.

The agricultural purchase price of fertilizers, pesticides, herbicides and mixed feeds will go up by an average of 6 percent.

Selling prices of feed grains will go up by 5 to 8 percent on 1 January 1980 as a result of the increase in purchase prices.

Industrial producer price and import price increases in the area of means and materials with no fixed agricultural purchase price ceiling will continue to be passed along to agricultural enterprises. As a result, there will be price increases averaging 7 to 8 percent for agricultural spare parts, approximately 6 percent for consumable supplies and miscellaneous materials and approximately 5 percent for outside services, all relative to prices at the beginning of 1980.

Charges for certain agricultural services (crop dusting, various inspection fees, artificial insemination, pedigree inspection, etc.) will also increase.

The producer (purchase) prices of agricultural products will rise in line with increased costs, in view of our production policy goals and the interest associated with exports and domestic supplies.

The level of purchase prices will rise by 5 percent. In particular, the increase per 100 kilograms will be 20 forints for wheat, 25 forints for feed grain, 18 forints for corn, 100 forints for rice, 5 forints for sugar beet, 200 forints for tobacco, 20 forints for fiber crops and 20 forints for potatoes.

The increase per kilogram will be 1.60 forints for beef, 2 forints for pork and 2.50 for poultry.

The price supplement paid to small producers in the case of multi-year contracts will increase by 1 forint above the base price for each kilogram of fattened pork.

The purchase price of milk, sunflower seeds and other oil-producing plants and paprika will remain unchanged. We expect an average price increase of 4 percent for agricultural goods in the free price category.

The new purchase prices of animal husbandry products and animal feeds will come into effect on 1 January 1981. In accordance with past practice, in the case of other (plant) products the new prices will apply to the new crops.

The price surcharge paid to small producers for fattened pigs sold under multi-year contract will become effective on 1 September.

Agricultural Products

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 39, pp 20-23, 26

[Text] The Council of Ministers adopted a resolution concerning agricultural price measures effective 1 January 1981.

Agricultural purchase prices of the means of production and materials used in agriculture will increase, as the price increases since the beginning of the year are fully or partially being passed on. During this year, most of the price increases are refunded from the budget on a temporary basis in the form of compensation through trade organizations marketing products with a fixed agricultural purchase price ceiling (agricultural machinery, fertilizers, pesticides, herbicides

and industrial feeds). Most of the energy price increases are balanced out by the 1 forint per kilogram price surcharge on poultry and subsidies paid in proportion to last year's energy use.

In order to ensure that agricultural producers are sufficiently aware of the increasing cost of the materials used in production and therefore manage them more sensibly, these transitional refunds will be eliminated as of 1 January 1981. At the same time, the agricultural purchase price of the most important means of production and materials will go up. To compensate for the bulk of the cumulative cost increases, the purchase price of agricultural products will also go up.

Legal provisions, communiques and bulletins implementing the resolution are being published.

Among these, the most important ones are:

--Decree No 20/1980 (6 September) MEM-AH of the minister of agriculture and food industry, on the producer price of agricultural crops, animals and animal products;

--Price Stipulation No IV/15/1980 (AT 30) of the Ministry of Agriculture and Food Industry and the National Price and Materials Office, on the producer price of agricultural crops, animals and animal products;

--the communique of MEM (Ministry of Agriculture and Food Industry), on detailed quality specifications for grains and oil seeds and accounting for quality differentials;

--Decree No 21/1980 (6 September) MEM-AH of the minister of agriculture and food industry, on the price of grain and industrial feeds;

--Price Stipulation No IV/17/1980 (AT 30) of the Ministry of Agriculture and Food Industry, on the price of grain and industrial feeds.

In addition to the above list, the Ministry of Agriculture and Food Industry, the National Material and Price Office and the Ministry of Finance published a joint communique on changes in the purchase price of the most important means of production and materials used in agriculture and the fees charged for services, effective 1 January 1981. (It is contained in issue No 35 of MAGYAR MEZOGAZDASAG.)

The legal provisions, other measures and information listed above are intended to ensure that large scale agricultural enterprises are able to formulate their 1981 production goals on the basis of early information.

In the following we will only present information regarding price changes.

I. Producer (Purchase) Price of Agricultural Products

One new feature of the present regulations is that producer prices are not being published in the form of a decree but as a price stipulation. Nevertheless, the obligation to conform to these prices is exactly the same as in the case of regulations contained in a decree. The price stipulation was first published in ARSZABALYOZAS AND TERMEKFORGALMAZAS.

Decree No 2-/1980 (6 September) MEM-AH on the producer prices of agricultural crops, animals and animal products differs from earlier regulations only in that it contains a supplement listing the various kinds of prices applying to agricultural products, as follows:

1. Prices fixed by regulatory authority: wheat for human consumption, rye for human consumption, rice (whole), sunflower seed with high oil content and hybrid sunflower seed, sugar beets, tobacco, paprika, fattened pigs (live or side of pork), beef, cow's milk, whipping cream and oily wool.

2. Prices formulated on the basis of official regulations and limitations:

a) Advisory price--malting barley, lupine, corn, feed barley, feed rye, triticale, coleseed, linseed, soybeans, hop, fall potatoes for human consumption, winter apples (special category and grade 1, also cold storage cost refund);

b) protective (floor) prices--fiber hemp, fiber flax, red onions, carrots, parsley, tomatoes, bell peppers, red bell peppers, green peas, string beans, cucumbers, watermelons, winter cabbage, Italian prunes, apricots, peaches, raspberries, grapes, grade 2, grade 3 and juice quality winter apples, fattened pigs sold without contract (live and pork bellies, piglets and suckling pigs; beef, calf, chickens, fattened geese, ducklings, turkeys and chicken eggs delivered without contract; cow's milk and whipping cream delivered without contract.

II. Price of Crops in Regulated Category

1. Grain Crops

a) Fixed price of wheat for human consumption (Table 1).

'Wheat for human consumption' is defined as all wheat varieties classified as wheat for human consumption by the MEM based on proposals by the National Variety Classification Council that comply with the provisions of the MSZ 6383 Standard for Wheat for Human consumption with a baking industry value of at least B_2 (measured by valorigraph or farinograph) and an Hl weight of at least 74 kg. The percentage of grains damaged by bugs must not exceed 10 percent and the percentage of sprouted grains must be below 10 percent.

Wheat for human consumption may be delivered as 'improved (special) quality wheat' if its wet gluten content is at least 35 percent, it has a spread of 2 to 5 mm and a baking industry value of at least A_2 (measured by farinograph or valorigraph) and the percentage of grains damaged by bugs is below 3 percent. Improved quality wheat must be delivered under special agricultural crop delivery contracts and it must be stored separately until grading and delivery.

b) Advisory price of malt barley, lupine and feed grains (Table 2).

The purchasing organization and the producer may jointly agree to a 5 percent deviation in either direction from the indicative price.

Feed wheat includes all varieties not classified as wheat for human consumption as well as all wheat (regardless of variety) whose quality is below a B_2 baking

industry value or below any of the minimal quality requirements listed for wheat for human consumption, or contains more than 10 percent barley impurities. All wheat dried at high temperatures (above 80°C) is also considered to be feed wheat.

The weight of husked or unhusked corn must be calculated on the basis of measured water content and the computation table published by MEM for husked corn with a 15 percent water content (this can also be found on page 23 of issue No 41, 1979 of MAGYAR MEZOGAZDASAG).

The producer price of feed grains applies to crops delivered to the nearest grain storage facility, or drying or mixing plant of the purchasing organization nearest to the agricultural producer. In cases where delivery of crops is to a different location (based on an agreement between the purchasing organization and the producer), the purchaser must pay for the excess transportation cost.

Table 1

Name	Producer Price (Ft/100 kg)	Hl Weight (kg)	Purity (percent)	Water Content (percent)	Standard
Wheat					
improved (special) quality	345	76-80	98	14.5	MSZ 6383
normal quality	330	76-80	98	14.5	MSZ 6383
Rye	310	71	98	14.5	MSZ 6342
Rice (whole)	1320	-	97	15.0	MSZ 6351

Table 2

Name	Producer Price (Ft/100 kg)	Hl Weight (kg)	Purity (percent)	Water Content (percent)	Standard
Malt barley	360	65	98	14.5	MSZ-08 1326
Lupine	750	-	98	14.5	
Corn (husked)	321	-	98	15.0	MSZ 12540
Barley	305	63	98	14.5	MSZ 6372
Wheat	305	70	98	14.5	MSZ 6383
Rye	305	67	98	14.5	MSZ 12542
Triticale	305	68	98	14.5	MSZ-08 1357

2. Oil Seeds (Tables 3, 4)

Hybrid sunflower seeds and sunflower seeds with a high oil content can contain at most 8 percent of seeds belonging to the variety classified under the free price category. Classification of varieties is published by MEM.

The purchasing organization and the producer may agree to deviate from the advisory price by at most 15 percent in either direction, based on joint agreement. Detailed quality specifications and price differentials for various grades are contained in the MEM communique.

Table 3. Official Fixed Prices

Name	Producer Price (Ft/100 kg)	Purity (percent)	Water Content (percent)	Standard
Hybrid and high oil content sunflower varieties	910	98	10	MSZ 6368

Table 4. Advisory Prices

Name	Producer Price (Ft/100 kg)	Purity (percent)	Water Content (percent)	Standard
Coleseed	590	98	10	MSZ 6363
-above 18 percent erucic acid content				
-below 18 percent erucic acid content	650	98	10	MSZ 6363
Linseed	950	98	9	MSZ 6361
Soybeans	1100	98	14	MSZ 6380

3. Sugar Beet

The official fixed price of industrial sugar beet conforming to standards is 5.60 forints per 100 kg per percentage of sugar (digestive) content and 0.56 forints for each tenth of a percent above a full percent.

For sugar beet with a sugar content below the 13.5 percent specified by the standards, the price per 100 kilograms per percentage of sugar content shall be: 5.00 forints between 13.4 and 12.5 percent sugar content and 0.50 forints for each tenth of a percent above a full percent; 4.50 forints below a 12.4 percent sugar content and 0.45 forints for each tenth of a percent above a full percentage point.

In the computation of sugar content, quantities below 0.05 percent must be rounded downward and quantities equal to or greater than 0.05 percent must be rounded upward to the nearest tenth of a percent.

Sugar content is calculated by the sugar factory on the basis of the full amount of the sugar beet delivered by the producer. Samples are taken at the time and place of the delivery. Samples must be tested within 48 hours after delivery.

If the producer is delivering the sugar beet at a previously agreed date then he must receive a time premium above the price set by agreement.

If the parties agree to harvesting the sugar beet between 1 and 20 November and storing it in piles on the field until delivery, the producer must receive special storage fees together with a time premium covering this interval. If the producer is delivering the sugar beet by rail at the sugar factory then the time premium must be calculated on the basis of the time of loading into railroad cars.

Transportation surcharge specified in the price stipulation must be calculated on the basis of the shortest distance between the center of the field and the location where the crop is delivered. The transportation surcharge is calculated on the basis of net weight increased by at most 5 percent allowance for impurities.

If the delivered sugar beet contains more than 10 percent foreign materials (dirt, weeds, etc.) then the portion of the transportation cost representing the excess impurities above 10 percent (paid by the sugar factory) is charged to the producer.

The sugar factory may enter into agreements with producers above and beyond delivery contracts, regarding the conditions and charges for other services performed in the course of contract fulfillment (loading, storage, direct transportation, delivery at the factory, etc.)

5. Hop

Advisory prices for hop (Table 7)

The prices apply to dried and packed hop with water content between 9 and 12 percent loaded into railroad cars at the originating station.

The purchasing organization and the producer may agree to deviate from the advisory price by at most 5 percent in either direction.

In the case of deviations from the MEMSZ 1327 hop standard, the official price may be reduced or increased by at most 1 forint per kilogram for each parameter different from those specified for each grade. The total deviation from the official price may not exceed 400 forints per 100 kg.

6. Paprika

The fixed official price of paprika (Table 8)

Table 8

Grade	Category	Raw (Ft/100kg)	Stringed or Ripened in Net
Mild	1	780	970
Hot	2	630	800

The price of mechanically harvested mixed paprika, suitable for storage, is 570 forints per 100 kg. Such deliveries may include 5 percent green pieces and 5 percent foreign materials.

The quality of paprika is governed by the provisions of the MSZ 6344 standard. Special services provided by the producer require a special charge, set by agreement.

The water content of stringed, ripened, or netted paprika may not exceed 60 percent at the time of delivery. The weight of paprika delivered in this condition must be recalculated on the basis of raw weight and the price must be computed on the basis of raw weight at the time of the harvest.

Based on agreement between producers and purchasing organizations, a surcharge may be paid for paprika delivered before 30 September or for fulfilling other conditions laid down by purchasing organizations (R.7, Article (4)).

The contract surcharge for multi-year contracts is 20 forints per 100 kg.

9. Potatoes for Human Consumption

The advisory price of fall potatoes for human consumption is:

First variety group	330 forints/100 kg
Second variety group	270 forints/100 kg

The first variety group includes all pink and red potato varieties classified or permitted for marketing.

The second variety group includes all white and yellow potato varieties classified or permitted for marketing.

The prices apply to grade 1 quality potatoes as defined by the MSZ 11852 standard.

The purchasing organization and the producer may agree to deviate from the advisory price by 20 percent in either direction.

10. Winter Apples

The advisory price of winter apples (forints/kg):

1 Aug - 31 Oct	Special	7.50
	First class	5.10
1 Nov - 30 Nov	Special	8.20
	First class	5.70
1 Dec - 31 Dec	Special	8.60
	First class	6.10
1 Jan - 31 Jan	Special	8.80
	First class	6.30
1 Feb - 28 Feb	Special	8.90
	First class	6.40
1 Mar - 31 Mar	Special	9.00
	First class	6.50
1 Apr - 30 Apr	Special	9.10
	First class	6.60

The list of winter apple varieties is published in the MEM ERTESITO.

The purchasing organization and producers may agree to deviate from the advisory price by at most 15 percent in either direction.

The producer price applies to apples conforming to the MSZ 6302 standard, selected and classified according to size. In case of cold storage of new crops of special and first grade winter apples delivered after harvest, a fee must be paid over and above the purchase price to cover storage cost.

These fees are set as follows:

in December:	0.80 forints/kg
in January:	2.10 forints/kg
in February:	2.90 forints/kg
in March:	3.50 forints/kg
in April:	4.20 forints/kg

The contracting parties may agree to a fee that differs from those listed above by at most 20 percent in either direction.

II. Fruits and Vegetables

a) Formulation of guaranteed prices for fruits and vegetables by enterprises.

Producers must be paid no less than the guaranteed price for fruits and vegetables listed in a separate communique when these are purchased on a contractual basis (R.3, paragraph c.). The guaranteed price must be set in the contract.

The guaranteed price is set by the purchasing organizations. They are required to inform the parties involved before signing the contract and to advise the appropriate price authorities.

b) Protective price of fruits and vegetables

Table 9 contains protective (floor) prices to be used for non-contractual purchases or market support purchases ordered by central authorities.

Name and Variety	Floor purchase price (Ft/100 kg)		Standard
	Grade 1	Grade 2	
Red onions			
from seedling	320	260	MSZ 6345
from seed	260	220	
Carrots	150	120	MSZ 11900
Parsley	350	280	MSZ 11901
Tomatoes			
cooking (packed in 10 kg Dutch crates	220	150	
industrial	160	120	

Table 9 cont'd.

Name and Variety	Floor purchase price (Ft/100 kg) Grade 1	Grade 2	Standard
Bell peppers	450	370	MSZ 11894
Pimentos			
red	600	500	MSZ 11894
green	250	-	
Green peas, industrial			
round seeded, 6-8.5 mm marrowfat, 6-9.5 mm	650	490	MEMSZ 140
round seeded, 8.5-10 mm marrowfat, 9.5-11 mm	500	390	
round seeded, above 10 mm marrowfat, above 11 mm	340	250	
Green peas in pod, cooking			
marrowfat varieties	550	-	
round seeded varieties	400	-	
String beans			
manually harvested, green or yellow, round	550	450	
mechanically harvested, green or yellow, round	450	400	
Cucumbers			MSZ 11916
6 to 9 mm	630	400	
9 to 12 mm	400	250	
Watermelons			
before 1 August	150	-	
after 1 August	120	-	
Winter cabbage	120	-	MSZ 11890
Italian prunes	420	-	MSZ 6391
Apricots			
over 40 mm diameter	620	450	
35 to 40 mm diameter	520	350	
30 to 35 mm diameter	430	250	
Peaches			MSZ 6303
A	750	-	
B	650	-	
C	600	-	
D	490	-	
E	380	-	
F	270	-	
Raspberries			MSZ 6307
frozen	1900	-	
crated	1700	-	
Table grapes	950	-	MSZ 6309
Winter apples			

Class 1	Class 2	Juice
320	230	150

III. Producer price of animals and animal products

1. Fixed official price of fattened pigs

a) The following conditions apply to pigs graded live, produced by small agricultural producers and sold directly or through representatives or produced by any agricultural producer with live weight over 130 kg, including lard pigs and lard-type pigs as well as pigs sold for breeding and purchased above 170 kg:

Producer price of live pigs (Ft/kg)

Meat and meat type pigs, 95 kg to 125 kg	32.50
Meat and meat type pigs, above 125 kg	30.00
Lard and lard type pigs, above 130 kg	28.00
Pigs sold for fattening, above 170 kg	27.50

The MSZ 6922 standard defines quality requirements as well as sex and type determination of pigs.

Classification of pigs into price (weight) categories must be carried out on the basis of gross weight at the time of delivery.

The purchase price is calculated on the basis of net weight reduced by weight adjustment.

In accordance with the provisions of R.7, Article (1), a 1 forint per kilogram quantitative surcharge must be paid on top of the base price for pigs produced in-house by large scale agricultural enterprises and AFESZ [General Consumer and Marketing Cooperatives] when the quality of the deliveries conforms to contractual obligations.

The quantitative surcharge also applies to fattened pigs purchased from small agricultural producers when delivered by a large scale agricultural enterprise of AFESZ which organizes, directly or through a specialized group, the activities of small agricultural producers in the area of pig breeding, fattening and marketing. At least 20 pigs supplied by small agricultural producers must be delivered in a single shipment.

A multi-year contract surcharge must be paid to small agricultural producers who contract with the purchasing organization to deliver fattened pigs for at least 3 years. The amount of the surcharge is 1.50 forints per kilogram for the first year's deliveries, 2 forints per kilogram for the second year and 2.50 forints per kilogram for the years thereafter.

A 3.00 forint per kilogram large scale enterprise premium must be paid for all pigs produced (fattened) in-house by large scale agricultural producers and delivered after grading. For purposes of the large scale enterprise premium, pigs must be considered produced (fattened) in-house if they were bred in-house or if the enterprise books show that the enterprise raised or fattened them for at least 60 days.

Regardless of weight category, meat and meat type pigs purchased from large scale agricultural enterprises and designated for live export will have a price of 36.50 forints per kilogram net weight.

This export price includes the base price, the quantity surcharge and the large scale enterprise premium.

b) Price of hogs delivered as pork sides, according to quality.

The producer price of meat and meat type hogs purchased by the enterprises of the Animal Trade and Meat Industry Trust from the cooperative farms of large scale agricultural enterprises and graded as pork sides is defined as follows:

	forint/kg
73 kg to 79 kg side weight	
Class 1 pork up to 30 percent white material	48.50
Class 2 pork, 30.1 to 35 percent white material	46.00
Class 3 pork, 35.1 to 40 percent white material	43.50
Class 4 pork, above 40 percent white material	41.00
95 to 105 kg side weight	38.50
hogs above 105 kg side weight	36.50
hogs with 65 kg to 73 kg side weight	40.00
hogs below 65 kg side weight	33.00

These prices apply to the side weight of meat and meat type hogs produced in-house by large scale agricultural enterprises not used for breeding. The prices include the value of digestive and other internal organs.

The prices set for side weight include the base price as well as the quantity surcharge and large scale enterprise premium.

c) The purchasing organization will pay special premium prices for live pigs and pork sides in cases where they comply with special quality or export requirements or other special conditions.

d) The price of fattened pigs sold in the market without contract will be lower than specified in paragraph a) and b) by 2 forints per kilogram in case of live delivery and 2.40 forints per kilogram in case of delivery in the form of pork sides.

e) Large scale agricultural enterprises are entitled to a seasonal premium for fattened pigs delivered on a contractual basis between January and April. The amount of the premium is 0.50 forints per kilogram in the case of pigs delivered live and 0.60 forints per kilogram in the case of pigs delivered as graded pork sides.

f) The purchasing organization may pay a seasonal surcharge of up to 1 forint per kilogram to small agricultural producers for deliveries based on special agreement or rescheduling of deliveries.

2. Protective price of piglets and suckling pigs

The protective price of young pigs with gross weight between 25 kg and 60 kg, suitable for further fattening, is 34 forints per kilogram.

The protective price of suckling pigs with gross weight between 15 kg and 25 kg, suitable for further fattening, is 38 forints per kilogram.

The protective price of piglets and suckling pigs also applies to non-contractual purchases.

3. Beef cattle

The official fixed price of beef cattle (forint/kg) is:

Young steers, 450 kg to 570 kg:

Extreme	39.50
Class 1	37.50
Class 2	34.50
Class 3	31.50

Young heifers

Extreme	above 430 kg	36.00
Grade 1	above 430 kg	34.50
Grade 2	above 400 kg	31.50
Grade 3	above 400 kg	28.50

Full-grown cattle above 450 kg

Grade 1	34.50
Grade 2	30.50
Grade 3	28.00

The purchasing organization may stipulate other delivery weights, prices and price application conditions within the product delivery contract provided these are covered by the export price of live cattle or meat products.

The price of beef cattle delivered without contract may be lower than the price of identical quality beef cattle as defined above. The price difference may not exceed 2.00 forints.

The classification of animals according to price category (weight category) must be performed on the basis of gross weight at the time of delivery.

Purchase price is calculated on the basis of net weight adjusted for weight reduction.

Age, sex and quality classification of animals is governed by the MSZ 6915 standard.

In accordance with the provisions of R.7, Article (1), agricultural enterprises and AFESZ must receive a quantity surcharge amounting to 2.00 forints per kilogram when delivering at least 20 heads of at least Grade 3 cattle conforming to

contractual stipulations in any quarter. The quantity surcharge must also be paid on cattle supplied by small agricultural producers if deliveries are arranged through large scale agricultural enterprise or AFESZ.

4. Calf

The protective price of calves (forint/kg) is:

--calves suitable for breeding, 70 kg to 200 kg: 40.00
--calves for slaughter, 70 kg to 200 kg: 34.00

The protective price of calves applies also to non-contract purchases.

Transportation Charges

The following transportation charges apply when large scale agricultural enterprises ship live animals to the delivery site (slaughterhouse) (forint/head)

	Hogs and lamb	Beef cattle
0 to 5 km	6.00	22.00
6 to 10 km	8.00	28.00
11 to 15 km	10.00	33.00

Separate agreements are required to set transportation charges when the distance exceeds 15 km.

5. Poultry and Eggs

The protective price of poultry and eggs is set as follows:

Chicken	28.50 Ft/kg
Fattened goose	37.00
Ducklings	26.00
Turkey	29.00
Chicken eggs (above 50 g)	1.30

The price of chicken eggs sold without contract must be at least 1.20 forints per piece.

When To Apply?

The provisions of the price stipulation regarding deliveries of fattened pigs by small producers are applicable as of 1 September 1980.

The following provisions are effective as of 1 January 1981:

--provisions regarding price conditions and accounting for cost reimbursements;

--malt barley, lupine and feed grains;

--fruits and vegetables (beginning with 1981 crops);

--fattened pigs;

--piglets and suckling pigs;

--beef cattle;

--calves;

--transportation charges relating to the transportation of live animals;

--poultry and eggs;

--cow's milk and whipping cream;

--fatty wool.

The following provisions are effective as of 1 July 1981:

--grain for human consumption;

--oil seeds;

--sugar beet;

--tobacco;

--hop;

--paprika;

--fiber hemp and fiber flax;

--fall potatoes for human consumption;

--winter apples.

Further Measures Expected

Further measures dealing with the purchase and sale prices of seeds, breeding stock and propagation materials and higher charges for certain specialized services used by agricultural enterprises will be published to provide additional information to agricultural enterprises. New, itemized purchase prices for the means of production used by agricultural enterprises, effective 1 January 1981, will be published at the end of this year.

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ROLE OF MATERIAL INCENTIVES IN AGRICULTURE WEIGHED

Budapest NEPSZABADSAG in Hungarian 23 Oct 80 p 6

[Article by Benedek Toth: "The Strength of Material Incentives in Agriculture"]

[Text] It appears as if there are no collective farms and state farms whose wage and bonus practices do not include some notewirthy and specific solutions. But the basic principles are similar and common trends are discernible. One such trend is that wherever possible, production wages are used. Thus, in animal production they strive to reward in relation to end products: they pay according to milk or egg quality and quantity and on animal weight gain and numerical increase. These policies serve to differentiate the wages.

Production wages also pay attention to the quality of work. One can clearly read in the wage rules of the Csopak Region Collective Farm (in Nemesvamos) the exact forint remuneration for the planting of a certain acreage. Beyond this wage, however, the collective pays a quality bonus for the careful sowing, Production Vice-President Gyorgy Markovszky emphasizes. The per-hectare bonus varies, depending on the planted crops and other circumstances.

It should be mentioned here that in the Hosszuhegy State Farm, according to a communication by Gabor Matyus, director, the winter apple harvest was placed on wage incentives. For outstanding work, they now pay a bonus of 80 forints and 5 kg. apples daily, in addition to a higher wage. The director of the Kiskunhalas State Farm, Istvan Katona, informs us that they pay a bonus to the vineyard workers--e.g., if 90-95 percent of the plantings take root, the workers receive 10 percent [bonus] of the wages they earned during planting. If more than 95 percent of the plantings take root, the workers get 20 percent of the original wages.

Profit in the Forefront

There is a struggle everywhere to reduce the loss of grain during the wheat harvest. Thus, at the "Peace" Collective Farm (Torokszentmiklos), the combine drivers doing outstanding work can get 2,000-4,000 forints extra, according to Janos Kasza, president. The conditions are, however, strict: the cut stalks can not be higher than 15 cm and grain loss must be kept to under 3 percent. Understandably, fuel saving has become important recently. The Csopak Region Collective Farm, already mentioned, returns one-half of the value of the saved fuel to its 23 truckers. But those who exceed the norm have to pay a penalty.

In areas where a lot of manual work is still done, share cropping is a successful and fairly well-spread practice. The Erdotelek Collective Farm raised 160 hectares of melons and 72 hectares of tobacco with this cultivation and work remuneration form. "The advantages of share cropping are visible: it becomes possible to include family members; the workers have a direct interest in the quality and quantity of the production and even in the early harvesting, getting more advantageous prices," lists Ferenc Locsei, the president.

In the Dusnok Collective, spice paprika is grown with share cropping. "We have 413 outside share-croppers this year," says Laszlo M. Zsilinszky, the president of the Collective. "They are workers of nearby factories and local women who are at home. We carry out the mechanized work: plowing, sowing, cultivating, and spraying. The share croppers do the hoeing and harvesting. We pay 2.40 forints per kg. of delivered paprika."

The collective farms and state farms, as they have learned over the years from their losses, understood exactly which are the very important, decisive tasks in farming and animal raising that need greater attention and higher financial interest and control. The wage and bonus methods increasingly spur rational feed and fuel economy and help efficiency. The profit view is advancing. These varying and accepted work incentives and bonuses also show the flexibility and willingness of initiate of the large agricultural aggregates. They prove the strength of independence. Let us not forget that the great majority of these outstanding and truly incentive methods were tested and perfected by the workers of our country's agricultural units.

How Good Is the Wage Policy?

Earlier, there was a great difference between the incentive, pay, and bonus systems of the state farms and the collective farms. But today most collective farms also guarantee a monthly wage and essentially the same salary rules apply to both the collective farms and the state farms.

The tabulation on the spread of financial incentives, produced by the national headquarters of the state farms, is very valuable. They examined practices at 18 state farms. It was found that in the majority of the farms the wage independence of the production units is very limited. The reason is that the company-level regulatory wage rule is very strict.

At the same time, correct moves can be seen to loosen the rigidity and structure of pay regulation. Thus, the Fuzesabony State Farm introduced a coupon system: tractor and combine drivers and workers in the repair shop and general transport will receive coupons worth 200 Fts every month (500 Fts in the peak season) in 50-Ft denominations. All or some of these coupons can be taken away by the production manager when someone does bad work or violates work discipline. The remaining coupons can be cashed.

The Agard Agricultural Combine uses a sliding wage scale, along with basic pay. The sliding part of the wage depends on the fulfillment of quality demands. The state farms have been producing a wage and bonus system since 1957. The system is periodically renewed and adjusted. Many valuable incentive methods are included but the survey, mentioned above, justly complains that the farms don't always pay enough attention to the quality and efficiency criteria.

The Managers' Incentives

At the end of every year, the collective farms' special committees examine the norms and wages. They use the experience gained during the year and try to exclude inequalities that may cause tension between the branches; wage levels and the individual workers' wages.

It is important to have the proper ratio between the managers' and the workers' wages. Openness is very important. There is trouble in those places where the pay and bonus of the managers has to be hidden. It is no accident that all of these are on the agenda of the general meeting of the cooperatives.

The principles and methods of the managers' bonus system is essentially similar to the above. A certain fraction of the annual salary of the so-called first-line manager should be given for fulfilling the important points of the annual plan. This bonus, including a special award, may be as much as 50 percent of the salary. The bonus picture of the chief branch managers and branch managers is more variable. Their conditions to get bonuses are understandably linked to the good execution of the most important tasks of production. For this reason, Balint Hartmann, the president of the Edeleny Collective Farm, claims the bonus conditions vary among the branches. In cattle raising, one gets 5 percent of the annual salary for fulfilling the plan. The bonus is 10 percent in sheep raising. The leaders of both branches receive 10 percent of the annual salary as a bonus for keeping the costs and wages at the right levels.

The Baja Collective Farm, as Otto Lusztig, president, reports, sees the weak parts of the current wage rules but, naturally, abides by them. They offer strong incentives to keep labor costs down. Thirty percent of the chief branch managers' bonus and 20 percent of the branch managers' bonus depends on conforming to the rules of pay regulations.

Janos Szabo, president of the Tapioszentmarton Collective Farm feels that giving bonuses for the overfulfillment of the branch profit plan has good effects. At this farm, up to 50 percent of the bonus of the chief branch manager can come from overfulfillment of the branch's profit plan. This makes them more interested in lowering costs and searching out better marketing tactics.

It is also good when the bonus of the branch managers' and chief branch managers depends to a certain extent on the production results of the whole farm. Then the plant grower thinks also about the livestock-raiser. There can only be profit when the leaders' and workers' bonuses are connected and they all feel the results of good or bad management. This is why many collective farms decided that the managers can get a bonus only if the members and workers share in the additional profits.

Without Schematics

It would be a mistake to forget, as we speak of crop and animal growing and gardening, the financial incentives of the auxiliary activities. Here, too, the goal is to interest the workers in efficiency, quality, and results of their work. As Barna Bencze, president of the "Peace" Collective Farm (Paszto) reports, the tool makers, repairers, and quality inspectors were interested in the overfulfillment of cost indexes. In addition to their monthly wages, they receive 1 to 2.5 percent bonus for overfulfilling the suitably broken-down plan.

It is also necessary to understand that any schematics is harmful in the wage and bonus policy of the collective farms and state farms. It would be very easy for the farms to copy without change the wage policies and methods of the outstanding producers. Many factors have to be kept in mind when the norms, wages, bonus conditions and awards are determined.

It is hard to overestimate the role of the successful incentive methods. But we must also remember that their effect comes only under the proper circumstances. It is essential to know the market and the rational production structure. Much depends on the central controls. The workplace morale is also decisive--it is an important part of the incentive.

Keeping all of the above in mind is not easy. To keep the wage and bonus methods ready for every day in the collective farms requires attention. But the work involving them is work that comes to bear fruit very rapidly.

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COOPERATIVE LEADERS EXPRESS MIXED VIEWS ON REGULATORS

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 40 1 Oct 80 p 3

[Article by Dr Istvan Kapronczai and Dr Laszlo Szenay of the Cooperative Research Institute: "What Do You Think About the Economic Regulators?"]

[Text] Investigations not based primarily on statistical data but reflecting the opinion of economic leaders necessarily belong to evaluations of the effectiveness of the price regulators. In the framework of such a survey, by means of interviews we asked the opinion of 60 agricultural producer's cooperative leaders about the effect of the various regulating elements. The farms selected included 20 weak ones, 20 medium ones, and 20 successful ones, and on the basis of other characteristics, we strived to select farms that would be fair representatives of the country's producer's cooperatives.

Falling Behind the Medium-Range Development Plan

Forty-four percent of the coops included in the survey fell behind their medium-range development plan. The economic leaders mentioned the regulation affecting development as the first reason for this. In addition, however, they also gave manpower problems, labor and farm organization shortcomings, and natural causes as explanations for the lag behind the planned development. Those raising the latter explanation belonged primarily to the weak category. It also became evident that because of their production profile, the weaker farms are much more sensitive to climatic changes than the successful farms.

It is noteworthy that one-third of the opinions held the regulating system to be satisfactory for the developmental efforts of the farms. According to two-thirds [of the respondents], it is not possible to achieve the farms' planned development (investment) objectives in the framework of the present regulation. Thus the majority of the coops examined is not satisfied with the regulators affecting development. It would be grossly simple, however, to accept on the basis of these opinions that the regulators are unequivocally at fault in the falling behind of the development plans. It appears that a significant number of economic leaders much more prefer to criticize the regulator system instead of their own farms. This is also shown by the fact that one finds among the farms listed in the successful category a much larger proportion of farms which understand the regulator system.

We cannot state, of course, that there are no worries about the regulator system. Several among the leaders questioned justified the reasons why, in their view, the regulator system hinders the achievement of the development goals. The majority of these leaders brought attention to the fact that the increase of the development fund had not kept pace with the increase in the cost of the means of investment. This tendency, however, cannot be ascribed as a mistake to the regulator system because, when the above restricting measures were introduced, economic management took into account the reduced possibilities for development, and this is also in part why the regulators became stricter. The problem of how much the possibilities for development are in harmony with the needs for growth is, naturally, another question.

Among the criticisms of regulators affecting systematic development, one also finds some which do not contradict the objectives of the regulators. In the case of many farms, the rules for replenishing the revolving fund created difficulties. This, in fact, burdened their development fund to such an extent that they were not able to achieve even indispensable investments. Of course, it cannot be disputed either that regulators to prevent the unjustified increase of reserves were necessary. In our opinion, however, the exaggerated unburdening of the development fund is not the exclusive method for this. Because this not only limits the carrying out of necessary investments, but in many cases makes it impossible for the enterprise to have a rational reserve management.

Many leaders also complained about the present credit policy practices. Among these, it is worth to ponder the assumption according to which "the reduction of the development fund also grows because of the present relatively short credit placement."

In some farms, a problem was caused (in our opinion, this should be changed) by the fact that the income tax system does not recognize the higher income level in case of the start of a new activity, particularly for industrial activity. According to these views, it is worth expanding the present activity only until the given activity is balanced. If a profit is formed, then in a significant proportion of cases, it is taken away by taxes in such a manner that the new activity does not help solve the coop's earlier income problems (eventually lack of fund). Thus from this angle, the tax system does not support production expansion and development. This prevents in particular the farms with unfavorable endowments from catching up. In our opinion, the regulators should not be allowed, even indirectly, to restrict the start of auxiliary branch activities in the farms with unfavorable endowments.

Before examining the source composition of investments, we measured how much development, planned production increase and realization of investments were in harmony with the possibilities of the farms. On the basis of the answers, it can generally be established that in the farms belonging to the good and medium categories, development did not create basic shortages, queueing or other financial worry. Among the 40 farms listed in the good and medium categories, the above problems occurred in only three of them. On the other hand, the financial worries mentioned appeared in 13 of the 20 coops in the weak category.

Putting together the answers with other information obtained in the course of the survey, we could also convince ourselves that the biggest problems with the financing of investments occurred mainly in those farms which solved their

production increase primarily by means of supplementary investments (the vast majority of these belonged to the weak category). In our opinion, the above are not only the causes but at the same time the consequences of the weakness of the farms already mentioned.

During the years of the plan period surveyed, the composition of investment sources in the producer's cooperatives that were queried were as follows: own resources, 62 percent, investment credit, 12 percent, state aid, 26 percent. The major part of the investments to be carried out in the average large farms, that is in the coops, belong under enterprise jurisdiction, and the leaderships of the coops decide about their realization. The decision, however, is directed by numerous economic policy instruments going beyond the proportion of investment sources. In this manner, cooperative investments have in the final analysis an enterprise character in their and much less so with regard to decision and financing. In the majority of cases, enterprise jurisdiction at decision time means merely the final agreement, that is the acceptance of a situation decided by accomplished facts. At the same time, this also means that the orientation of the developments ultimately helped achieve the objectives of [our] agricultural policy.

In accordance with the goals of the regulator system, state aid played a greater role in the coops belonging to the weaker category. On the other hand, there was no essential difference between the coops in the good, medium, and weak categories as far as the source ratio of investment credits. Finally, apart from the differences within sectors, the weight of state aid decreased among the financial sources of cooperative investments.

In the course of the practical evaluation of investment sources, we were able to establish that a significant share of the costs of fixed assets increase--an average of 38 percent in the coops surveyed--does not directly burden the coops. In the case of certain types of investments, this ratio was even higher. In several cases, this resulted in the farms becoming interested in achieving investment variations which reduced primarily current expenditures. Since they did not finance the investments to a larger proportion out of their own resources, the cost of a one-time investment became for them a secondary factor. This also proves that the attempt of this year's regulator system modification aimed at increasing the weight of the coop's own resources, among them of the investment fund, is justified.

The possibilities for development are determined to a large extent by the regulation of the devaluation deduction. In 1980, the most important change in this area appears to be the fact that in the case of certain machines, the farms--in addition to the given conditions--may establish themselves their amortization rates. It would appear that the possibilities existing in the free choice of deduction rates will be more advantageous for the successful farms. In the latter, indeed, accelerated writing off makes it possible to remove from under taxation the amortization formed in the profit branch and to put it directly into the development fund. On the other hand, weak farms cannot make very much use of this possibility, since the amortization forming in the profit branch is one of the sources for increasing personal incomes.

2153
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PHARMACEUTICAL INDUSTRY EXPORTS TO DEVELOPING COUNTRIES REVIEWED

Budapest FIGYELO in Hungarian 1 Oct 80 p 6

[Article by E.M.: "Pharmaceutical Industry Exports to Developing Countries"]

[Text] At the beginning of October, a joint Hungarian-Bangladesh drug manufacturing enterprise will start operations. Since 1972, MEDIMPEX [MEDIMPEX Foreign Trade Enterprise for Pharmaceutical Products] has regularly shipped Hungarian drugs and this year's exports will reach a value of $2 million, but for the sake of bigger exports, it was deemed advisable to set up a joint interest enterprise. First, production of basic pharmaceuticals will be started, on the basis of ingredients shipped from Hungary. Last year, sales of Hungarian pharmaceuticals in the developing world reached $41 million. Latin American countries accounted for 35 percent of these sales, Asian countries, 34 percent, African countries, 27 percent, while 4 percent of the exports consisted of pharmaceuticals sent to health organizations of the UN. MEDIMPEX envisages that by 1985 Hungarian sales could reach close to $110 million. Therefore, it is already getting ready for the large-scale program by expanding its market organization and developing its major markets by taking into consideration existing conditions (such as the standard of the local pharmaceutical industry, the level of development of health care and organization, and so on). Among these major markets are India, Mexico, Brazil, Nigeria, Venezuela, Argentina, Angola, Mozambique, Bangladesh, Indonesia, Pakistan, Thailand, Jamaica, Ethiopia, Algeria, Iraq, and Afghanistan.

The developing countries have differing characteristics with regard to pharmaceutical purchases and distribution. Competitive negotiation is the form taken by the state purchasing of finished pharmaceuticals put on the market. The drugs needed by the state health network are generally obtained in this manner, with purchases made for the state-owned hospitals and clinics. The second major form is that of private market sales, which require considerably more market activity. In most countries, health authorities tie private market trade to preliminary registration, which in general is a lengthy time and cost consuming procedure. Successful private market sales require in most countries a permanent market presence. Thus, the enterprise's delegations are of late also paying attention to the markets of the neighboring countries. An example: the enterprise representative working since September in Djakarta not only surveys the needs of the Indonesian market, but also includes in his activities Singapore, Malaysia, and the Philippines. Similarly, the enterprise representative in Cairo as of 1 October will survey the market not only in Egypt but also in the Sudan and Ethiopia. In the same vein, the enterprise wants to send representatives to several developing countries in the years

to come. At present, scientific offices headed by an enterprise representative are operating in Algeria, Jamaica and Bangladesh. A similar office headed by a local expert functions in Syria. There are enterprise representatives active in Mexico, Brazil, and India, and jointly owned manufacturing and sales enterprises operate in India and Nigeria. By 1985, MEDIMPEX wants to set up further enterprise offices, among other places in Argentina, Indonesia, and so on.

The use of pharmaceuticals also varies in the developing countries. Because of their modest financial means, the poorer countries purchase primarily basic, life-saving products, and have few opportunities to buy prevention-oriented products. The most significant structural differences regarding the use of pharmaceuticals are as follows: the average share of antibiotics in the world's drug consumption is 13 percent, while it is only a few percent in the developing countries. (The need for anti-tuberculosis drugs is also presently high in developing countries.) Ninety-five percent of the products against malaria are used in the developing countries. Drugs used to cure heart and arterial system diseases constitute the second largest group of pharmaceuticals in world consumption; their ratio in the developed industrial countries is about 11 to 15 percent, while it is a mere 4 percent in the developing countries.

There are export markets (for example Guinea, Haiti, the Sudan, Congo) to which Hungarian industry ships exclusively finished pharmaceuticals. In other countries where finishing activity already takes place (for example, in Pakistan, the Philippines, Morocco, Thailand, Algeria), MEDIMPEX exports ingredients and finished pharmaceuticals. The more developed countries of the Third World cover a large part of their needs with domestic production, and some of them prohibit the import of finished drugs. In these countries, Hungarian exports consist primarily of ingredients and intermediary products. India, Mexico, Brazil, and Argentina, for example, belong to such countries.

In accordance with the pharmaceutical industry endowments of the developing countries, the Hungarian enterprise has signed various cooperation agreements and is negotiating further ones. MEDIMPEX has already prepared its Sixth Five-Year Plan concept and will have in 1985 a total of 23 interests in 18 developing countries.

2153
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WORKER SELF-GOVERNMENT MEETINGS REPORTED

Chemical Works in Bydgoszcz

Warsaw TRYBUNA LUDU in Polish 4 Aug 80 p 3

[Article by G. Smulska: "Worker Self-Government Meetings in Search of Reserves"]

[Text] The Organika-Zachem chemical plants in Bydgoszcz, which produce dyes, semifinished products and synthetic products, among other things polyurethane foam to meet the needs of the furniture and automotive industries, concluded the first half of 1980 with good economic results, which does not mean, however, that they satisfied customer demands in Poland and abroad fully and in accordance with their undertaken obligations.

Goods production was achieved, sales and export tasks were implemented with a surplus, but the range of manufactured products differed considerably from what had been planned. Three plants--a dye works, synthesis plants, and the experimental Izochem plant--did not carry out tasks valued at a total of 150 million zlotys, not furnishing ordered quantities of dyes, liquid chlorine and several other semifinished products. Specific obligations to specific customers were not discharged.

An Absolute Condition

During the deliberations of the Workers' Self-Government Conference (KSR) representatives of the work force devoted the most attention to this issue, acknowledging among other things that the fact that, for example, more aniline was sent abroad instead of dyes, implementing the plan for export by the same token, should not gratify the producers. Technical possibilities and production potential were not utilized, which was reflected in turn in decreased management efficiency.

The main reason that the variegated plan was not achieved was incomplete and erratic deliveries of raw materials, primarily from import, but also domestic raw materials. As indicated by the information presented by the director of Zachem, equipment damage and deficits in employment contributed to this situation. Active members of workers' self-government, referring to these evaluations in the debate, pointed to the need to streamline supply planning. This was demanded in order to insure the efficient flow of information chiefly in difficult situations. This is an absolute condition for the correct organization of production and trade activity of units linked with cooperative unions.

The KSR acknowledged that real possibilities exist for achieving planned yearly tasks in production and sales with regard to value. With regard to assortment, however, the plan is a difficult one. There is a need for renewed analysis of possibilities in this field and for broader consideration of domestic raw materials supply.

Equipment Has To Work

Much attention has been devoted to better use of production assets. Maintaining equipment continually active is a determining factor here. Machinery damage determined production results for the first half of 1980 to a significantly lesser degree than did raw materials, but it also did play a role, and this is already a factor for those dependent on Zachem.

Another important matter: Expensive chemical apparatus imported from abroad often stands unused as a result of a lack of spare parts to replace those which wear out. Many of these spare parts can be made in the plant (recently, for example, documentation of 3,000 different details and systems was prepared). But not everything can be resolved within the framework of the plant. Actions aimed at mobilizing production of certain spare parts in Poland would be necessary, therefore.

For Every Month

It has been resolved that with the aim of achieving more efficient implementation of the varied tasks for the second half of 1980 and of getting through the backlog to the greatest possible extent, particular establishments and services of Zachem will specify tasks for each successive month, adapting them to current supply and production capabilities.

Some establishments, which are not having difficulties with raw materials, have accepted superior tasks. For example, a semifinished products plant will produce 2,000 tons more aniline than provided for in the plan. A materials plant will increase deliveries of polyurethane foam. In order to decrease the deficit in the countrywide balance of flooring materials for residential construction needs, Zachem will undertake production of flooring slabs in August.

The conference acknowledged that the results of the first half of 1980 in Zachem were composed of average, above average, and below average work. Independent of external difficulties, this situation attests to the existence of fairly large internal reserves. They ought to be utilized more fully in the second half of 1980.

Poznan Agricultural Vehicles Plant

Warsaw ZYCIE WARSZAWY in Polish 15 Aug 80 p 3

[Article by Dariusz Piatkowski: "Poznan's Solidity Despite Difficulties: Tarpan With Ambitions"]

[Text] What difference does it make if 1980 began so well that plans for the first months have been fulfilled with a fairly large surplus? The Workers' Self-Government Conference (KSR), taking place in the Poznan Agricultural Vehicles Factory (FSR), had to calculate not so much the effects of past quarters, but had to occupy itself

primarily with the imeediate future of the FSR, with the coming months, which do not bode well at all for Tarpan's creators.

But amidst the wailing, there are other things.

There have been discussions on this in Tarpan. There were reservations on the matter of classification groups and on the means of clearing accounts. But the machine tools never once came to a halt. Sometimes, it is true, it has been difficult to come to terms with things, but it never occurred to anyone that trucks might not leave the factory and that spare parts would not be sent to the farmers for whom Tarpans just now, during harvest days, are and will be so very important.

At the KSR and not only during the conference, diverse means have been sought to provide for wiser, more rational management in the second half of 1980, management both of factory funds and materials, and primarily of manpower time. After all, it is not hard to pursue a plan in overtime. The more important thing is for everything possible to run as orderly as it can during daywork: Not only in the main FSR plant in Antoninek, but also in the branch plants in Grodzisk, Gniezno, Kalisz, everywhere that Tarpan has its suppliers.

From the Workshop--To the Factory

There have also been days of despair in previous months. For example, the flow of energy ceased, and there was a shortage of elements from cooperating firms. More than 5,000 hours were wasted as a result. That is a lot. But this is 20,000 hours less than what was wasted in the very same period in the first half of 1979! The responsibility for this is shared by the Tarpan manufactureres, the FSR leadership, and the entire 4,000-strong work force of the youngest and evermore vigorous factory in our automotive industry. An enormous part of the responsibility rests with people, but some of it also lies with the computer, about which it was once said that its use is incongruous here, that the Tarpan needs it like a fifth wheel on a wagon. Today no one is laughing at the electronic brain anymore. Thanks to it we know far in advance what we will be short of and when, what suppliers will have to argue about, and where auxiliary brigades should be engaged in order to compensate for possible deficits.

It is difficult to produce vehicles in an establishment which was turned into a factory from repair workshops and which still has to develop, modernize, and grow. But the Poznan FSR will never be a colossus in the mold of Tychy, Zeranie, and Jelcz. Today, with an annual production of about 6,000 Tarpans, the FSR is the smallest Polish automotive plant. It will also remain such several years from now, when newly erected Tarpan II departments start up with a creep, when 15,000 and afterwards 25,000 of these useful vehicles will be produced annually in the FSR. Naturally they will be different than those we now know from roads and roadless routes. Already today, for example, nearly all vehicles traveling to clients in Poland and abroad have more modern engines--engines no longer derived from the antiquated "Warszawa," but from the "125p-1500 Polish Fiat." This is one of the measurable effects of the Tarpan association in the Zeranie Automobile Factory (FSO) group of enterprises. For the present, therefore, at KSR--and not only there--they are counting the vehicles produced today and discussing what to do to make them better and more durable, and to make them less costly for both the factory and consumers.

They Are Working More Economically

It has been carefully established how and where to seek the most diverse savings. In the first half of 1980, for example, consumption of materials decreased in the FSR by more than 22 tons of steel, among other things, but for the whole year it was agreed that it was necessary to save about 120 tons of metallurgical products. Electrical energy consumption decreased in this past half year by 52 megawatt hours, whereas in the second half of the year—although there will be "peak" use—the Tarpan manufacturer want to save another 55 megawatt hours.

Point by point, item by item, reserves and methods of using thsm wisely have been indicated. It seems as though the cardboard and plastic packaging in which various elements are sent for assembling vehicles on the assembly line in Poznan is a trifling matter. How many of these boxes have gone to the junkpile recently. Bonuses have been implemented for retrieving boxes and for restoring them to a condition permitting further use. In the past year about 50,000 boxes have been retrieved, and 356,000 zlotys in financial awards have been paid for this. This year 35,000 boxes have already been retrieved, and the awards paid total nearly 200,000 zlotys.

Sometimes there is no way to come to an agreement with the foundries to have metal sheets for the Tarpan and for other products produced in the FSR come in sheets that would fit exactly for processing. Many tons of raw materials have gone to waste with one stroke, have gone for scrap. Sometimes less was carved out of a sheet than was wasted. Now, thanks to different organization of preparatory efforts, the initial selection of metal sheets is better, and sheets can be selected for processing more carefully. And what remains finds its way to the FSR branch establishments, and various useful elements come from this apparent waste; what the factory does not use is turned over to trade resale for market products. Precisely herein lies the secret of economizing, of managing tens of tons of metallurgical products.

And despite these additional economic measures, despite more arduous work we succeeded this year in decreasing work absorbency in the FSR by more than 61,000 work hours. The people who are better utilizing, conserving, and repairing machinery and equipment are responsible for this. It is from these hours that time has arisen for vehicle production above and beyond that called for in the plan. Instead of the envisaged 3,000 Tarpans, 3,121 of this year's Tarpans have already been delivered to customers. And there also are more spare parts, amounting to 171 million zlotys' worth.

The less pressed the plan is, the fewer overtime hours there will be. And nevertheless, wages will be higher. The average monthly wage in the FSR increased to 5,514 zlotys in the first half of 1980, whereas it totaled 5,104 zlotys a year ago.

Better wages, but they are given for increased efficiency, for better results; for turning out more vehicles, and for getting out better and more durable ones.

"In 1979, guarantee repairs on Tarpans cost us 4.111 million zlotys," the chief administrator of the FSR, Master Engineer Andrzej Bobinski, told us. "This represented 0.36 percent of the value of vehicles sold. To all appearances, that may not even be very much. But this strain has not given the work force any peace. It has irritated ambitions that we have to pay for mistakes, for deficiencies occurring during production. What led to this was the understandable feeling of abashment that

customers have cause to complain about something that has broken down in our vehicles. We have considered these questions by various methods: They have been debated in work crews, in departments, at party meetings. I do not know whether all of our customers are already satisfied with us, but in the first half of 1980 the factory paid an average of 1,348 zlotys in guarantee repairs per Tarpan, much less than in 1979. This year's Tarpan probably is better than last year's.

Better and More Ambitious

And there is more to this. We have the ambition to be the factory known for truly honest work in Poznan. Changes, improvements, and supplements are constantly introduced. We are working on reinforcing particular elements and mechanisms of our vehicles, and we are seeking more modern solutions.

Efforts in this direction are being made both by the work force and by the recently established Experimental Institute for Cross Country Vehicles. Among the more important topics currently being introduced in the FSR, about which our director, Master Engineer Przemyslaw Olejnik, spoke, are for example the change in the cooling system mounting--which many customers complained about, quieting the sliding door of the Tarpan, improving the doors so that they close tightly, increasing brake efficiency, a change in the steering wheel, introducing a differential block system in the engines.

And besides this, there are new, subsequent models, such as the bin-type model Tarpan, and also the vehicle equipped with only a frame on which the purchaser can build according to his own knowledge and needs, and there will also be a vehicle with a superimposed casing from synthetic products which will be much more airtight than gabardine is.

And--may it happen as quickly as possible--there will be a Tarpan with a diesel engine instead of a gasoline engine! There is already such a mark 4C 90 Polish engine from the Andora of the Transportation Equipment Plant of the Polish Aviation Plant in Andrychow. It has been examined thoroughly and was painstakingly produced also in Poznan. It went through trials on routes of all kinds totaling about 60,000 km. The trials went perfectly.

It is high time for a mature decision and for serious thought to be given to this propulsion unit for the Tarpan Lublin's Zuk, and delivery vehicles and microbuses from Nysa. By combining the efforts of three factories, the FSR, the Truck Factory (FSC), and the Delivery Truck Factory (FSD), we have to help the designers from Andrychow so that they will complete their trials and investigations as soon as possible and finally undertake batch production of such a necessary diesel engine, thanks to which many tons of fuel can be saved.

There are many issues, plans, and aims at the Poznan FSR. There is no way to mention all of them, but it is worth mentioning that besides the Tarpan, this factory is also producing the sensational Kret to plow ground and precision diagnostic and regulating devices, and various car washers. This year there will be 170 FSR-Tunels, car washers, a very large percentage of which are earmarked for export--so large, that the plan for foreign exchange influxes surely will be achieved with a surplus, but--there are not enough car washers for everyone in Poland who is eager to have one. Therefore, in the FSR plant on Sikorski Street in Poznan they are thinking

about how to increase production and about what to do so that at least 300 car washers can be produced in 1981—for domestic stations and for export.

I am convinced that just as it has been with other issues, so the ambitious Tarpan makers will cope with this task--just as they have managed in all the previous months and years of the operation, expansion, and development of this newest Polish automotive factory.

8729
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CAUSES OF FOREIGN INDEBTEDNESS DISCUSSED

Warsaw POLITYKA No 42, 18 Oct 80 Supp pp 17, 18

[Article by Stanislaw Gruzewski: "How Did It Come To This?"]

[Text] Until quite recently only a few Polish citizens who had access to official foreign information knew the extent of our indebtedness. For most people, this basic measure of our economy was a secret. It was not until the August events on the coast on 25 August of this year that Finance Minister Krzak appeared before television cameras and for the first time officialy informed us that Poland's foreign indebtedness exceeds 20 billion dollars. This information came as a shock to many people, even those occupied daily with economic matters. In general, people knew that our country was incurring debts, but they were not aware of their extent. It was only after the disclosure of the size of the debt that people began to think how it had come to that?

The primary reason was errors in the economic policy, and the subsequent so-called internal adjustments which were mentioned so frequently in various official pronouncements. It is clear that even external circumstances have affected our economy negatively, particularly since 1974, when the capitalist world was experiencing its first energy crisis, but not to the extent that attempts were made to show it was. The heart of the matter boiled down to subjective factors, that is faulty decisions impacting on our economic relations with other countries and causing an increase from year to year of a negative balance in the country's payments balance.

A Forces, But Faulty Program of Development

It is necessary to look for the beginnings of our present difficulties in the so-called "new strategy of economic development" proclaimed on the threshold of the 1970's, the essence of which was to be based on speeding up development of the Polish economy in relation to the not too favorable 1960's from that standpoint. Of all of the measures proposed, the idea itself was vlid. It also received popular support from the public because, who would not want to see his country become an important industrial producer, as was frequently suggested to all of us. Unfortunately, as it later turned out, often those were only empty words.

In order to realize such a concept of economic development it was first necessary to develop a truly realistic and comprehensive program which would encompass a

complete review of our capabilities, that means: what we ought to do ourselves based on our own scientific-production-construction capability, what we ought to buy in socialist countries and what in capitalist countries--in consideration, to be sure, of the permissible limits of indebtedness, which financial experts evaluate as follows: namely, equal credit and interest repayments should not exceed 25 to 30 percent of annual export value.

Sad to say, such a program was not worked out. Buying was commenced (primarily in capitalist countries) of what was and what was not needed. Those who advanced the most proposals were good. On the contrary, those who had many comments and reservations toward such behavior were accused of old fashioned thinking, not understanding the new policy, and not infrequently they were dismissed from their positions. It reached the point where the primary criteria of the work evaluation of the director of an enterprise, an association, or even a minister, was his ability to advocate the new investment themes. It was said at that time "that is a good comrade, because he has drive." The fact that the drive of those comrades frequently placed the national economy in danger of huge losses was of no concern to anyone. Enough of that. Anyone who managed with permitted, and frequently even with prohibited methods, to snatch the largest possible chunk from the state's load was considered the best. Using that kind of evaluation for the management staff led to the creation of various pressure groups which frequently functioned with premeditation, groups whose most important goal was to promote their own ideas of industrial sector development, product groups, or selected plants, without regard to whether the country could or could not afford that. The interest of a narrow group, and not that of the national economy as a whole, was what counted most. How frequent were the instances when these pressure groups deliberately decreased the amount of investment outlays solely in order to force their investment concepts and "to enter the plan." And when that had already occurred, it was recognized that the central planner would in one way or another have to provide whatever money was actually needed. There was no temptation even to develop a proper process for making decisions of great national significance. The entire initiative was ceded to those who prepared project drafts. There were no independent conferees--aside from the interested group--who could have evaluated every investment proposal in a comprehensive, objective manner without fear of losing their own jobs. The lack of such an objective evaluation in effect made every proposal a good one.

The resort and local pressure groups which arose in that time utilized all kinds of measures to push their own investment undertakings at any cost. As Magister J. Gwiazdzinski (Zycie Warszawy 27 September) properly observed, "the root cause of all of our present difficulties is the totally voluntarily shaped investment program, in many cases, extorted by various pressure groups. Instead of clearly shaping a long-term investment program which, above all, would insure market stability--and in addition a program aimed at the genuine development of foodstuffs, market goods, chemistry, etc--we have become entangled in a program of difficult investments."

The Green Light for Imports

Not only did it come to the formation of an unsound investment program within the framework of the new economic development strategy, but a broad avenue for imports was also opened. Ministerial pressure groups, which at the time of de-

veloping their investment proposals did not take the country's payment capabilities into consideration, utilized this for their convenience. Their delegations travelled the whole world from Western Europe, through the United States and to Japan seeking orders. What is more, they managed to create an opinion in the country's political leadership that all of the more important undertakings can be realized primarily, if not exclusively, in cooperation with capitalist firms. It was not important for these pressure groups whether or not the national economy could afford such deep involvement in imports which were so difficult for us. The purpose, not the cost, was important. This could be seen best when, despite the existence of the alternative of selecting a socialist country partner, who frequently was no worse and sometimes even better, a capitalist firm was selected. An eloquent example was the purchase of a license for a city and intercity bus from the French firm of Berliet.

The Polish automotive industry had worked in this area since 1958 with the Czech industry. The result of this cooperation was the Jelcz bus which we have produced for years. However, talk had already begun in the 1960's about modernizing the Jelcz and the need for a more modern bus not only for city, but also for intercity transportation. This goal could have been attained either by entering an agreement with the existing partner, or by establishing contact with the Hungarian firm Ikarus, which has grown to become the leading producer of buses in Europe. Ikarus was chosen. Talks were undertaken, but the year 1970 came along. Plans began to change. To be sure, talks with the Hungarians were continued, but now only in order to collect "convincing" arguments why it was impossible to cooperate with this partner. Of course there was no difficulty in collecting that type of argument. Appropriate specialists from industry were engaged. These saw to it that everything went the way the ministerial lobby wanted it to go. The subsequent course of action in the matter is well known, but it is worth mentioning it now. Thus, in 1972, preparations were made for the first official visit to France at the highest level. One cannot go empty-handed. It is necessary to have some kind of more important subject on Polish-French cooperation. The ministerial lobby immediately utilized the occasion and presented its proposal concerning the purchase of a license from the firm of Berliet, despite the fact that it was known from the beginning that it was not the bus that we wanted. The license cooperative agreement was concluded in August 1972. Initially, Poland would first undertake the import of finished buses, and then the process of initiating their production would begin. This production has continued to date, that is for 8 years. The targeted production capability (5,000 buses annually) which, in accordance with the production plan developed at the time the license was purchased, was to have been attained in 1980, has yet to be seen. According to plan assumptions, barely 1,000 buses will be produced in the current year. One of the principal causes of such low production is the continuation of high cooperative imports which we cannot now afford. As the result of such a serious delay the country's transportation problems have increased. Thus, it became necessary to turn to Hungary with a plea for the sale of buses by the firm with which cooperation was rejected in 1972. The Hungarians agreed and currently there are several thousand Ikarus type buses operating in the country. People have an opportunity of comparing to see which bus is better. Comments are unnecessary.

This is one of many examples which show how a subjective approach to matters of basic significance for economic development was driving our country into unnecessary foreign debts. In addition to the incorrect selection — from a payments

viewpoint -- of a foreign partner, a second factor which caused an ever greater involvement of foreign exchange was the very process of initiating production under license. The most important thing for pressure groups was having a finished product appear immediately after the signing of a licensing agreement in order to be able to display it to the country's top leaders. The fact that the product consisted 90 percent of elements and assemblies imported from capitalist countries was not important. What mattered above all was the effect, showing our superior s and supervisors how our industry operates and our attainments in the new projects sector. These studied gestures were practiced on a wide scale in industry, and have cost the national economy dearly.

Just what did a decision to initiate licensed production without appropriate preparation signify? There is one answer -- increased imports both of raw materials and other products, and cooperational imports. The process of "walking away from import" was always free, no one was in a hurry to do so.

It was sufficient to plan import needs in a suitable way and then to skillfully defend them in the supervising unit. The benefits of large imports have been and continue to be doubtful for enterprises and associations, as well as for the ministry. Thus, it is little wonder that the plans for new projects were hardly ever completed on time and that the mastery of new production extended for years and years.

The license boom of the 1970's, with its pursuit of technical novelties, also resulted in our buying licenses which, in general, were not necessary for our economy. An example of just such a transaction was the purchase in 1974 of a license for a tractor from the firm of Massey-Ferguson-Perkins. At that time, Polish agriculture had made no demands whatever on industry to develop a new family of tractors. All it asked for was an increase in the production of tractor types then being produced. The problem was quantity and not quality, because tractors such as Ursus had attained a good reputation among our farmers and because of this there was no neet to buy a license for a new tractor type.

Insofar as the future was concerned the Design Office of the Ursus Mechanical Works developed its own new family of tractors which have successfully passed a difficult examination in the course of tests conducted in France, and received a good evaluation from the specialists there. This undoubtedly was the greatest attainment of the Polish designers from Ursus. It was only because of the then rush-for-foreign-novelties by ministerial pressure groups, that it was not put into production. Instead the production of licensed tractors turned out to be unusually difficult. There were substantial overruns, first of investment outlays, together with a delay of not less than 4 years in completing the investment. In accordance with the original plan Ursus Mechanical Works was to produce 55,000 tractors in 1980, but actually produced 2,000. It is difficult today to say what the losses are to the national economy as a result of this.

Finally, a third example of the exuberant imagination of persons who had "driving power," and that is the license for heavy load carrying capacity trucks which was purchased toward the end of 1975 from the Austrian firm of Steyr-Daimler-Puch. In accordance with the contract agreement, our industry, that is the Jelcz Automobile Works, was to initiate the production of heavy-duty trucks weighing 38 to

100 tons with a trailer and a 270- to 450-horsepower engine, in three basic versions: a dump truck, a truck-tractor and a ballast-tractor. In accordance with the then-adopted plan, the production of basic assemblies was to have been started in the years 1977-1978, and the production of the trucks in 1979-1980. All of these goals have remained on paper while the purchased license has been placed on the shelf because of the lack of resources. It was known that those resources would not be available at the time the license was purchased, but despite that the ministerial lobby had its way.

The Freezing of Capital

In undertaking many investment decisions, voluntarism led not only to creating an erroneous and very import-absorptive development program, but also to an excessive commital of resources. This did not permit the proper synchronization of investment proposals with the building trade's construction capabilities. As a consequence, a huge gap occurred and many important investments were delayed and a large amount of capital in the form of unutilized machinery and equipment was frozen. Polish National Bank studies show that the value of this machinery and equipment in 13 basic economic ministries as of 31 March 1980 amounted to 48.5 billion zlotys. Of this amount the sum of 34 billion zlotys or more than 70 percent involved imported machinery and equipment of which 24 billion zlotys, or almost 50 percent involves second payment area countries. Prolongation of the storage time of this equipment makes the situation worse. According to the Bank's figures, almost 45 percent of the total value involves machinery and equipment which has been in storage more than 12 months. This was almost double what it was 1 year ago. Nearly 95 percent of the value of unutilized machinery and equipment involved seven basic economic ministries:

Ministry of the Machine Building Industry	9.2	bil	zlotys	including	8.5	bil	zlotys	from	import
Ministry of Metallurgy	7.8	"	"	"	5.8	"	"	"	"
Ministry of Forestry and Lumber Industry	7.2	"	"	"	5.9	"	"	"	"
Ministry of the Chemical Industry	6.6	"	"	"	5.2	"	"	"	"
Ministry of Construction and Building Materials Industry	5.2	"	"	"	2.5	"	"	"	"
Ministry of Heavy Industrial and Agricultural Machinery	4.7	"	"	"	3.2	"	"	"	"
Ministry of Power and Atomic Power	5.2	"	"	"	2.0	"	"	"	"
Total	45.9	"	"	"	33.1	"	"	"	"

This is another example of the lack of economical management in the 1970's. In order to limit economically unjustified import from capitalist countries, resources are often necessary for the purchase of specialized machinery and equipment in second payment area countries. There is no money for this. At the same time we have huge amounts of unutilized machinery (which in most part were bought from those countries) as the result of delays in investment completion, or because of total changes in production programs.

All of these factors have had a substantial impact on the state of our indebtedness which we will now have to pay off under very bad economic conditions. But how do we do this? We ask this particularly now when it is also necessary to supply substantially more goods than ever was the case in the past so that we can guarantee the realization of the agreement made with the working class?

Everything which was said here does not mean that we are expressing ourselves against imports and are urging economic self-sufficiency. We have not done that here in the past, nor do we do that now. We are concerned only with presenting to the broad mass of readers the shocking blunders which have been made in the country's economic policy, in order to guard against similar distortions in the future, by developing proper action methods. If anywhere, it is in foreign trade in which it is necessary always to be governed by good judgment and economy, something that was lacking in many of our economic activists in the 1970's.

In our supplement we wrote many times about the need for rationing imports and, in general, intensifying exports, particularly with reference to countries of the second payments area. We also pointed out the very high import-absorptiveness and materials-absorptiveness of our economy. Perhaps the titles of my articles attest to that: "Don't Wait for Manna" (7/1973), "There's No Time for Delay" (4/1974), "We Cannot Continue This Way Any Longer" (6/1974), "We Cannot Delay" (9/1974) "Proposals for Today" (1/1975), "Potentates Without Faces" (4/1975), "More Trust" (10/1976), "How to Ration Imports" (1/1977), "The Only Medicine" (6/1977), "Search Where You Are" (10/1979), "Specialized Inconsistencies" (12/1979).

This article did not elicit a practical response from our decisionmakers. They behaved as if the state treasury had no bottom.

10433
CSO: 2600

FORTHCOMING AVERAGE SALE PRICES TO BE INCREASED BY 30 PERCENT

Warsaw ZYCIE GOSPODARCZE in Polish No 37 14 Sep 80 p 3

[Article by Krzysztof Krauss: "Two Points of View"]

[Text] A government draft resolution to intensify price controls and increase the discipline of pricing was discussed widely and submitted, as announced earlier, to social consultation. It has been awaited with great interest as it pertains to the fundamental issue, both from the "market" and "mechanism" points of view. But do these points coincide? And can they coincide in the present situation? And also, how do the targets and provisions of the proposed standard act compare with the targets and provisions of the former act, the decision pertaining to implementation, on 1 January 1981, of new materials supply prices which will increase average sale prices by 30 percent?

I think these questions cannot be overlooked. And it does not seem to me that these are questions which can be answered absolutely unambiguously, at least today, in this emotional state which accompanies everything connected with market problems, costs of living, etc., and with still very hazy ideas on the subject of what exactly should be included in the notions of restructuring the system of management, improving the management of instruments, and strengthening the role of cost effectiveness.

What Do the Consumers Expect?

Antoni Gryniewicz, deputy manager of the PKC, makes clear in a talk with a newspaper reporter: "I would not like to preclude the results of social consultation. The opinions that reach us confirm, however, that a political need of the moment is to undertake quick actions to slow down further increase in retail prices of market products in order to calm down prices in general. This is expected first of all by people and the draft resolution attempts to address it." And obviously it is difficult to disagree with this opinion.

All the factory crews, those that were on strike and those that were not, unanimously demanded that we get inflation under control as it is the greatest threat to household budgets and the main reson (external at least) for the drop in recent years in the real income of many groups of society and for the slowdown in the income increase of others.

How does this draft resolution attempt to assure a "calming down" of prices? First, by introducing a list of products and services, comprising (appendix to the draft

resolution) initially approximately 100 items, after the first phase of consultation enlarged to 118 items, whose prices should fall under special control and be determined by the Council of Ministers or the PKC. Second, by placing pricing of what's called prices of new items and of fashion articles prices, including those that were not on the "protected list," under the control of an independent body, that is of the PKC and its local branches. Previously these prices were arrived at by producers accompanied by dealers, that is by those whose own interest prompted them to establish prices as high as possible. Third, by accepting a general rule that the binding formula in establishing decentralized prices (and partly of the remaining ones) should be the cost formula. Previously, as we know, there were more formulas; after cost, for example, supply-demand, etc.

A Journalist Comments:

Previously there was also a list of products and services, that could be priced only by the Council of Ministers or the PKC. It was not a small list. As early as 1977, and then there was a limitation of the range of what is called decentralized prices, about 55 percent of market products and services were sold at prices which were established centrally: 33 percent of the total turnover by the government, 22 percent of the total by the PKC and some ministries.

Representatives of the PKC respond:

--Let us be exact. The draft resolution discusses prices under special control, whereas the data you quote refer to the division of control in matters of retail prices among central units (government, the PKC, ministries) and the remaining units. This is not the same.

--The PKC estimated, here I quote a report published a year ago, that about half of the general increase in the price level had its source in central decisions...

--For example, that's how the difference is expressed between suggested "special control" in the draft resolution and simply the division of competency; which prices are established centrally and which are not. Products and services put on the "protected list," to use this not too exact term, are put there with a determined intention, openly and publicly. And besides, the figures you quote should be accurate. The products and services included in the list account for about 55 percent of retail turnover (food about 80 percent of turnover). It corresponds roughly to the old division into "centralized prices" and "decentralized prices." But in the prices established by central organs are also included the prices confirmed by the ministries and the ministries have their own interests, not always corresponding to the general social interest. Now, there will be only two price managers "from the list:" the government and the PKC. If we count among the prices established by central organ only the ones confirmed by the government or the PKC, the share of turnover in products and services under strict control increases by 10 to 20 points...

What do the producers expect?

Let's dot the "i." This consulting group of the government draft resolution on prices, let's call it for simplicity's sake the "consumer group," expects that it will be an act authorizing "freezing," and even in some cases lowering of prices on the products most frequently bought and most substantially influencing living costs.

These are the most frequent expectations. And what hopes for the new legal regulation in pricing do the producers generally have? What are the points of view and tendencies? What fears exist? I say this because we should not hide: some formulations of the draft resolution are received by economic managers from companies, departments and ministries for industrial sub-branches with mixed feelings and even with alarm.

The hopes brought by the announcement of the government resolution, to a smaller degree the concrete draft, and particularly the gradual increasing of the list of "protected" products after consultations with factory crews and discussions in the press, referred mainly to the standardization of principles on which the state pricing policy should rest. The economic activists of enterprises have been demanding such standardization of principles for a long time. It was only in appearance that great freedom of choice, and as a matter of fact the constantly growing lack of central control of pricing, gave them a free hand, increased the independence of their economic organizations.

The freedom was "convenient" in traditional methods of accounting for targets that were formulated in gross values by the plan postulate assigned to companies (sub-branches and ministries). It always allowed, when other methods failed--and they had to fail more and more frequently because in the practice of central economic planning, as we know, the bonds between the size of "allocated" tasks to specific organizations and the size of "allocated" funds were more and more often broken--salvation by manipulations in goods and prices. Every manager of an economic organization knew, however, that it increases the conflict between the directly perceived interest of the company, sub-branch, and branch, and the broader social interest. And when the social interest collides with the fractional interests of economic organizations, there is no room for the true process of decentralized management, for substituting the administrative methods of directing the economy "from the center" with parametrical methods. In a situation of conflict of interest, the "center" will have to intervene by way of directives because it has no other way.

The first charge against the draft resolution advanced by the economic managers from companies is: this document is inconsistent. It formulates indeed a general principle that price should be the result of socially justified production costs, but at the same time, by making a "protected list" for the majority of products going to the market, it accepts the fact that there will be a large area of exceptions to this principle. The degree of differentiation in the profitability of products put on the list is substantial. A big part of the list is occupied by products which under present production conditions do not assure the minimum of profit, and some of which are sold below production costs. After the reform of supply prices, announced for the next year, the majority of products put on the "protected list" will not assure the minimum of profitability for the companies, some--many more than today--will begin to yield losses.

The resolution, they say, in this situation, does not improve, but worsens the prospect of ordering the price structure. In this way, it worsens the prospect of the "economizing" criteria according to which the companies will account for the effects of their work. It limits, if it does not render impossible, more essential changes in the process of freeing the companies because it makes deeper the conflict between the direct interests of economic organizations and the social interest.

The second charge directed against the resolution by the economic managers from companies refers to the bureaucratic procedure of establishing prices which makes difficult a quick adjustment to changing consumer needs. The resolution may become an element slowing down technological progress, and weakening interest in inventions, already very weak. It is difficult to reconcile with the resolution those forms of incentives which are included in the "prices of new products." The prices of new products, the eocnomic managers from enterprises say, were abused, it is true. But they constituted quite a logical attempt, adapted to the realities of management, to stimulate the enterprises' interest in renewing the products they offer for the market. Perhaps these prices were imperfect, but they constituted a form of "providing incentives for innovation." However imperfect, this form has been proven in practice. It is imperfect not because the profits assured by the prices of new products were too small, but because the direct bonds were broken, as a result of departure from the original principles of what is called the large economic unit reform--the bonds between the size of achieved economic results and the size of the available payment funds, as well as between the size of funds collected on the development fund account and the right of spending them for the company's investment goals. The prices are being abused not because the enterprises demanded to maintain preferential prices for new products without limit, but because after the period for which the new price was established, additional profits were taken by the state and the size of accumulation prescribed by directive which the company was obliged to assign to the budget, calculated these surpluses of profit in advance.

Real and Apparent Dangers

The easiest objections to refute and the least justified fears of the draft resolution advanced by the companies, they say in the PKC, refer to the apparent threat of bureaucratic procedure in establishing prices and of erasing incentives for real technological progress in a steady renewal of produced goods, responsive to market needs. Now, a determined formal system of confirming prices is also in force, referring also to what are called decentralized prices. Decentralized prices are not in general determined by the companies alone, on the principle of an agreement with the recipient. The stipulated prices are used mainly in non-socialized and agency trade and refer to craft products, but not all of the In supply turnover, prices in general do not require acceptance by superior organs and are negotiated between the cooperating companies, so it might seem that these are stipulated prices. They are not, however, "free prices," "stipulated," because the method of calculating these prices is regulated by very detailed directives.

The majority of decentralized prices for what is called market products and some supply ones (standardized machine elements, standard tools, etc.) are verified by special commissions, working on the department level. Only these commissions (more exactly, the department directors), not the companies, have the right to confirm the price. It is then necessary to prepare the proper calculation, obtain the opinion of the commercial community, and in the case of a new product, generally also the evaluation of the usage qualities, the product features. It is necessary then to maintain the whole official time-consuming procedure to collect the assigned documentation. There should be no difficulties, they say in the PKC, in cases where at present "external" approval is required, to assign the chairmanship of sub-branch commissions to the representatives of the central office or the local offices of the PKC, who are given great authority, allowing them, for all practical purposes, to confirm prices "on the spot." The procedure of price confirmation in this system, if

the companies applying for the price supply properly prepared documentation, will not be prolonged by a day or by an hour. This procedure can be even more accelerated, simplified, if it is released from various unnecessary formalities, dictated by bureaucratic habits, that are still quite common in the activities of the sub-branch commissions.

The reservations that it will lead to further bureaucracy in the price confirmation procedure, say the journalist's interlocutors in the PKC, derive from reasons other than worry about the procedure's efficiency. Simply, the matters were decided "in the group," without the presence of "unappointed persons," that is representing interests other than those of the sub-branch. That is the reason for the frequent violation of the binding legal standards, and the unilateral interpretation of these standards: for self-interest, not for social interests. Last year, for 28,000 of the controlled prices in retail market products, materials-supply and capital goods prices, services and calculsted sale prices, nearly one-third was established improperly and the prices were too high! Similar results were obtained through the control of about 5,000 prices in the first quarter of this year. The presence of "unappointed persons" representing an organziation independent of producers, may disturb the "idyl," and force everybody to treat more seriously the norms of determining principles in pricing.

And the references for "new products?" These, after all, will remain, and at any rate should remain. The accumulation of a majority of industrial products aimed at the market is big enough to reconcile two only apparently exclusive goals: profitability of new production for the company and slowing down of the trend of unjustified price hiking for new products above the boundary dictated by decency and responsibility for the social results of price decisions. The "cost" formula that is to find general application in reference to so-called decentralized prices and much broader application in reference to the "price of new products" approved by the PKC, removes the causes of the inefficiency of present control over pricing practices. It makes the rules to which prices should be subordinated rational.

For the producers who treat honestly the right to set the prices for new products the new regulations make the situation easier. They release them from the competition of those who would like to gain additional profits not by work, but by a "method." There should not be any more of what is happening quite often now: the best economic results, which carry entitlement to the awards of bonuses and citations, are obtained not by those who truly work for them, but by those who are impudent and cynical enough to substitute for true effort the appearance of good work.

Other causes of the insufficient effectiveness of incentives for innovation mentioned by company representatives do not refer, emphasize the journalist's interlocutors in the PKC, to the methodology of pricing, but to matters connected in general with the functioning of economic mechanisms, style of managing, etc. These are matters, however, that will not be regulated by any standards act regarding prices; this is not its aim. It requires, as already announced, changes in the whole system of planning, management and directing, extensive systems changes.

Short and Long Range Goals

Significantly more complex, emphasize the journalist's interlocutors in the PKC, is a reaction to those reservations and fears advanced in the companies that refer to

the influence of the new resolution on the price structure in general and the compatibility of the resolution's intention with the announced reform of sales prices. An extensive "protected" list that includes the majority of products and market services does not mean, in truth, "freezing" the prices on these products. It is true, however, that it aims at limiting the increase in the cost of living and that other, earlier ratified decisions, temporarily "freeze" the prices of some products "from the list." It is also true that the magnified state of market imbalance caused by pay and assistance increases already carried out or planned for the near future will create pressure on the increase of average sales prices and in the internal turnover of the economy.

After a period of "freezing" some prices, which is socially necessary, say the journalist's interlocutors from the PKC, there must come a period of thoughtfully ordering them. In the long run such a structure of retail prices cannot be maintained, as it causes pressure on the market for food products, whose sale is and will be limited and whose production costs, because of objective reasons, grow and will keep growing. All prices, including also basic products, will probably come near in the future to the ratios derived from socially justified production costs. This is one of the important conditions of putting the market in order and of strengthening the role of cost effectiveness in management. Getting close to the price ratios, derived from social production costs, does not allow one to leave aside sales prices either.

Making sales prices real, and it is open to discussion whether in terms of local or world prices--they tell the journalist in the PKC--has to come. The problem that we think should be considered in the new situation is whether it should be done in one step or in stages, on the scale planned in previous decisions or on a different scale, smaller or larger, on such a basis as envisaged in current guidelines (or domestic costs) or on another basis (world prices).

The PKC is preparing then for the new leadership of the party and government an evaluation of "cost" estimates for the announced reform of sales prices. This evaluation is not ready yet, but one thing is known: materials costs would increase as a result of a change in sales prices by about 830 billion zlotys. They want to conclude this work as soon as possible, as different solutions can be adopted, but the selection of a specific option should be based on full, truthful, and competent information. One cannot afford to act "in the dark," follow "the feeling;" the matter is too essential.

The resolution about prices, about increasing control and strengthening the discipline of pricing, they say in the PKC, does not solve all the problems because it cannot. It is too early for that. It forms, however, a framework that facilitates the improvement, in connection with others, mainly systems solutions, of this crucial socially important element of management. We cannot wait because these are justified demands of the crews and the whole society, because it is simply a political need, until these "other matters" are finally and unambiquously decided. It goes without saying, in our opinion, that this resolution should be treated as the first step in putting prices in order in our economy, to be followed by subsequent steps, like this resolution carried out in the open, after broad, frank consultations, after getting opinions from all involved. Only such steps will be socially accepted and will guarantee a choice of solutions, the best of what is practically possible.

9272
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IMPACT OF ENERGY CONSERVATION DEMANDS ON AGRICULTURE SEEN

Bucharest CEREALE SI PLANTE TEHNICE in Romanian No 7, Jul 80 pp 3-7

[Article by Dr Gh. Budoi and Prof Dr D. Toma]

> [Text] "Rational utilization of energy and management of it with a high sense of responsibility must become a broad mass action, a general cause for all workers and, in the current stage and in the future, the rise in efficiency of the entire national economy, assurance of conditions for socialist Romania's faster social-economic progress and for raising our people's well-being and civilization to a high level depend on it." (From the "Program-Directive for Research and Development in the Energy Area for the 1981-1990 Period and Main Guidelines up to the Year 2000")

I. The World Energy Crisis

Energy consumption is one of the main factors in society's continued development.

The explosion in the prices for crude oil in the winter of 1973-1974 put the energy crisis on the agenda. Following this period, year by year it became more and more clear that the era of cheap energy accumulated in fossil hydrocarbons as well as of chief raw materials had passed.

The energy crisis should not be viewed in a simplistic way: It is not caused by sources of hydrocarbons. These were limited from the start and could run out. The crisis was due to the policy conducted by the developed capitalist countries and the big international oil companies, which favored the appearance and development of the discordance between the structure of raw energy consumption and the structure of world energy resources. Thus, at present, the use of petroleum in total world energy consumption is 45 percent and 62 percent together with natural gases, with the resources existing representing only around 11 percent of the total (ERA SOCIALISTA, No 10, 19). It is felt that petroleum resources can be consumed in 50-80 years, while those of coal--in 600-800 years. Such a finding should not be viewed from positions of pessimism or fatalism but should stimulate a new attitude and

responsibility and should introduce into man's awareness "concern with natural hydrocarbons."

The energy problem has multidimensional implications: technical-economic, political, social and ecological. Man is becoming more and more aware of the importance of energy in the development of society and of adopting a responsible attitude now but, in particular, in the future.

Studies, discussions and programs to solve athe energy problem have been drawn up at the world level. Efforts are intensifying to improve technologies and find new energy resources, to restructure some industries and bring coal back into the forefront.

II. RCP Policy in the Energy Area

Effects of the world energy situation also are being felt in Romania due, on one hand, to our country's interdependence with the world economy and, on the other, due to the fact that energy consumption has risen rapidly together with the country's industrialization, while energy needs, particularly in the area of hydrocarbons, can only be satisfied partially from domestic production.

Our party has promoted a realistic and deeply scientific policy in the area of energy as well as other areas of activity. Thus, compared with 1950, net coal production in 1978 rose 9 times, that of extracted crude oil--2.7 times (with this being the smallest rise compared with the other energy sources), methane gas--13.8 times and electrical energy—62 times. While the share of coal in the electrical energy production of other countries has progressively become lower, under the clearsighted orientation of Comrade Nicolae Ceausescu, the party's secretary general, large investments have been carried out in Romania for the construction of thermal electric power centrals with inferior coal. The share of coal rose from 22.4 percent in 1960 to 33.2 percent in 1975, of total sources of electrical energy. Decisive measures have beenadopted to save and have rational usage of petroleum and to reorganize some of the big energy-consuming branches of industry.

The energy policy conducted by the party in our country is of a deeply national nature. Of particular importance is the "Program-Directive for Research and Development in the Energy Area for the 1981-1990 Period and Main Guidelines up to the Year 2000,"which places before us the grand goal that in the coming decade Romania should become independent with regard to fuel and energy. Toward this end, "a central goal is a thorough exploitation of the country's zones with a view to discovering new deposits of coal, crude oil, gases, radioactive substances as well as to intensifying concern with utilizing solar energy, wind energy, thermal waters, biomass, assuring the more and more emphatic reduction in the share of hydrocarbons in the country's hydroenergy consumption." Hydrocarbons will be used in particular for the chemical industry, restricting their utilizing in the combusion processes.

III. Implications of the Energy Crisis for Agriculture

Agriculture is a basic branch of the economy and makes a basic contribution to increasing our country's wealth. The 12th party congress provided new and grand tasks for the development of agriculture. The congress decided the move to a new quality in the 1981-1985 five-year plan and in the area of agriculture, a quality carried out through a substantial increase in agricultural production, particularly per hectare and per animal output as well as through a rise in economic efficiency. As Comrade Nicolae Ceausescu specified in his report to the 12th party congress, "A basic goal of the next five-year plan is to carry out a deep agrarian revolution, comprising both the material-technical base as well as the organization of production."

The big goals facing our country's agriculture and the creation of a modern and intensive agriculture are being fulfilled in the context of the energy policy established by the party. The specification should be made that, together with the intensification of agriculture in our country as well as in the world, its job as a consumer of energy resources as well as of other various raw materials (iron, cement and so forth) has risen as a result of the extension of mechanization, chemification, construction and other activities. The direct consumption of energy (mechanization, irrigation and so forth) currently is 3-4 percent of total consumption. If we also add the indirect consumption (energy to produce machinery, fertilizer, pesticides, conditioning of the products, consumption on the farm, circulation of products and so forth), agriculture consumes a total of 11-12 percent of total energy (Rauta, 1979).

In the context of current energy policy, it becomes clear that a substantial rise in agricultural production is being carried out under conditions of high productivity, with minimum material expenses per unit of product, thus assuring a large growth in economic efficiency and a minimum consumption of energy.

Continuing, some of the more important directions are presented in which action must be taken to implement the energy policy in the area of agriculture.

1. The saving of energy. Under current conditions, under the party's impulse, the idea of "the most economical source of energy is the saving of energy" has become broadly accepted. Practice has proven that in this way covering the need for energy of 20-25 percent can be achieved. The ways for saving energy are many: reducing the shuffling and idle running of machinery, sensible organization of work, coupling aggregates in order to use the motors' power to the maximum and so forth. Some of these ways will be treated in a more developed way in this article.

Carrying out land projects during the physical maturity of the land permits reducing the resistance to ploughing nearly in half with enormous advantages for the quality of the projects and reducing the consumption of fuel and use of machinery.

Of course, in practice, it is not always possible to carry out all the land projects during the physical maturity interval. But the sensible organization of work, working in two shifts permit full enjoyment of these advantages.

2. Sensible use of the land stock. The land is the reservoir of water and nutritional substances for plants, for taking over and transfering energy and matter for energy bioconversion. In proportion to bioconversion the importance of the land is so great that it actually cannot be estimated.

To a great extent fulfilling the demands to raise per hectare output and to obtain large, quality production with a minimum consumption of energy depends on the way the properties of the land are used, preserved and improved. This demand is obligatory for our country, since the possibilities for increasing arable area are small. Thus, arable area now is 95-98 percent of the arable potential, compared with 64 percent in the USSR and 51 percent in the United States and Canada (Rauta and col aborators, 1979). Around .45 hectares arable land on the average are per capita in Romania compared with .40 hectares for the world, .97 hectares for the USSR and .93 hectares for the United States and Canada. In the year 2000 about .33 hectares arable land per capita is forecast for Romania.Bearingin mind the tasks to increase agricultural production, the result is that we will obtain several times greater production than now approximately from the same area. As a result, intense action should be taken to increase the production capacity of the land, which is fully achievable, since the properties of the land are improving, actually superior fertility is being achieved and the coefficient of the bioconversion of solar energy is rising under the conditions of advanced science and technology.

The ways to raise the fertility of the land are many and varied (the application of fertilizers and additions, irrigation, drainage, perennial grasses and so forth). Space here does not permit us to make a detailed treatment of these.

3. Reduction in fuel and energy consumption in the mechanized operation of agricultural work. Currently, for agricultural as a whole, the need for energy and fuel to do agricultural projects with mechanized means represents the greatest share.

Bearing in mind that in 1980, compared with 1979, the share of fuel for agricultural jobs operated mechanically has been reduced considerably, together with rise in the volume of mechanized jobs and per hectare production, it is necessary to take some measures, with the goals sought as follows: reduction in the consumption of liquid fuel for mechanized jobs under conditions of utilizing current machinery systems and those forecast for the next five-year plan; working out and creating new machinery systems which would provide modulation and standardization of agricultural machinery as well as the building of complex aggregates as means to reduce the specific consumption of energy and materials; use of nonconventional energy sources in agriculture (solar, wind energy, biogas, biological and geothermal energy) for the

purpose of partially replacing fuel and electrical energy consumption; development of automation of production processes as a way to save energy through the optimization of the working sysgems of the agricultural machinery and installations.

The main way to reduce liquid fuel consumption for mechanized jobs under the conditions of given machinery systems is the formation of aggregates which would carry out more than one job on the same run, would load the tractors' power more fully and, for the heavier jobs, would utilize high-powered tractors. For this purpose the forecast is to build aggregates on the basis of existing equipment being mass produced, together with the application of simplified and efficient technologies for the main agricultural crops. The effects anticipated for the first phase are as follows: a reduction of around 8 percent in fuel consumption is anticipated for the corn crop for the improved technology applicable immediately and 25 perceent for the technology being researched; for the cereal crops, the figures are 2 and 26 percent, respectively; for the sunflower crop the figures are 4 and 27 percent, respectively and for the soybean crop, around 4 and 21 per ent, respectively.

With a view to reducing fuel consumption for the jobs of conditioning, processing and preserving agricultural products, the forecast is to produce new types of driers which would use the new types of heat generators, utilizing secondary agricultural products such as straw, stalks and so forth and obtaining corresponding output.

Another main direction for reducing fuel consumption in agriculture is the introduction and extending into the working processes of agriculture the machinery systems which would carry out more than one job in a single run, under various combinations achieved as machine modules with the same working width so that they can be utilized in multiples for tractors of different classes of power, in all cases providing a complete loading for them of up to 85-90 percent of their power.

In the current period and in the near future, the modules may be built by coupling two-five different machines in depth and two-six groups of modules by working width. Mainly the operations which can be done at the same time through modular machinery systems are working the land, preparing the seed beds, sowing, fertilizing, herbiciding work, and administering insecticides.

Utilizing the modular machinery systems we obtain reduction in the specific consumption of motor fuel, a reduction in the number of standard sizes, shorter period for carrying out agricultural jobs together with improving the quality of them and reducing settling of the earth. As a result, we forecast the elaboration of a modular system for all existing machinery which is suited to modulation, with this system continuing to be at the base for assimilation of agricultural equipment into manufacture.

One of the important concerns is to build combined modular aggregates which would permit preparation of the land with concomitant execution of direct sowing in stubble and elimination of ploughing work and seed bed preparation.

In this case, the reduction in motor fuel consumption may be estimated to be more above 18 percent.

Extending the use of nonconventional energy in agriculture, that is, solar, wind and biological energy, is a priority goal. The heliothermal collectors built at the level of current technology can assure a savings of 1 ton of conventional fuel annually per 10 square meters of collector panel. We see from the experimental figures obtained until now the possibility of heating with solar energy through the heliothermal collectors the water needed to prepare the food in the animal-raising sector, in obtaining biogas, in drying agricultural products by using methods of active aeration in air warmed to 3-8°C above the air temperature and so forth.

With regard to the use of wind energy, multiple and rapid wind motors will be built as well as aggregates driven by them to supply the zootechnical farms or rural localities with water or to reduce the electric current sent to local consumers. Taking into account the average wind speed, one may estimate, for a first stage, the production of a quantity of energy equal to 160 million kilowatt hours per year. In the long-range stage, this could increase several dozen times.

In order to use biological heat, the stress will be placed on research in heating the air in the animal stables and poultry houses with the aid of heat given from the stale air, through changes in heat as well as the use of heat given in cooling the milk. Also, the use of the biogas obtained from animal waste will be sought with a view to obtaining thermal or electrical energy. Current research is concerned with building motors which would use only biogas as fuel. There also is a parallel study of the possibilities for recovering the heat lost through cooling of these motors and evacuation of the gases burned during their operation, which represent the equivalent of 66 percent of fuel consumed.

Automation of the working processes is an important source in achieving energy savings. Automation solutions can provide energy savings by the following:

Building of equipment for the automated supervision of the operation of complex mobile aggregates with a view to discovering the technical and technological defects in the working process;

Building automated control and regulating equipment for the equipment and installations with a view to having a constant maintenance of the operating parameters within the optimum limits established beforehand;

Establishing charts and equipment for automating the processes for preparation and distribution of food in the zootechnical shelters;

Establishing appropriate ventilating systems and systems for equipment automation with a view to obtaining the optimum indicators for the microclimate in the shelters;

Automation of working processes in the storage areas for preserving the agricultural products.

4. Optimization of fertilizer and pesticide consumption, improvement in the production and use of them as well as improvement and optimization of irrigating techniques, include the big reserves for energy savings with a large share in implementing energy policy.*

5. Bioconversion. Increase in the conversion output of solar energy by biological means is considered to be one of the most important directions in increasing agricultural production and providing man with energy resources. Currently, plants are utilizing only 1-2 percent of solar energy. If this "magical" conversion output could be increased several times, agricultural production would rise at least in the same proportion (Giosan, 1978).

In order to increase the convertibility output, research also is taking place in other directions: a) Change in the structure of the plants' blade apparatus, also providing interception of a larger quantiy of light energy; b) Better combining of techniques and production factors and so forth.

6. The organization of crop rotation system in the united agroindustrial councils. A profound agrarian revolution must be carried out both in the area of the material-technical base as well as the area of organization of production. A particularly important role in promoting new dire tions for the agrarian revolution belongs to the united state and cooperative agro-industrial councils, which provide the concentration and specialization of production, eff cient use of material, financial resources and the labor force.

The organization of the united councils has created the opportunity for organizing large crop rotation systems which permit the efficient use of the land stock and of technical resources and big savings in fuel.

Man looks optimistically at a solution of the energy problem. The successes obtained until now are an eloquent proof of the fact that there are unlimited opportunities in this area.

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ECONOMIC AND INDUSTRIAL AFFAIRS

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CONTENTS

INTERNATIONAL AFFAIRS

Hungarian-USSR Economic Cooperation Described
(L. S. Yagodovskiy; FEHERUGYI SZEMLE, Oct 80)..... 1

Bosnia-Hercegovina Trade With USSR
(M. Mirnic; PRIVREDNI PREGLED, 28 Oct 80) 12

Briefs
Yugoslav-Bulgarian Cooperation 14
Yugoslav-USSR Trade 14
Kosovo-Albanian Trade 14

BULGARIA

Severe Losses Caused by Lack of Grain Storage Facilities
(Dimitur Avramov; ANTENI, 15 Oct 80) 15

CZECHOSLOVAKIA

Tighter Wage Controls Urged, Punitive Examples Given
(Rudolf Friede; PRACE A MZDA, No 9, 1980) 20

GERMAN DEMOCRATIC REPUBLIC

Academician Explains Need for Incentive Pay Principle
(IWE-TAGESDIENST, 9 Sep 80; EINHEIT, Sep 80)..... 25

West German Commentary
GDR Academician's Discussion

EC 1022 Computer Built in Rostock, Installed in Schwerin
(SCHWERINER VOLKSZEITUNG, 9 Oct 80) 34

[III - EE - 64]

HUNGARY

Concepts of 'Second Economy' Activities Described
(Judit Adler; MUNKAUGYI SZEMLE, Aug 80) 35

Agricultural Achievements for 1980 Published
(FIGYELO, 15 Oct 80) 43

Price Changes Noted in Agricultural Bulk Buying
(Huba Radnoti; FIGYELO, 15 Oct 80) 46

Half-Year Achievements of Chemical Industry Summarized
(Laszlo Racz; FIGYELO, 8 Oct 80) 48

POLAND

Briefs
New Shipping Line Vessels 53
Summertime Energy Savings 53

ROMANIA

Small-Scale Industry Role in Local Resource Use Defined
(Mihai Caramzulescu; REVISTA ECONOMICA, 3 Oct 80) 54

Prospects for Wave Energy Utilization Assessed
(Constantin Tomescu; ENERGETICA, May-Jun 80) 59

Use of Automatic Data Processing Systems Discussed
(Mihai Draganescu; ERA SOCIALISTA, 20 Oct 80) 66

YUGOSLAVIA

Nine-Month Foreign Trade Balance Data
(Milorad Urasevic; PRIVREDNI PREGLED, 28 Oct 80) 74

Investments in Fixed Assets, January-August 1980
(PRIVREDNI PREGLED, 14 Oct 80) 77

Rate of Employment to 1985 Discussed
(Miodrag Panic; PRIVREDNI PREGLED, 28 Oct 80) 79

HUNGARIAN-USSR ECONOMIC COOPERATION DESCRIBED

Budapest FENEUGYI SZEMLE in Hungarian No 10, Oct 80 pp 723-732

[Article by L. S. Yagodovskiy, Doctor of Economic Sciences, Counselor of the Soviet Embassy in Hungary: "Economic Cooperation Between Hungary and the Soviet Union"]

[Text] The processes of the revolution in science that are characteristic of the modern age, and production's becoming increasingly international have resulted, among other things, in that increasing participation in the international division of labor has become a decisive factor in the economy of practically every country.

As we very well know, this applies also to Hungary where, due to a series of objective conditions, the mentioned factor is of particularly great importance in forming the economy's complex. And it applies also to the Soviet Union, although to a lesser extent, of course, as compared with Hungary. The Soviet Union is in a different position, for it has natural resources of its own, the size of its economy and domestic market is different, and different are the conditions under which the economy is being developed. And yet, the Soviet Union feels increasingly the need to broaden its trade relations, in the interest of solving faster the tasks confronting the economy.

While interested in expanding economic relations with every country, it is only natural that the Soviet Union and Hungary regard as most important the intensification of economic cooperation with the fraternal socialist countries, and within this the development of mutual bilateral relations. Soviet-Hungarian cooperation has suitable political and ideological foundations that, among other things, exclude any form of discrimination and pursuit of one-sided advantages. Furthermore, on a broader international scale, participation in the socialist division of labor enables the Soviet Union, Hungary and their partners to utilize the advantages inherent in socialist ownership of the means of production and in a planned economy. These advantages are self-evident, even though the fraternal countries--for certain objective and subjective reasons--do not always seem able to make full use of them in their bilateral and multilateral relations.

Due to the aforementioned differences in the development of their economies, the Soviet Union and Hungary each have an objectively different degree of need to participate in the international division of labor and, among other things, mutual trade is not of entirely identical importance to them. The Soviet Union has taken this latter fact constantly and suitably into consideration. Speaking at the 25th Soviet Party Congress about economic relations with the socialist countries, L. I. Brezhnev, secretary general of the CPSU Central Committee and chairman of the Soviet Union's Supreme Soviet, emphasized the following: "Not only great mutual advantages are involved, but also tasks of enormous political significance. The point is that we must strengthen the material base of the socialist community. The Politburo of the Central Committee approaches this question precisely on the basis of such considerations. We hold that implementation of the decisions adopted jointly with the fraternal countries, and fulfillment of our obligations toward them are the sacred duty of the State Planning Commission, the ministries and enterprises, of all those working in this area." Understandably, such comprehension of the question--and it applies also to the existing economic relations with the Hungarian People's Republic--ensures on the part of the Soviet Union suitable and favorable conditions for bilateral economic relations.

From the late 1940s to date, the annual volume of Soviet-Hungarian trade increasted nearly fortyfold. Soviet-Hungarian trade will amount to about 5.3 billion rubles this year and, on the basis of preliminary estimates, will reach approximately 35 billion rubles under the coming Sixth Five-Year Plan (computed on the basis of 1980 prices), which on average will mean 7.0 billion rubles a year, and even more at current prices. It is obvious that such quantitative changes induced fundamental qualitative changes, as a result of which economic relations with Hungary and other socialist countries --while retaining their political significance, and even if we take the size of the Soviet Union into account--have become a significant factor for the Soviet economy, and thus also the goods shipped from Hungary are contributing significantly toward the solution of certain economic tasks.

Already in 1975--i.e., immediately before the present five-year plan--the Soviet Union procured from Hungary more than 7 percent of its import of motor vehicles, installations and transportation equipment, about one-third of its import of pharmaceuticals, more than one-half of its import of canned vegetables, about 20 percent of its import of cotton fabrics, approximately 19 percent of its import of meat and meat products, etc. Since then the turnover has increased further. From 1976 through 1980 the Soviet Union will be getting from Hungary 32,000 buses, 154,000 rear-axle assemblies that will be used in the production of transportation equipment, 300 million rubles' worth of computer hardware and parts, the same amount of telecommunications equipment, 600 million rubles' worth of pharmaceuticals, etc. According to a 15-year agreement signed in 1976, Hungary's fruit export during the mentioned period will increase from 245,000 to 330,000 tons a year. Hungarian consumer goods--for example, shoes, fancy leather goods, apparel, knitwear, furniture, wine, etc.--also are very popular among Soviet consumers. Demand in the Soviet Union for such products far exceeds the present

level of deliveries, and even the projected future level, so that in practice the Hungarian economy's capacity is one of the most important limiting factors of the volume of such imports from Hungary. In addition it should be noted that this volume is influenced decisively by such factors as, for example, Hungary's ability to import suitable raw materials, etc., and the level of the attainable prices.

Eloquent proof of what these large-scale deliveries to the Soviet Union mean to Hungary is the fact that about one-half of Hungary's export of machinery and equipment is directed to the Soviet Union, and that favorable conditions exist in Hungary for a large proportion of the output of light industry, the food industry and agriculture. In exchange for these commodities, we are supplying Hungary with Soviet raw materials and energy. (It should be noted here that on the basis of clearing the Soviet raw materials and energy arrive in Hungary at prices far more advantageous than from capitalist markets.) Furthermore, the modern equipment, complete plants, obtained from the Soviet Union often have a decisive influence on the development of the power, metalworking, petroleum-refining, construction and chemical industries, and also on other sectors of Hungarian industry. More than 86 large industrial and other facilities were built or modernized in Hungary with Soviet technical cooperation. These include, for example, the Danube Iron Works, the Debrecen Antifriction Bearing Works, the Szekesfehervar Aluminum Combine, the Pecs and the Danube thermal power plants, the Inota peak-shaving power plant, the Szazhalombatta Oil Refinery, the Pet Nitrogen Works, the Belapatfalva Cement Factory, and many others. At present the Soviet Union is participating in the equipping and modernization of thirty more plants, including the converter plant of the Danube Iron Works, four coal mines, and a large power-generating plant worthy of special mention, the Paks Nuclear Power Plant.

Soviet-Hungarian cooperation in science and technology is intensifying year by year, as a result of which Hungary--with the help of the Soviet Union's enormous scientific and technological potential--has multiplied its own potential also in this area that is particularly important under present-day conditions. And the Soviet Union, within the framework of cooperation, is applying the best results of Hungarian research. Soviet-Hungarian cooperation among scientists, planners and designers is gaining ever more ground. They--often together with representatives of other CEMA countries--pool their efforts in space research, nuclear physics, in research and development of new transportation equipment, in computer technology and the production of medical equipment, in telecommunications and the production of instruments, in testing agricultural innovations and developing new cattle breeds, in the modernization of crop production and livestock production, etc.

A recent event of outstanding significance was the space flight of Bertalan Farkas, a citizen of the Hungarian People's Republic, within the framework of the international "Intercosmos" program. This very important event in the two countries' scientific and technical cooperation is of great significance also in a general sense: it has become a symbol of Hungarian-Soviet fraternal friendship.

We could go on listing the areas of Soviet-Hungarian scientific and technical cooperation. But this does not mean the absence of unutilized opportunities in this field, which in our opinion is more a question of quality than of quantity. Certain organizational, economic and other shortcomings sometimes detract from the effectiveness of scientific and technical cooperation, the continuous development and rise of which serve the interests of bouth countries.

Taking into account the scale and developmental prospects of Soviet-Hungarian economic, scientific and technical cooperation, and also the fact that these relations are an integral part of relations existing within the socialist community, we may say with full conviction that these relations are contributing toward the economic development of both countries, toward increasing the effectiveness of their production and solution of the questions related to the rise of the population's standard of living. They also enable us to moderate the undesirable effects of the crises and political instability typical of the capitalist world.

The effect of these relations is closely linked to their long-term and stable nature. It will be remembered that the first Soviet-Hungarian trade agreement was signed in 1948. Initially the mutual deliveries were based on annual agreements. This was followed by a period of increasingly longer-term agreements. The practice today is to coordinate the preparations for the coming five-year plan, and on this basis long-term trade agreements are drafted that are supplemented by an entire series of bilateral and multilateral agreements.

Coordination of the Hungarian Sixth Five-Year Plan and of the Soviet Eleventh Five-Year Plan is practically nearing completion. This work took several years. Taking into consideration the most important aspects of economic cooperation, the two parties attempted to find solutions that best correspond to both countries' interests and possibilities.

We may include here the volumes and rates of the most diverse deliveries during the coming five-year period (for example, raw materials, fuels, energy, machinery and equipment, consumer goods and farm products); the two parties' needs and possibilities with respect to further specialization and cooperation in production; Soviet participation in large-scale investments in Hungary; the extent of Hungarian participation in large-scale Soviet investments (in exchange for which the Hungarian People's Republic will get products it needs); the question of the composition of export and import; development of the balance of trade and balance of payments; regulation of credit relations, etc. The agreements in principle that Comrade Janos Kadar and Comrade L. I. Breshnev reached in the course of their meetings in 1978 and 1979, and the talks between the two prime ministers, A. N. Kosygin and Gyorgy Lazar, played an important role in the solution of problems of this kind.

We will develop further the overwhelming majority of the 30 long-range bilateral agreements now in force. A typical example of this is the cooperation agreement covering the basic branches of the chemical industry.

Within the framework of the expanded agrochemical cooperation, the combined total of the deliveries by the two countries under the Sixth Five-Year Plan will exceed 1.0 billion rubles, which makes this agreement significant also on a world scale. Pursuant to this agreement, Hungary will increase the export of effective plant protectants that Soviet agriculture needs, because the production of such plant protectants requires relatively little energy; while the Soviet Union will increase the supply of manufactured fertilizers and other energy-intensive agrochemical products.

Another important area of cooperation in the chemical industry is the so-called olefin program that initally was coordinated for ten years, from 1975 through 1984. Under this olefin program, the two countries built mutually complementary capacities which, among other things, resulted in no small savings in terms of investment cost. Hungary is supplying its partner with ethylene and propylene, while the Soviet Union is supplying polyethylene and other products.

So far as the volumes are concerned, at the time when the agreement was worked out the mutual deliveries offset each other in value terms, at the prices then in force.

Two problems have arisen since then. One problem is related to the fact that on the world market the price of ethylene has increased lately, at a rate significantly faster than the prices of ethylene derivatives. The other problem concerns cooperation after 1984. On both problems, decisions have been made that take Hungary's interests into consideration. It was deemed expedient to abandon as of 1980 the offsetting of the deliveries in terms of prices, and to switch to mutually agreed volumes based on prices set annually, in accordance with the CEMA pricing principle that takes to a greater extent into consideration the price movements on the world market. This provides an immediate and significant profit for the Hungarian partner. So far as the future is concerned, according to a recently concluded agreement the mutual deliveries in 1985 and 1986 will continue basically in the same forms as before (this time is needed to complete the construction of suitable complementary capacities); and thereafter, through the year 2000, the Soviet Union will supply the ethylene, in exchange for Hungarian propylene. If we take into account how much gasoline must be processed to produce the ethylene, reversing the ethylene pipeline's direction of flow essentially means that Hungary will be getting more energy.

Lately we have been devoting close attention also to the further development, through 1985, of the Soviet-Hungarian alumina- and aluminum-industry cooperation that has been in existence since the 1960s. According to the agreement now in force, Hungary gets back all the metal produced from Hungarian raw material. The importance of this to Hungary is already evident from the fact that the processing of the alumina now shipped to the Soviet Union would have required not only the construction of costly new capacities, but would have involved the consumption--this year, for example--of at least 3.0 billion kWh of electricity. A certain modification of the situation--among other things, the state of the Soviet aluminum industry, and also the energy deficit in the European part of the Soviet Union--compelled

us to start negotiations for renewing or expanding the alumina-aluminum agreement after 1985 in a way such that will continue to serve the interests of both parties.

Independently of the examples already cited, it is clearly evident that the system of large-volume and long-term Soviet-Hungarian agreements is being constantly expanded and simultaneously perfected, with due consideration for the possibilities and needs of both partners, and that this system continues to serve the interests of both countries' economic development. Work is proceeding parallel with, and closely linked to, the negotiations on coordinating the Soviet and Hungarian national economic plans for 1981-1985. Here we have already accomplished much, which only further emphasizes and reinforces both countries' important advantages that stem from the long-term and stable nature of their economic relations.

Above we have already mentioned repeatedly that economic relations between the Soviet Union were an integral part of general cooperation within CEMA. In assessments of this kind one must take into consideration that the bilateral Soviet-Hungarian economic agreements are closely connected to the multilateral agreements that already exist or are being worked out. Among the latter we should mention particularly the long-range target programs of cooperation that have been adopted within CEMA, and which define the partners' joint tasks and activities regarding the most important questions of their long-range economic cooperation. It is only natural that numerous questions of these fundamental documents must be specified in terms of bilateral relations, including Soviet-Hungarian relations. This is already being done now and will be realized even more effectively, in the course of working out a new long-term Soviet-Hungarian economic agreement.

One of the most important characteristics of Soviet-Hungarian economic cooperation, similarly as of cooperation among other CEMA countries, is a continuous rise of the significance of specialization and cooperation, the most important basic direction of socialist economic integration at present and particularly in the future.

Today we could list numerous examples of fruitful Soviet-Hungarian agreements on specialization and cooperation. We might mention the cooperation that has developed in the production of buses and cars and, in other areas of engineering, the coproduction of machine tools, ships, cranes and light-industry equipment. Similar cooperation has developed in the production of computers, in the chemical industry, and in many other branches of industry. As a result of Soviet-Hungarian cooperation, Hungary has become one of the largest bus producers in Europe, and Soviet citizens gladly ride on the nearly 60,000 excellent Ikarusz buses that now operate in the Soviet Union. The rear-axle assemblies of excellent quality, which the Raba Factory supplies in ever greater lots, play an important role in the production of Soviet buses and trolleybuses. Each year Hungary ships 300,000 to 400,000 various parts to the Volga Automobile Factory. It participates in the Zhiguli program and receives each year about 15,000 cars of this make from the Soviet Unions. These cars are very popular in Hungary. Supply of

the Soviet market's demand is closely related to the development of the Hungarian Shipyard and Crane Factory, which receives numerous structural elements from the Soviet Union. The diesel trains built by Ganz-MAVAG operate very successfully on the railroads of the Soviet Union. The Soviet Union remains interested in importing such trains, in whose production Hungary has specialized.

Different views developed regarding the proportion of specialization and cooperation deliveries, and this is probably related to the methods of reporting. In any case it is obvious that this proportion is high already now (according to some data, specialization and cooperation deliveries account for 46 percent of the Hungarian export of machinery and equipment to the Soviet Union, and for 55 percent of the Soviet export to Hungary). Furthermore, it is likewise obvious that this proportion can and must increase further, in accordance with the two countries' possibilities and interests.

Adoption of the long-range program of specialization and cooperation is proof of the interest in specialization and cooperation in both the Soviet Union and Hungary. The mentioned document was drafted on the basis of the agreement in principle between Leonid I. Breshnev and Janos Kadar during their 1977 meeting in the Crimea. After this meeting, the planning bureaus and ministries of the two countries worked hard to evaluate and summarize the accumulated experience, to explore the long-range direction of cooperation, and occasionally to reconcile divergent demands and possibilities. As a result, a program agreement through 1990 was signed in Budapest, in March 1980. Actually this is a general agreement that specifies the objectives and tasks of the proposed cooperation, the basic directions of the development of production specialization and cooperation, the related scientific and technical relations, and the basic principles of the program's realization. In listing the directions, the agreement emphasizes that the parties attach special significance to the development of cooperation in the production of machinery and equipment (including electrical engineering, shipbuilding, electronics industry, and the production of telecommunications equipment), which they propose to achieve through the optimal scale of production and parts supply, and through a rational distribution of the program for the production of subassemblies, among the enterprises that produce the finished products. The document lists those products of the automobile, farm-machinery, instrument, electrical-engineering, machine-tool, chemical- and petroleum-industry equipment, power-industry equipment, mining-industry equipment, telecommunications equipment, construction and road-building equipment, and shipbuilding industries in whose production the two parties wish to specialize or cooperate. In addition, the program includes also the questions of cooperation in the fuel and raw-material industry, power industry, ferrous and nonferrous metallurgy, chemical and petrochemical industry, consumer-goods industry, agriculture and the food industry.

It was specified that both parties' obligations stemming from the long-range program's realization would be outlined in the protocol on coordination of their national economic plans, in the long-term trade agreements based on this protocol, in the annual barter agreements, in the agreements

on specialization and cooperation, in the cooperational work plans of the competent Soviet and Hungarian organs and organizations, and in the contracts concluded by the two countries' economic organizations.

The elaboration of subprograms of specialization and cooperation proceeded parallel with the drafting of the long-range program. Already in December of last year--i.e., even before the drafting of the general document was completed--subprograms were concluded for the production of instruments, light- and food-industry equipment, chemical and petroleum-industry equipment, construction and road-building equipment, telecommunications equipment, and petroleum-refining and petrochemical equipment. In March 1980, similar agreements were signed for cooperation in power-industry equipment, shipbuilding and in the chemical industry. Agreements were signed two months later for specialization and cooperation in the production of tractors and farm machinery, equipment for livestock production and feed processing, machine tools, and in the electronics industry.

Thus to date the elaboration of specialization and cooperation agreements has been completed in many branches of the national economy, and the elaboration of a few more documents of this type is in progress. The objectives of the agreements, which are integral parts of the long-range program, are a planned division of labor, the pooling of Soviet and Hungarian resources to utilize the two countries' production, scientific and technological potential more fully and more efficiently, the acceleration of technical progress, and improvement of the effectiveness of production.

The listing of subprograms illustrates that specialization and cooperation extends to numerous branches of the Soviet and Hungarian economies, and at the same time it is evident that specialization and cooperation are of particular significance in engineering. It is a known fact that the "machinery and equipment" commodity group has long played a dominant role in Hungarian export to the Soviet Union, and it now accounts for more than 50 percent of the total export. Of course, it is in the interest of the Hungarian economy to maintain or increase this proportion. At the same time, the proportion of machinery and equipment within Soviet export to Hungary is much smaller, around 20 percent in recent years. Naturally, the balancing of these two proportions is out of question, but the objective situation is such that, in our opinion, the growth rate of manufacturing and particularly of engineering deliveries plays an increasingly important role in maintaining a suitable growth rate of Soviet export to Hungary, and consequently in maintaining the growth rate of Soviet-Hungarian commodity trade. In conjunction with this question, however, the situation on the Hungarian market is significantly different than the situation on the Soviet market: in principle the Soviet economy is able to "absorb" any quantity of Hungarian machinery (provided, of course, that its technical level is suitable), whereas the Hungarian economy's ability to absorb finished products is far more limited, but this does not mean that we have already exhausted all the possibilities. From all this it follows that an increase of Soviet export to Hungary, and of entire Soviet-Hungarian commodity trade—which is in the

interest of both countries--depends significantly on the expansion of cooperational relations, on mutual deliveries of parts and subassemblies that both countries can use in their finished products produced for each other's market or for the markets of third countries, which is of importance particularly to Hungary.

New cooperation is unfolding increasingly in the production of equipment for nuclear power plants. The CEMA countries concluded an agreement on this in 1979, and pursuant to this agreement Hungary will supply about 600 million rubles' worth of equipment to the Soviet Union and other socialist countries in the next ten years. Such equipment includes, for example, the remotely controlled casette-loading machine that manipulates the fuel containers inside the nuclear reactor. The first such machine, for the Paks Nuclear Power Plant, is now under construction at the Ganz-MAVAG factory, on the basis of Soviet plans and with the assistance of Soviet experts, using Soviet components. This is an excellent opportunity for the Hungarian workers and engineers to gain experience in this field and at the same time it is a challenging task for them.

Another fact: The competent Soviet and Hungarian organizations will jointly elaborate by 1982 a program for the development of cooperational relations in the production of boilers and turbines, a field in which both the Soviet Union and Hungary have vast experience. Consequently, the purpose of cooperation is to enable both countries to raise the technical level of production in this field.

We have not listed all available examples of cooperation. But we must also point out that the results to date do not exhaust by far our possibilities and needs.

So far as the long-range plans of similar cooperational arrangements are concerned, we should take into account the possibilities of export to the Soviet Union and consider the large-scale production in Hungary of subassemblies for machinery, equipment and instruments that are not material-intensive, incorporate high technology and require workmanship of great precision. It would be useful to study the feasibility of having the Soviet Union supply Hungarian industry on an increasing scale with drives, electric motors, pumps and other products that are relatively material-intensive.

A special requirement is to better supply the growing demand of the Soviet Union, Hungary and other socialist countries for such products as integrated circuits, microprocessors, etc. The cooperation that has developed in this field ensures an opportunity to solve many practical problems, but at the same time we need more-decisive measures that are important prerequisites for accelerating the rate of scientific and technological progress. Practice proves that this is the area where economic integration is particularly important, its opportunities are significant, and where it is very dangerous, economically as well as in other respects, to lag behind the world level.

Today the need to rapidly expand mutual trade in parts, subassemblies and finished products is generally recognized. In this area we already have

multilateral (within CEMA) and bilateral (within the Soviet-Hungarian Intergovernmental Commission) policy decisions, and to a certain extent also the requirements are known, but there is relatively little export supply. This situation is probably related to the inadequate development of the specialized production of such products. This is the reason why the number of customers significantly exceeds the number of potential suppliers. At the plants that produce components for their own finished product, it is often impossible to produce as a "sideline" parts and subassemblies for other customers, and also the incentives to do so are lacking. Let us mention another side of this question: the mechanism of economic incentives to supply the integration partner with production components. We will not attempt to discuss in detail the problems in conjunction with this question, but we merely wish to call attention to the need of developing further multilaterally this exceptionally important and promising form of cooperation.

Credit relations play an important role among the wide-ranging aspects of Soviet-Hungarian economic relations. Hungary received its first commodity credit from the Soviet Union, for 10 million dollars, in 1946, and in the difficult postwar years this credit played an important role in stabilizing the country's economy. In the early 1950s, Hungary obtained new Soviet credits, for the procurement of farm products and consumer goods, and for investment purposes. After 1956, Hungary received credit on several occasions, including credit in convertible foreign exchange, which was used to stabilize Hungary's balance of payments and also for investment purposes. In accordance with the practice within the Socialist community, Hungary received these credits, including the dollar credits, at an annual interest rate of 2 percent, and the credits were repayable in commodities.

Subsequently a new form, called investment participation, was introduced in the relations between the Soviet Union and other CEMA countries. Which meant that also the socialist countries, including Hungary, participated in building production facilities on Soviet territory, mostly in the form of special-purpose deliveries. These deliveries were accounted as credit provided for the Soviet Union, repayable in products produced by the jointly financed plants (asbestos, pulp, etc.).

In the 1970s, a new chapter opened in credit relations. In trade among CEMA countries a new pricing principle was introduced in 1975. It better reflects the changes in world-market prices, although their effects are strongly dampened. Because of the commodity structure of the mutual deliveries, all this increased Hungary's balance-of-trade deficit in relation to the Soviet Union. Credits to the Soviet Union in the form of investment participation were no longer timely in this situation. To the extent that mutual obligations remain and Hungary continues to ship various installations and other commodities to the Soviet Union for the construction of specific industrial plants, in repayment the Soviet Union will make available to Hungary a proportion of the products produced at these plants. Furthermore, this form of cooperation also means that the mentioned Hungarian deliveries constitute a separate item in trade settled through clearing; the Soviet Union's delivery obligations after the plants'

construction remained unchanged, but these deliveries again are a separate item in trade settled through clearing. Simultaneously an agreement was reached that Hungary would obtain long-term credits, under the favorable conditions customary within CEMA, to offset its balance-of-trade deficits with the Soviet Union during the validity of the 1976-1980 trade agreement. In this manner the Soviet Union has taken important economic steps that will make it easier for the Hungarian economy to adapt to the significantly changed conditions of the world economy. The importance of this Soviet policy from the viewpoint of ensuring the stability of the Hungarian economy's development becomes even more obvious if we take into account the already mentioned facts that Hungary covers a significant proportion of its demand for petroleum, natural gas, electricity, iron ore, cotton, pulp, and other fuels and raw materials, through deliveries from the Soviet Union, and that the prices charged by the Soviet Union for the clearing portion of these deliveries are significantly lower than the current world-market prices.

In this article I have not said much about the conditions of implementing the Soviet-Hungarian agreements and mutual deliveries. I hope to revert to this question at a later date, on the pages of PENZUGYI SZEMLE.

Janos Kadar, first secretary of the MSZMP Central Committee, spoke of the importance of the two countries' fraternal relations, in his televised address on 1 June, when the Soviet governmental and party delegation completed its visit to Hungary. He said in part: "Our friendship with the Soviet people, our joint efforts to further develop Soviet-Hungarian cooperation, and the wide-ranging opportunities that stem from the broad unity of the socialist countries are a reliable support for us." This assessment is particularly important because it not only establishes the results already achieved but also provides direction for the future, in the interest of utilizing our possibilities more fully.

To achieve the set objective, which is in accord with the current and long-range plans of both countries, will require considerable effort, some directions of which I have attempted to outline in this article.

1014
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BOSNIA-HERCEGOVINA TRADE WITH USSR

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 28 Oct 80 p 3

[Article by M. Mirnic]

[Text] The Soviet Union is one of the most important partners in Bosnia-Herzegovina's foreign trade. And let us say at the outset that for a long time now this trade has been undergoing steady growth.

To illustrate, over just the last 2 years commodity trade with the USSR has comprised about 27 percent of the republic's total foreign trade. Or again, the republic's commodity trade with the Soviets last year alone totaled $660 million, $280 million of exports and $380 million of imports. Last year exports covered 73.5 percent of imports, by contrast with the year before last, 1978, when that percentage was quite a bit less—48.7 percent.

Similar successes have continued this year, when in just the first 7 months Bosnia-Hercegovina's total trade with the USSR exceeded $600 million, which is all of 81 percent more than in the same period of last year. Exports were up 62 percent at $240 million, and imports were up 96 percent at $370 million, and the coverage of imports by exports averaged 64.4 percent.

The assessment of the experts is that these figures and trends are very favorable for Bosnia-Hercegovina and that they are far more favorable than the respective figures for Yugoslavia as a whole, where the surplus that was evident up until last year is slowly becoming a deficit with all the consequences of that situation.

If we examine the entire region of socialist countries from the standpoint of their foreign trade with Bosnia-Hercegovina, the Soviet Union accounts for a very high percentage—60 to 70 percent of this republic's total trade with the socialist countries.

Yugoslavia, and also this republic within it, is already importing from the USSR certain important raw materials and processing materials. The most important are coking coals, petroleum, conifer pulpwood, cotton, and now gas as well. On the other hand, industrial products are dominant in our

exports, such as fittings, steam separators, electrical equipment, office and business machines, and so on—to mention only a part of those things which are being exported from Bosnia-Hercegovina. Footwear manufacturers, for instance, say that today they are unable with their present capacities to produce the amount of goods which at present they could deliver to that market.

In the context of these trends emphasis is put on the datum that successful financial cooperation is also being carried on with the Soviet Union. For example, Soviet credits are being used to build a number of projects in the republic, while at the same time our construction crews are employed quite a bit at construction sites in the USSR.

The successes are truly such that at first glance one would say that there are no problems in these relations, but that is not the case. There are quite a few problems which are slowing down and hampering attainment of still better results in this area. When this is debated, particular emphasis is put on the shortage of certain types of processing materials. This is especially pointed up by footwear manufacturers, who say that it could easily jeopardize fulfillment of export obligations with the USSR unless this problem is solved in good time and in a satisfactory way. Underdeveloped transportation is also included among the serious problems, especially insofar as it relates to export transactions. That is the reason, it is said, that goods not uncommonly wait for several months at the border, since transport to the ultimate consumer or customer has not been adequately organized. The insufficient motivation to export to the market of countries with bilateral agreements because of the indispensable need to obtain convertible exchange through exports is also one of the factors slowing down exports to this area.

Now that we are talking about the share of the socialist countries in Bosnia-Hercegovina's total commodity trade, let us note that after the USSR Romania and Czechoslovakia are its most important partners. Cooperation with the People's Democratic Republic of Korea and the People's Republic of China has also been expanding in the recent past.

The share of the socialist countries in this republic's total commodity trade in the current 5-year period is also the most important for any region and averages about 43.3 percent. In the structure of that trade imports have a particularly important share—61.3 percent. That higher share of commodity imports results in a deficit in commodity trade which has been growing at an average annual rate of 7.6 percent in nominal terms. Coverage of imports by exports in commodity trade with these countries has risen from 58.1 percent in 1975 to 70.5 percent last year. Average coverage is 63.2 percent.

It is also striking that processing materials have a notable share in the structure of imports from these countries. As we have said, petroleum, especially because of the price hikes, coking coal, conifer pulpwood, cotton, semifinished products of iron and steel, synthetic fibers, and the like. All in all, Bosnia-Hercegovina's economy is at present meeting a sizable portion of its needs for processing materials from this region.

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BRIEFS

YUGOSLAV-BULGARIAN COOPERATION--This year the machine industry in Nis will have a $7-million trade in both directions with partners in Bulgaria. Next year three times more business ($21.5 million worth) will be contracted for. Slavko Jovic, director general of the machine industry, said there are possibilities for more cooperation: "We have offered to our Bulgarian partners a construction crane which we are producing in cooperation with a French partner. These cranes are not produced in Bulgaria, so we expect to deliver four or five of them to start with. Next year deliveries for 570 railroad cars to transport coal and grain, as well as tank cars, have been contracted for. We expect that by 1985 cooperation will amount to $70 million." [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 6 Nov 80 p 2]

YUGOSLAV-USSR TRADE-- At the end of the current five-year plan total trade will be about $16 billion. This year it will amount to about $5 billion; in the first 8 months of this year $3.1[illegible] billion was traded ($1.39 billion in Yugoslav exports and $1.739 billion in imports from the USSR). [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 30 Sep 80 p 3]

KOSOVO-ALBANIAN TRADE--The increasingly frequent contacts between business people on various levels, as well as the opening of the only Kosovo foreign trade organization, "Eksimkos," office in Tirana, have contributed toward promoting economic cooperation between our province and Albania. In 1978 the value of trade in both directions was $3.4 million, in 1979 it was about $10 million, and in 1980 it is expected to be about $25 million ($17.7 million in exports and $7.3 million in imports). According to "Eksimkos" in Pristina, through which all trade between the Province of Kosovo and Albania is carried on, $14.2 million worth of goods were traded in the first 8 months of this year ($9.4 million in exports and $4.8 million in imports). Kosovo exports mainly cooking oil, seamed pipe, lead alloy, and cotton; while Albania exports cement, bitumen, petrol-gas, sea salt, southern fruit and vegetables. During their stay last month, Albanian business people visited many work organizations in Kosovo and expressed readiness to increase trade contacts. Possible cooperation includes linking the two electric power industries, building the Firze-Prizren electric transmission line (negotiations are underway), exporting metal and wood products, and importing natural gas for industrial capacities in the province and medicinal plants for the "Farmakos" factory in Prizren; cooperation in agriculture is also discussed. Next year trade between Kosovo and Albania should amount to about $40 million, $15 million of which would be exports from Kosovo, and $6 million of which would be imports; while $19 million worth of goods would be exported to Albania through "Eksimkos" from other parts of Yugoslavia. [Text] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 10 Oct 80 p 3]

CSO: 2800

SEVERE LOSSES CAUSED BY LACK OF GRAIN STORAGE FACILITIES

Sofia ANTENI in Bulgarian 15 Oct 80 pp 1, 8

[Article by Dimitur Avramov: "Silos or Temporary Covers?"]

[Text] Upon the decision of the Politburo of the BCP Central Committee of 10 October 1980, in the Sofia Georgi Kirkov Hall, a national conference was held which discussed the question of a new rise in grain production and its more efficient use. The First Secretary of the BCP Central Committee and the Chairman of the State Council, Todor Zhivkov, provided a thorough analysis. The Secretary of the BCP Central Committee Petur Dyulgerov gave a report which emphasized the successes of Bulgaria in grain production, it outlined certain weaknesses and obstacles and noted measures for their successful overcoming.

The present publication of the newspaper ANTENI takes up an exceptionally important question, the storage of grain.

With the development of the world economy, an exceptional role is given to grain production. The grain problem today has become a vital problem for mankind. As was stated by Comrade L. I. Brezhnev, this has always been "the measure of the wealth of any people."

The consolidation of agriculture, the high level of mechanization, the introduction of new varieties and technologies have provided an opportunity to sharply increase production and satisfy the constantly growing needs of grain supplies.

All of this requires a large silo and warehouse system for the storage and processing of the grain. For years we have allocated significant capital investments for creating this system. But in spite of this it is becoming more and more apparent that the increase in grain production has far outstripped the capabilities of the storage facilities. At present, the nation is experiencing an acute need for grain storage facilities with a total capacity between 4 and 6 million tons.

Real or Assumed Losses?

The shortage of modern storage facilities leads to the incorrect storage of enormous amounts of grain. As a result, the grain becomes easy prey for rodents and birds, it spoils, and so forth. According to specialists it is a question of losses amounting to hundreds of thousands of tons a year.

We do not possess accurate data of the losses because such are not kept. The leadership of the agroindustrial complexes [APK] do not care for such information since, as they assert, it would also be of interest to...the prosecutor. But here are several approximate opinions:

Engr Georgi Dakov, general director of the Agrostroy [Agricultural Construction] Construction Combine under the National Agroindustrial Union: "Grain losses never appear in the balance sheets of the APK in the country. According to my rough estimates, the value amounts to around 300 million leva annually."

Engr Georgi Kazakov, director of the Bullip Construction Enterprise under the Agrostroy Combine: "In my opinion, if we figure the value of the losses over 5 years, they would be sufficient to build all the silo facilities needed by the nation."

Engr Panayot Georgiev, specialist at the Cereals and Feed Industry DSO [State Economic Trust]: "The rate at which we are building silo and storage facilities is very low. At the same time, the grain losses are beyond belief."

A Clarification

It is essential to make clear that the question is not only how much but also what we are building.

Specialists are unanimous in their opinion that the best storage facilities permitting loss-free storage with full mechanization and automation of the processes are site-cast reinforced concrete silos. This is also shown from practices in such major grain producers as the USSR, the United States and Canada, where a predominant portion of the capacity is of the silo type. However, in our country this is only around 30 percent. The rest is primarily metal sheds, flat storage areas, asphalted platforms and metal cribs.

The efforts of the specialists to alter the ratio in favor of the silos and to halt the construction of the covered sheds up to now have not been particularly successful. And this is the case even though the "sheds are expensive to build, they require 5-fold more land per unit of capacity (in comparison with silos--author), they are not suitable for mechanization and automation of the production processes, and allow large quantitative and qualitative losses in storing food grains." According to the USSR Minister of Procurement G. S. Zolotukhin, "a shed is not a grain storage facility."

Two years ago, at a conference with highly placed economic leaders and specialists, a decision was taken to make certain corrections in the designing and construction of the silo and storage system, and to halt the construction of open platforms and metal sheds for grain storage. In spite of this construction of the sheds has continued up to the present.... Under the Decree No 48 of the Council of Ministers (1 July 1976), 105 million leva were to be allocated for the development of the silo and storage system. Over the 2 years, about 35 million leva have been used for building...sheds. (In this instance the specialists have proposed that the term "used" be replaced by "wasting of money.") And another fact. Two years ago, the former general director of the Cereals and Feed Industry DSO in a note affirmed that "the trust annually spends up to 3 million leva for tarpaulins...."

The cost of one ton of capacity in sheds without mechanization of the processes amounts to 35 leva. The capacity of the facility averages around 1,500 tons. Amortization is 20-25 years.

The cost of one ton of capacity with a site-cast reinforced concrete silo (capacity, 30,000 tons) and full mechanization of the operations is 66-70 leva. Amortization is 100 years.

Senior Science Associate, Engr Petur Khristov, director of the Institute for Cereals and Feed Industry has stated: "For years running our specialists have been asserting that the problem of correct grain storage can be solved only by building a modern silo system. But even now there are people who feel that the sheds can be used for the same purpose, and even insist that we alter our position about them."

How Are the Silos Built?

Slowly, assert the specialists, and they require great expenditures of labor and equipment. Directly interested in this are the National Agroindustrial Union and the Ministry of Construction and Building Materials. Some prove how important it is to build a silo-storage system. Others try not to be involved in such projects. As a rule construction is carried out slowly and continues for years. It appears that the construction and installation combines in the okrugs put the projects of the NAPS [National Agroindustrial Union] in last place in terms of importance. Last year their fulfillment varied between 70-75 percent in Varna, Vidin, Turnovo and Vratsa. The "record" belongs to the SMK [construction-installation combine] in Pazardzhik, with 26 percent.

Engr Stoyan Punkin, chief director of capital construction at the NAPS: "The Ministry of Construction accepts ever fewer of our projects. This year, it agreed to include just one silo in its plan. In addition construction takes excessively long. In Dunartsi, Vidin Okrug, the completion date of a silo was last year, but its construction has still not been started. For this reason we are forced to set up our own construction organizations in the okrugs."

Engr Tsano Trichkov, chief director at the Ministry of Construction and Building Materials: "The blame is not only ours. We are carrying out construction and installation work for over 80 million leva for the NAPS, and we cannot accept projects above the plan. The silos are built slowly, we do not have enough manpower and we have many projects of national importance."

The slowness with which the problem of grain storage is being solved is apparent also in the case of the experimental silo made from prefab elements in Grudovo, Burgas Okrug, and the large silo in Varna known by the name "Topolite." According to the specialists, the latter could satisfy significantly the requirements of Northeastern Bulgaria, in simultaneously saving large amounts of state money paid by the state in the form of demurrage. For around 15 years, the silo has not yet "emerged" from the files of the designers. It appears that this instance also is the result of the existence of the erroneous notion among certain persons that silos are passive assets.

At the same time, the enormous grain losses continue. And on different levels the disputes continue about the type of capacity to be built. And several years ago, a new element appeared in them.

The Case of the LIP

In 1977, a license and five machines were purchased from the FRG to make metal silo enclosures according to the so-called LIP system which is used in scores of countries throughout the world. With these machines each year it would be possible to build facilities with a total capacity of 300,000 tons. The metal enclosures are built rapidly, easily and economically, they allow full mechanization of the processes and provide conditions for correct storage. Here are the data from one flyer: "In comparison with the classic reinforced concrete silos, the LIP system requires almost 7-fold less concrete, 2-fold less steel, around 7-fold less labor, and almost 2-fold less finances for one ton of capacity."

The enumerated advantages, it seems, are not sufficient. In 1978, the nation built scarcely 19 metal silo enclosures. (One enclosure with a capacity of 3,000 tons can be built in just 10 days by 8 persons.) The disputes are also continuing over the question of who should be the chief executor of these projects. Agrostroy does not have sufficient capability, and insists that the work be taken over by the SMK in the okrug, as is the case in the USSR. However, the other side has greeted such prospects without any enthusiasm and is reticent to become involved in concrete foundation work. There are still delays in experimenting with a dependable corrosion-proof cover which would extend the life of the metal silos. For the Cereals and Feed Industry DSO, 2 years have not been enough to conclude a contract with the appropriate scientific institute for developing such a cover.

In the meanwhile, Engr Georgi Kazakov together with Engr Georgi Simov, director of Promzurnoproekt [?Design Institute for the Grain Industry], has developed and is introducing into practice a new roof design for metal silos. It is 13½ tons lighter than the classic type, production does not require plant conditions, and can be made by 8 persons in 12 hours. The development has been patented, and in November of last year, it received a bronze medal at the International Specialized Exhibit for Rationalization and Invention at Nuremberg. The USSR, United States, Australia and Italy have shown interest in it, and offers are also being prepared for other countries. At the Brussels conference of the countries and firms which have licensed the LIP, in the time limit of the requirements, the most time has been given to Bulgarian representatives.

In the summer of 1979, our specialists led by Engr Kazakov in a short period of time built two metal silos in the town of Klin, Moscow Oblast. The projects were accepted with an evaluation of excellent.

At the request of the Soviet side, the Bulgarian group has instructed around 40 Soviet workers and specialists. The exceptional interest in this can be seen from the numerous visits of highly placed state and economic leaders of the USSR. To the leader of our group, the minister G. S. Zolotukhin expressed readiness for joint cooperation in introducing and improving the LIP system. At this meeting it was learned that the USSR has purchased a license and 12 machines for building the metal silos.

These are the facts. We have taken them up to emphasize our perplexity over the still-continuing struggle of opinions pro and contra the LIP system. It seems that certain subjective interests and considerations are also intertwined at the expense of state ones. In spite of the categoric view of specialists from the Institute for Cereals and Feed Industry that the ratio between the types of built facilities should be as follows: 50 percent site-cast reinforced concrete silos, 25 percent of the prefab reinforced concrete cribs and 25 percent metal silo cribs.

A Change of Concepts or a Change of Function?

In many countries of the world, the silo and storage system has been made into an independent unit, an industrial subsector in the economy. Hence its names: "Silo industry" or "silo system." In Bulgaria these names are not popular. However, the problem is not one of a difference in terms, but rather one of the essence which is concealed in them.

The silo and warehouse system is perniciously influenced by the fact that its operations are viewed as secondary or auxiliary, and are not directed by the State Planning Committee for an industrial sector, as is the case in the other countries with developed grain production. As a result there is a lack of specialists and trained personnel, basic facilities, worn out and obsolete machines are used, and technical decisions and developments are not implemented. The 7-year efforts of the Institute for Cereals and Feed Industry to include the silo and storage system as an independent subsector in the food industry up to now have remained unsuccessful. With such a situation, it is no wonder that our silo and storage system continues to fail the needs of modern grain production.

10272
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TIGHTER WAGE CONTROLS URGED, PUNITIVE EXAMPLES GIVEN

Prague PRACE A MZDA in Czech No 9, 1980 pp 457-461

[Article by Rudolf Frieda, Federal Ministry of Labor and Public Welfare]

[Text] The set of Measures for the Improvement of the System of Planned Management of the National Economy After 1980, approved by Decree No 42 of the Czechoslovak Government on 31 January 1980, also set down important tasks aimed at establishing effective auditing activity by organizations and economic production units, their superior organs and respective central organs. These measures also place emphasis on effective wage audits carried out by all levels of management as one of the means to be applied to improve the correlation between economic efficiency and remuneration and tighten wage discipline.

The results of comprehensive wage audits carried out in the first half of this year by auditors of the Federal Ministry of Labor and Public Welfare prove again that managers of enterprises and organizations, VHJ's and branch ministries must apply much stricter criteria to wage setting because in practice new shortcomings have reappeared which are in conflict with wage regulations and flout wage discipline.

For example, the endeavor of enterprises and organizations to raise the Quality and standard of THP's (technical and economic workers) is being undermined by paying workers below the age of 45 in excess of 50 percent more than they are entitled to by their qualification because the grace period granted them to catch up with the required educational level has long since lapsed (Energy Research Institute, Prague; Sigma, k.p.d., Prague; Slovak Energy Enterprises, general management, Bratislava; CKD Dukla, Prague; Thermoelectric Enterprises, Prague). In addition, some THP's fail to stipulate altogether when and how they will catch up with the missing educational requirements (CKD Tatra, Smichov). At the same time it is inadmissible for organizations to assume the authority of a superior organ and change or grant variances from wage scale stipulations based on numbers of subordinate workers (SEP general management, Bratislava).

Regulations are being flouted most flagrantly in the wage component exceeding the wage scale mainly in the form of premiums and bonuses of all kinds in spite of the fact that central organs have been paying special attention to personal material incentives paid for high quality work and production results for a

number of years. The same is true of noncompliance with Decree No 157/1975 of the Code promulgated by the FMPSV [Federal Ministry of Labor and Social Affairs] and with the 1973 guidelines for the implementation of wage forms and the guidelines for the payment of material incentives to managers of individual enterprises.

For example, SEP, general management, Bratislava has granted some THP managers the right to pay bonuses for meeting production indicators over which it has no direct control and for which it is not accountable (for example bonuses for the completion of the proposed number of official business trips paid to the manager of a special department) or for indicators which are not specific and are unverifiable and whose fulfillment cannot be ascertained objectively (for example the uninterrupted implementation of the propaganda plan, the uninterrupted fulfillment of tasks set down by guidelines for the selection and training of workers). Similarly, the ZEZ national enterprise in Prague pays bonuses to the director's office manager, the chief comptroller, the security chief and even to the nurse for the "comprehensive evaluation of work assignment fulfillment." Similar shortcomings were detected also at the Postmaster General's Office in Prague.

In disregard of paragraph 25 of the above-mentioned FMPSV decree and its principles, bonuses are being paid workers failing to fulfill the stipulated indicators without deducting any, even the minimum penalty (for example Sigma, k.d.p., Prague with the approval of the so-called bonus-setting commission).

Also the determination of fulfillment of stipulated indicators for which the workers are being granted bonuses is not always being carried out objectively but only by the simple annotation in the respective documents such as "being fulfilled" or "fulfilled" (for example at SEP, general management, Bratislava); what is required is evidence that a specific indicator has been fulfilled.

On 13 May 1980 the FMPSV again emphatically reminded all federal organs by letter No 316-732/80-7700 that all regulations in force must be met before any kind of bonus can be granted because serious transgressions are constantly being discovered by wage audit teams in this specific sector. Both the stipulation contained in paragraph 26 of FMPSV Decree No 157/1975 of the Code and also the 1975 and 1977 principles are being flouted even though these regulations clearly state that output premiums can be granted solely as the result of comprehensive evaulation of the fulfillment of set tasks not only on the basis of quantity, but also quality, economy and efficiency of work. But in some enterprises practice deviates grossly from these regulations.

To give examples, the group of workers who are entitled to premiums is not always clearly identified, mandatory indicators which must be fulfilled are not set in advance (Sigma, k.d.p., Prague) or the indicators are part of standard work requirements (Energy Research Institute, Prague) and nobody ascertains the fulfillment of the stipulated indicators. Differentiation between performance premiums, which is desirable, is frequently inconsistent and some categories of workers are receiving unjustified preferential treatment (for example service car drivers at ZTS, general management, Martin were being paid performance premiums amounting to 76 to 96 percent so that together with other bonuses and supplemental payments the performance component amounted to 90 to 120 percent of their regular wage).

Special premiums are designed to enable enterprises to use material incentives in cases where workers must meet especially exacting demands or requirements connected with the fulfillment of urgent tasks and for outstanding achievements listed in FMPSV guidelines which, due to their exceptional nature, cannot be regarded by any other wage form. But almost none of the enterprises and organizations audited complied with these principles and misuse of premiums is a rather normal occurrence.

In a number of instances these premiums are being granted without justification, without proof of exceptional performance, for overtime work (Postmaster General's Office, Prague) or for standing in for another worker (CKD dukla, Prague) even though the respective wage tables set down the type of remuneration applicable in such cases. Premiums are again being used as remuneration for "good work", "preparation of a ROH conference", "activity in CO", "harvest work", "organizing recreation of apprentices" etc. (Energy Research Institute, Prague; Sigma, k.d.p., Prague; SEP, general management, Bratislava; Communications Assembly Enterprises, Prague; ZTS, general management, Martin; ZEZ, Prague). The finding that only in September 1979 the SEP general management in Bratislava paid 75 percent of all THP personnel special premiums in addition to so-called targeted premiums is proof that these wage expenditures are not always being used properly.

Some enterprises and organizations continue to proceed incorrectly in implementing FMPSV Decree No 159/1970 of the Code. The conditions underlying the granting of premiums at important occasions in work and in life are not being spelled out, the total length of employment is not being given in all cases (SEP general management, Bratislava), and also the granting of bonuses for 25 years of uninterrupted work in an enterprise from the first day of employment is being handled incorrectly (Sigma, k.d.p., Prague).

Some organizations are granting advances on payments for the fulfillment of economic tasks which exceed 60 percent of the overall amounts due for the entire year (for example payments to managers of branch offices of the Energy Research Institute in Prague).

An important part of wage forms and material incentives are also annual premiums paid in accordance with the FMPSV decree of 25 October 1977 to management workers for fulfilling set indicators on the basis of comprehensive evaulation of results of economic and managerial activity. Wage audits carried out by FMPSV personnel brought to light some shortcomings and failure to comply with the above decree also in this sector.

As an example, the amount of the annual premium is not always being reduced by at least one fifth for failure to fulfill some key indicator (Sigma, k.d.p., Prague) or the premium is reduced by the minimum amount but at the same time the reduction is made up several times over by the payment of special premiums (SEP, general management, Bratislava). In addition, the enterprise is not always able to submit a record of the result of comprehensive evaulation which according to paragraph 4 of the above-mentioned decree is supposed to constitute the basis for deciding on the final amount of the annual premium.

The outlined results of the wage audits performed reveal that the current practice and the frequently benevolent procedure of enterprises and organizations in the area of material incentives paid to individuals cannot continue in the future. Therefore,

one of the measures in preparation also includes changes in the granting of premiums and bonuses consisting in reorienting applicable indicators to emphasize quality and efficiency of overall performance, steeper penalties for failure to fulfill these indicators, etc.

The wage audits also brought to light important findings concerning agreements concluded on services performed outside the labor contract. Such agreements are designed to enable enterprises and organizations to perform certain services and activities within the framework of fulfilling tasks called for by the plan for which socialist enterprises do not possess the necessary capacity, lack needed specialists, etc. Of course, these agreements must meet conditions stipulated in paragraph 232 to 238 of the Labor Code. Unfortunately, this is not always the case in practice. In this area almost all enterprises and organizations audited have been systematically flouting the Labor Code and ministerial regulations even where a prior wage audit was already performed and the management of the enterprise was directed to rectify the shortcomings discovered in this area.

While making a distinction between work activity and an agreement to perform a service can in some cases be difficult enterprises flout the Labor Code even in cases involving repeat work tasks which constitute an agreement to perform a service or a regular labor contract. For example, the national enterprise ZPA in Cakovice concluded several agreements on organizing a training course from February to April 1979 instead of concluding a work contract. Similar shortcomings were uncovered also at the Communications Assembly Enterprises, Prague; the Postmaster General's Office, Prague; Sigma, k.d.p., Prague; and ZEZ, Prague.

Also, prior written permission to conclude a work agreement is not being systematically required by the home organization as called for by paragraph 237 of the Labor Code, or such consent is not being sought until after the conclusion of the agreement (Sigma, k.d.p., Prague; ZEZ, Prague).

But the most frequently occurring transgression of the Labor Code is payment for work performed on the basis of such agreements even though Ministry of Finance Decree No 91/1966 of the Code stipulated that remuneration for work performed on the basis of agreements on services outside the labor contract must be the same as for identical work performed within the labor contract. For example, the amounts of remuneration agreed upon are not being entered with a reference to the respective wage scale or calculation on which they are based or calculations are made only after completion of the work with the amounts incorrect and in conflict with valid wage scales (ZTS, general management, Martin; ZPA, Cakovice; CKD Dukla, Prague; Sigma, k.d.p., Prague; Energy Research Institute, Prague; ZEZ, Prague).

Ministry of Finance Decree No 91/1966 of the Code on remuneration for teaching foreign languages, lectures, translations etc is not being complied with (Energy Research Institute, Prague) and the remunerations agreed upon include various unauthorized supplemental payments such as overtime work surcharges, rush work surcharges etc (Sigma, k.d.p., Prague).

Sometimes designers are being granted wages according to wage scales for design work instead of applicable wage scales which is in conflict with FMTIR Decree No 88 of 26 July 1976 on the authorization required to engage in design work (CKD Dukla, Prague; Postmaster General's Office, Prague).

In order to enforce compliance with regulations governing renumeration for services performed outside the labor contract obviously not only will stricter criteria have to be applied than in customary current practice, but auditing will have to be intensified and consequences drawn from the flouting of lawful regulations.

The fact that a number of shortcomings listed above were detected by FMPSV auditors in many enterprises and organizations by a check whether shortcomings detected in prior wage audits carried out a year or two before were corrected is especially serious. Of all audited enterprises only PZO Kovo, Prague, PZO Exico, Prague and the Railroad Electricfication Enterprises, Prague have dealt responsibly with the results of wage audits and corrected all the shortcomings found.

The conclusion is that measures instituted by the managements of the enterprises were not effective enough in every case and mainly that their implementation was not verified consistently and in time by responsible managers in the enterprises and by superior organs. Moreover, neither managements of enterprises nor superior organs draw any conclusions from the flouting of the measures instituted or from gross transgressions of wage discipline, or do so only in quite exceptional cases. For example, of enterprises and organizations where audits were carried out the general management of the enterprise Railroad Construction Enterprises, Prague reduced the annual bonus of the manager and deputy manager for economics for failure to correct the shortcomings detected by the FMPSV audit, while the deputy managers of the national enterprise Tatramat Matejovice were only issued a reprimand. The manager of the enterprise Rail Track Maintenance Mechanization, Vrutky, who was fined Kcs 80,000 by the ONV Martin for gross transgressions against wage discipline, was ordered to pay Kcs 14,000 to make good for the damage he caused. Based on the finding of gross transgressions of wage discipline in almost all sectors dealing with wage policy, the FMPSV has proposed that the respective ONV's institute legal proceedings for the imposition of fines according to paragraph 270 of the Labor Code against Sigma, k.d.p., Prague and the general management of the concern Slovak Energy Enterprises, Bratislava.

The wage audits discussed demonstrate that no appreciable tightening of wage discipline has occurred so far in enterprises. One cause of this state of affairs is undoubtedly the shortcomings in auditing enterprises and superior organs and lack of consistency in correcting uncovered shortcomings and punishing failure to take corrective action. In current practice sanctions are being applied primarily against organizations which involve only exceptionally individuals, and then mainly against responsible managers who caused the flouting of valid wage scales and regulations by neglect of their managerial responsibilities. Therefore, empowering central state administration organs to prosecute not only organizations but also individuals as one of the measures to be instituted is expected to improve the effectiveness of wage audits and tighten wage discipline.

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ACADEMICIAN EXPLAINS NEED FOR INCENTIVE PAY PRINCIPLE

West German Commentary

Bonn IWE-TAGESDIENST in German No 136, 9 Sep 80 p 3

[Report from Berlin: "Problems With Incentive Pay." A translation of the East Berlin EINHEIT article cited below follows this commentary]

[Text] The theoretical SED organ EINHEIT (No 9, 1980) has admitted there are difficulties in paying the workers in the GDR according to their performance. It was "obvious" that there could be no wage system for once and for all which needed no further development. Right now, for instance, many new questions had been raised in making the performance principle prevail in R&D in connection with the application of scientific-technical progress. As scientific-technical progress and its improved effectiveness had become the key issue for further economic development, achievements in this field would thus also necessarily have to find their special material recognition. There were still many theoretical and practical matters here which "by no means in every case" had found a solution. Economic dynamics would in principle have to be combined with the dynamics of the performance principle.

GDR Academician's Discussion

East Berlin EINHEIT in German Vol 35 No 9, Sep 80 signed to press 14 Aug 80 pp 870-877

['Work and Work Collective' feature article by Prof Dr Otto Reinhold, economist, member, SED Central Committee; rector, Academy of Social Sciences, SED CC; member, GDR Academy of Sciences; corresponding member, USSR Academy of Sciences; member, EINHEIT editorial board: "Work in Our Lives"]

[Text] A great part of our time is devoted to work. We are working in industrial enterprises, production cooperatives, science institutes and other facilities. But even when we are done with our legally allocated working hours, we are as a rule not yet done with all work. Our household, apartment, garden, or the beautification of our environment call for us to lend a hand. Many of us have their hobbies or do other kinds of practical work. And there are many innovators who are using their leisure time for figuring out technical improvements. It shows that work and leisure cannot simply be separated from each other, let alone opposed to each other.

The Fundamental Role of Work

Socialism is a society which, based on the political power of the workers class and the public ownership in the means of production, depends on work. Our party program says: The SED "regards conscientious, honest, socially useful labor as the innermost core of the socialist way of life and advocates developing the kind of atmosphere in all public domains that effectively fosters the pleasure of work and dedication to achievements."[1]

True enough, work forms the basis for any social order. No society can exist without work. In a letter to Kugelmann, Karl Marx pointed out this plain fact: "Any child knows that a nation that would stop working for a few weeks, let alone a year, would kick the bucket."[2] In his main oeuvre, "Das Kapital," he emphasized that work is an "eternal natural condition of human life and therefore independent of any given form of life but, rather, common to all its forms of society."[3]

What then is what is particular, specific of work in socialism? First and foremost, the fact that the workers class, the strongest productive class in numbers, also exercises the political power and decides how and in what manner the absolutely necessary labor is carried out, and what happens to the results of this labor. Labor is undertaken with means of production which are public property. This directly connects with the fact that labor is the sole source for the well-being not only of society but in principle of each individual as well. Constructing the socialist society means eliminating all conditions that would allow someone able to work to live at the expense of the work of others. Distribution according to work performance is one of the fundamental principles by which economic and social life is organized in socialism. Through competition and many other forms of democratic participation in the management and planning of the economy, the working people exercise their political right to active partnership in socialist society. Thus in the field of labor an essential characteristic of socialism is brought to realization, it being socialist democracy, and the working people feel day after day that their involvement through thought and creative deeds is wanted and appreciated.

The dictatorship of the proletariat and the socialist ownership in the means of production make possible investing the economic potentials in such a way that a job is reliably secured for each and every working person. Full employment is a basic goal in the shaping of socialist society. Social security and a secure job are of course no automatic results of the socialist order but the consequence of continued dynamic economic growth. No serious person can doubt that the range of sociopolitical measures is determined principally by the growth in economic efficiency. Job security also presupposes that the economy is made secure through qualitative and quantitative growth and that manpower released at one spot is needed at another.

Never in history was labor merely a duty. Among the basic realizations of Marxism-Leninism is the proof that labor is the most important form of all vital human manifestations. It is labor by which man tames nature,

modifies it, wrests from it all he needs to live. Looked at historically, however, he can do so only by changing himself. Labor--together with nature--not only is the source of the material wealth of society. Rather, in addition, labor is the vital sphere in which man brings his intellectual and physical capabilities to practical realization and develops them further and where he perfects his experiences, his mastery, his skill and imagination, his energy and the ability to shape his future consciously and systematically. Only through work or in connection with work can man realize his creativity, can he develop and demonstrate true creativity.

Marxist-Leninist historians have always been pointing out that at no time has work in history been merely an enforced burden, a material necessity conforming to no human needs. In all eras we find examples showing how proud the peasants, craftsmen, workers or engineers have been of their work, their achievements and their abilities. The actual contradiction, therefore, does not lie in the opposition fashioned by bourgeois sociologists between man's innate inertia and laziness and the compulsion to produce his livelihood on the other side. What was placed in opposition was labor, especially the need for creative activity, and the various forms of exploitation in which, in the course of history, labor had to be performed and even now still has to be performed in large parts of the world.

In capitalism, the attitude of the workers class toward labor is affected by negative factors. Ultimately they can all be attributed to the fact that production, the working conditions, and the possibilities for unfolding the creative capabilities and interests of the working people are governed solely and exclusively by profit interests, never by the working people's interests and needs. All attempts to eliminate the antagonistic contradiction between capital and labor within the framework of capitalist society therefore needs had to fail. What is essential here, however, is that this contradiction follows not from the "nature" of man, from some indolence or laziness characteristic of him, but from the capitalist production relations.

The socialist revolution, mainly the transfer of the means of production into socialist property, has created entirely new conditions for labor. That is in no way altered by the fact that in many enterprises techniques and technological operations often do not as yet differ from what they are in capitalist enterprises. Not until socialism labor and the working man receive their proper respect from society. Capitalism is typified by the principle that says "if you have something, you are someone." Socialism says, instead: "if you can do and achieve something, you are someone." Respect for working man is one of the supreme values of socialist humanism.

Social Security and the Readiness for Performance

Discussions, especially with enemies of socialism, often raise the question whether there might not also be many negative effects resulting from the high degree of social security and safety in contemporary socialist society. The bourgeois political economy keeps claiming, time and time again and in various variants, that absolute job security leads to poor work, deficient

labor discipline and loafing on the job. Only under the constant danger of being fired and becoming unemployed would everyone strive for optimum achievements. Absolute social security for the working people would ultimately undermine, and finally do away with, the crucial performance motivation. Even among us there are some who seem to tend toward such thoughts in discussions. In our confronting manifestations of poor labor discipline and slovenliness, by rude sales personnel and unfriendly and unsatisfactory service in restaurants and other service enterprises, we sometimes hear people say all that could be much more simply and rapidly done away with if everyone would have to worry, day after day, about his job. That such matters are being discussed in that fashion at all indicates, first of all, that most GDR working people are working well and with discipline but also are worried the results of their labor could be harmed, such negative attitudes then doing discredit to our good socialist cause.

But could we seriously intend to surmount such manifestations that contradict the interests of socialist society by cutting down our social security and thereby achieving a greater performance readiness? Indeed, in the capitalist countries the fear of being dismissed and unemployment is a first-rate disciplining tool in the hands of the entrepreneurs. There, the increasing unemployment figure could significantly enhance the labor intensity. Downtime and sickleave have dropped radically. Above all the trade union press in the FRG is reporting that working people, afraid of being fired, do not even report plant accidents and are putting up with prolonged injuries to their health. That of course significantly contributes to enhancing the effectiveness of capital and profits.

For the capitalist society, such working and living conditions and all their effects are perfectly normal. Yet the workers class, after all, has for more than hundred years conducted a sacrificial struggle against the capitalist order to eliminate such conditions. To introduce them in any form at all into socialism would profoundly contradict our humanistic objective. Optimum social security, full employment included, is one of the greatest and most important accomplishments of socialist society. It is a vital key to shaping the developed socialist society in all its important domains.

The economic and social effect comes first here. To live in a society where for all members the anguish about bare subsistence, the dread of the next day, is done away with has been the dream of working men for many centuries. Our society has fulfilled that dream. Maximum social security, including full job security, is the basic condition for the emergence and forming of socialist personalities. How could under conditions constantly threatened by the danger of being fired a self-assured worker's personality be generated that takes part in deciding on all issues of public life in free decisions? Freedom of personality and job security are tied to each other inseparably. The fear of unemployment and freedom for most of the working people are mutually exclusive.

This then also brings up the issue about democracy. This not only involves the legal definition of certain rights, however important they may be, but rather the real conditions, the real possibilities, for actually exercising democratic rights. As capitalist practice has shown, free democratic decision under conditions where losing one's job always threatens is either impossible or under significant constraints. The systematic development of social security in socialism, on the other hand, is one of the important premises for the systematic development and perfecting of socialist democracy.

In May this year, the Bonn Bundestag held an interesting debate on the topic "humanization of labor." It is a topic that has become very prominent in the capitalist countries in recent years. There are various reasons for it. For one thing, they reflect the growing influence of real socialism and the pressure of the workers movement in the capitalist countries. The representatives of monopoly capital seek this way possibilities to contain the confrontation between capital and labor. And then there is the need for some measures resulting from the change in working conditions caused by scientific-technical progress. The representatives of monopoly capital seek a manner of shaping working conditions in a way that will guarantee maximum effectiveness of production and highest profits. Yet as the Bundestag debate referred to has shown, the various parties are not agreed on how to proceed. The idea was to fund the measures for the program on the "humanization of labor" from the federal budget. Especially the CDU/CSU representatives opposed that idea. Their main worry was that such measures could lead to some form of workers' and employees' participation in decision-making, and thus to restraining the entrepreneurs' omnipotence. In other words, the imperialist ideas of a "humanization of labor" exclude the core of humanism, the democratic right to comanagement in the economy.

Bringing To Bear the Impulses Inherent in Socialism

The existence or absence of social security and democratic rights have fundamental implications both for the awareness and the way of life of the working people. For that reason can the further shaping of the developed socialist society proceed only in connection with the further development of social security and safety. No other development is either conceivable or possible.

This being so, the question arises what the motives and impulses are that lead to conscientious work and great achievements in socialism and how manifestations can be overcome that oppose them. It was already mentioned that social security and full employment are inseparably tied up with economic efficiency, essentially controlled by it, in fact. What is decisive here is, naturally, the performance of each individual working person. Social security, after all, is not a matter that arises automatically from the socialist production relations. Social measures within such scope are no presents from the party or the government. One must work hard for them. So they are possible only through high economic achievements. In this sense then the socialist society is a performance society in the full sense of the word. But all this has nothing at all in common with its interpretation by bourgeois ideologists.

Western mass media often declare in a deprecating sense that a performance pressure was being exerted on the working people in the GDR and other socialist countries. That is meant to suggest that high achievements are being enforced in socialism by means similar to those characteristic of capitalism. Anyone who knows even the least bit about reality in the socialist countries will also know how nonsensical such notions are. The impulses for high achievements in socialism are entirely different in kind. Our society doubtless expects high achievements from all working people because they are needed to realize the essential characteristics of socialism, realize its purpose. For that reason the management and planning of social development are aimed at creating the prerequisites for such achievements and at finally providing the greatest social recognition for those who produce these great achievements.

The starting point for the motives and impulses for such achievements is the identity, in principle, between the interests of society and those of the individual. Yet it cannot always and in every respect be directly sensed and experienced by an individual. Its effects are different from, let us say, the fear a worker has in a capitalist enterprise that he might get laid off.

To make sure that every working person does good work in socialism and that this identity in principle becomes practically effective in one's daily work and turns into an impulse, mediating links are needed in the organization of social labor.

What are their most important elements?

First it includes the performance principle or—as Marx put it—the principle "from each according to his abilities—to each according to his performance." Practically that means: for good labor good money, but also for good money good labor. Our whole wage system is designed in accordance with that principle. And its practical effect is great. Yet it is equally apparent that there can be no system that is definitive for once and for all, for which no further development would be necessary. You need not be a great expert to realize that in the course of time with the development of new problems certain contradictions will likewise evolve. Right now, for instance, in connection with a broad and effective application of scientific-technical progress, many new questions have arisen in enforcing the performance principle in R&D. As scientific-technical progress and its improved effectiveness has become the key issue for further economic development, achievements in this field must of necessity also find their special material recognition. There are still many theoretical and practical matters to be resolved here. Though clear in principle, those problems in the performance principle arising with the transition to a by and large extensively expanded reproduction have by no means in every case been given practical solutions. Similar problems have also arisen in other fields.

Here one thought should be stressed in particular: if the principle of distribution according to work achievement is to be an effective impulse, it is necessary constantly to seek the best and most effective forms of

practical application for it. This can for various reasons not be detached from the social reproduction process. Economic dynamics must needs be combined with the dynamics of the performance principle.

Second, the development of the impulses inherent in socialism greatly depends on a smooth reproduction process. Interference in the reproduction process, downtime alterations and operations in fits and starts have demobilizing effects, as all practical experiences have shown. They invite inactivity and violations of labor discipline. A smoothly running reproduction process encourages a desire for high achievements and, because of the technological circumstances as such, calls for disciplined and responsible work. Sociological surveys, for instance, have shown that the willingness to take part in the innovator movement is much greater in many enterprises than is the status it has practically attained. The managerial prerequisites are not everywhere created for it, however. Experiences confirm that in enterprises and combines where a strict organization of the reproduction process is ensured, the competition and innovator movement likewise come up with fine results.

Third, the unfolding of socialist impulses, and thus the development of a socialist attitude toward work, are significantly affected by ideological and social factors. That is why we talk about material and moral incentives. The question is, however, what we mean by moral incentives. Included in them are, naturally, moral recognition, a high appreciation for good, disciplined work, and a critical confrontation with poor work attitudes. Yet we see this not only as a task of indoctrination. Rather, the whole atmosphere that prevails in an enterprise or a work collective is of great importance to the work attitude. The experience that one takes part in industrial decision-making and the knowledge that one's own word counts and so forth are important factors in this.

From that vantage point, the development of socialist work collectives and the competition movement play an exceptionally big role. Socialist competition has of course all sorts of effects. It is a form through which the working people take part in economic management. Within the scope of such competition, new insights are made to prevail, good and proven experiences are generalized, and defects and arrears are criticized. At the same time, however, socialist competition has an important educational function, it amounting to a contest, after all, for best results. If properly conducted, it also always reflects the enforcing of a socialist labor ethic. That is why the competition of socialist collectives is primarily concerned with socialist labor organization. The socialist character of a collective is seen above all in that the kind of atmosphere is being created constantly in which everbody helps produce optimum work achievements. Undisciplined conduct is not likely to spread in a collective that seeks to do conscientious and honest work, to make full use of working hours, and to find new and better solutions.

If we thus refer to moral labor incentives, we mean a whole bunch of factors that all together provide the kind of work attitude that conforms with the requirements of socialist society.

Fourth, the living conditions outside the enterprise play a big role. Solving the housing question, for instance, greatly affects the extent of fluctuation. A smooth supply situation likewise is a not insignificant factor in making full use of working hours. The proper connection between industrial labor and shaping the territorial living conditions constitutes an important impulse of socialist society.

Fifth, we can by no means manage without administrative measures to enforce strict and effective labor organization where everyone is wholly familiar with his tasks and duties, the preconditions are set for meeting them and violations of established work standards are prevented.

In talking here of a socialist work attitude, the socialist society also has specific forms to bring it about. Those are forms and methods that conform to the character of socialism and are inseparably tied in with its maturation and development. This is the only way to produce the impulses needed for further boosting economic efficiency. But this always concerns forms and methods that do not operate automatically but must be brought to effect through deliberate activities of ours.

Taking account of the complexity of the factors mentioned plays a decisive role in this. We can hardly rate highly enough, of course, the performance principle, the material incentives. But that alone cannot produce those impulses and that labor attitude that are needed for the requisite quantitative and qualitative economic growth of the 1980's. A full effect can be obtained from this only in combination with the other factors mentioned, especially the smooth organization of the reproduction process and the development of socialist collectives. Practical experiences and theoretical conclusions alike have emphasized that the formation and development of the socialist collectives is the crucial link in socialist labor organization. Effective, disciplined work, socialist relations and the forming of socialist personalities are intimately tied up together in the collectives' operations. Also in this respect then does socialist economic management—on whatever level—make qualitatively different demands than does the management of a capitalist enterprise.

Scientific-technical progress in various ways affects the substance and character of labor. Already Marx pointed out that in the outcome of automation, man would more and more take his place outside of production. From an immediate link in the production process he becomes its inspector, its supervisor. Automated production processes, even automated production departments and enterprises have now become technically and economically feasible. In connection with that, the question has been raised whether that might reduce the importance of live labor by man.

Practical experiences indicate that will not be so at all. The development of the material-technical productive forces mainly means that man's control over nature, the labor productivity, i.e. the yield and degree of effectiveness of concrete human labor will increase in the production of material goods and services. This process goes through many intermediate stages and

provisional solutions. Even though enterprises and combines are doing a lot for improving the working conditions, in connection with rationalization projects, certain groups of working people still are going to have to perform physically heavy and monotonous work for some time. Furthermore, it has been found in practice that some of those "transition stages" leading to automation even come with increased physical and mentally monotonous work. The essential thing is, however, that scientific-technical progress places new demands on the work and on the working people.

That pertains first of all to education as a whole, not merely to the technical skills. The investigative report published on the accident in the Harrisburg nuclear power plant in the United States brought out that its main cause was to be found in the totally inadequate qualifications of the persons employed there. Having no notion of what was happening in their field of work, they committed errors in their work. Along with technical knowledge obviously greater weight attaches to accurately observing technological discipline and to the sense of responsibility. Yet high discipline and great responsibility become physical stress factors to the extent that basic technological process are not known and thus the need for certain conduct is not understood.

Scientific-technical progress at the same time creates new possibilities for shaping the substance and character of labor in such a way that its creative character is enhanced.

An organic connection between the scientific-technical revolution and the advantages of socialism therefore means forming in an individual the kind of characteristics and abilities that are needed for an effective mastery of modern techniques. But it also means using science and technology for gradually creating the material prerequisites for creative work for all working people, so that work will more and more become a need for an individual. This organic connection between the advantages of socialism and the scientific-technical revolution is a decisive condition for the further shaping of the socialist way of life, the unfolding of socialist personalities, and the formation of a communist attitude toward work.

FOOTNOTES

1. "Programm der Sozialistischen Einheitspartei Deutschlands," Dietz publishing house, Berlin, 1976, p 54.

2. Karl Marx to Ludwig Kugelmann, Marx/Engels, "Werke," (Works), Vol 32, Dietz publishing house, Berlin, 1965, p 552.

3. Karl Marx, "Das Kapital" Vol I, Marx/Engels, "Werke," Vol 23, Dietz publishing house, Berlin, 1962, p 198.

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CSO: 2300

EC 1022 COMPUTER BUILT IN ROSTOCK, INSTALLED IN SCHWERIN

Schwerin SCHWERINER VOLKSZEITUNG in German 9 Oct 80 p 1

[Article by J.H.: "New Computer: 300,000 Operations Per Second--Large-Scale Computer in Schwerin's Data Processing Center in Operation 2 Months Ahead of Schedule"]

[Text] The new EC 1022 computer in Schwerin's Data Processing Center can perform 300,000 computer operations per second. This ESER equipment [uniform system for CEMA] was installed in Schwerin and operational in only 15 days--a GDR record. Since 6 October, almost 2 months ahead of schedule, the computer has been working around the clock. In that way additional output worth about half a million marks can be produced.

The equipment, built by VEB Robotron Combine in Rostock, is a joint development of six CEMA nations. For instance, the central processor comes from the USSR. The computer personnel see the difference in performance between this modern computer and the conventional R 300 as comparable to that between the new automobiles and the P 70.

The young employees of the production section have chief responsibility for the utilization of the project costing millions of marks, for the equipment was turned over to them as a youth project.

On the day of delivery, Operator I, Raimund Weding, emphasized the commitment of the youth to perform their best in the full utilization of the equipment and material with the request to be accepted as candidate in the ranks of the party of the working class.

Another ESER computer is to begin operation in the year of the 10th Party Congress and thus make possible a nearly one-third increase in capacity. Furthermore, since the beginning of the year, the plan fulfillment is ahead of schedule, entailing no additional material because of the saving of EDP paper.

CSO: 2300

CONCEPTS OF 'SECOND ECONOMY' ACTIVITIES DESCRIBED

Budapest MUNKAUGYI SZEMLE in Hungarian No 8, Aug 80 pp 6-9

[Article by Judit Adler: Data for Interpreting the Concept of the "Second Economy"]

[Text] The existence, extent and operating mechanism of the "second economy" has been one of the popular topics of recent economic debates. Lack of clarity of the concepts, ambiguity in the content of meanings of the categories used, make it more difficult to understand the debates, handle the problems and solve the problems which come up. Difficulties with interpretation and terminology often occur in the initial stages of investigations. This is no different in describing the second economy either. Starting out from differing backgrounds, the experts dealing with the topic try along differing dimensions to arrive at explanations for second economy's operating mechanism, to discover the interface points and interconnections between the first and second economies, etc., while the concept of the second economy is quite unclear, covering a number of debatable elements.

I. Notes to the Concept of Second Economy

The second economy as a theoretical category can be derived by means of dissecting the unified economy according to various viewpoints. This dissecting can be done several different ways and for many different purposes, but all breakdowns use certain preliminary assumptions concerning the economy as a whole, and its parts.

One phenomenon can be defined in several ways. One might define its contents, its object, its parts, etc., but the method is also possible whereby we exclude parts from the whole, and describe the category we wish to discuss, on the basis of the "remainder theory". However, in this latter case it is desirable that the "remainder" be some kind of approximately homogeneous entity according to the criterium (criteria) essential from the viewpoint of the analysis.

Much depends on the suitably chosen criteria of dividing up the economy, and on the content clarity of defining the part which is cut out, from the viewpoint of how useable the created concept will be in theory and in practice.

First, I will deal with two definitions of the second economy, which definitions are perhaps the most widespread, but which in general professional circles will cause the reader to engage in a debate, keeping in mind the above mentioned requirements. Following this, I will introduce one possible concept of the second economy's content of meanings.

1. One of the Approaches

The publication* by the staff of the Labor Sciences Department of the Carl Marx University of Economic Sciences [MKKE], written after studies were made of this topic, can be considered a basic work in defining the phenomenon of the second economy and in describing its operating mechanism.

The Definition Developed as the Result of Research:

"By second economy we mean the methods of making use of the ability to perform work outside the socialized economic sector, and the process of redistributing the incomes outside of the socially organized distribution, [by] the population among itself, [and] the summary of these [processes]. In accordance with this, in addition to the legalized private sector's [sic] activities, we list in this sphere of the economy and of the distribution:

a) the producing and service activities of unofficial contributors (unregistered employees and people doing work at home), illegal craftsmen who pay no taxes (skimmers), and the providers of various services inside the socialist production organizations [using their tools and materials] (work on the sly) and outside of these, individually or as a family, as contractors, associate contractors, whether sold on the "market" or done for the purpose of realizing savings ("self-consumption");

b) merchandise-producing or self-supplying [agricultural] economic work conducted on bigger or smaller pieces of real estate, land assigned as part of payment [for someone's use], in household plot operations individually or as a family, perhaps with the temporary or long range use of outside manpower;

c) those types of the population's income's redistribution, of which the "tip" [in Hungarian: "wine money"], "appreciation money" and "lubricating money" are characteristic examples, which take place in connection with work activity, job assignment, position in organizations of the socialist sector, also being in this sphere;

d) also, the ways of obtaining income which, too, are outside the socially organized framework -- a whole series of additional forms of [income] regrouping [belong here]; such are [for example]: renting out living units in privately owned buildings and in assigned state-owned rental apartments; the buying and selling of real estate and personal property by the population; money lending deals among private persons; and other various contracts and agreements involving the systematic commitment of incomes and obtaining incomes; etc.

[On the other hand], deriving values from the population's savings and accumulations, through the socialist sector (savings accounts, renting a private vacation home to a state organ, etc.), as well as extra work, overtime, other forms of miscellaneous jobs done in the socialist producer cooperatives, and the supplementary earnings, the population's incomes derived from these, border the cases the sphere of which is being discussed here, but we consider them to be outside that sphere."

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* Hereinafter, the quotes are from Istvan R. Gabor's article, titled "The Second (Secondary) Economy", VALOSAG No 1, 1979.

The first question to come up in describing the second economy within the framework of a socialist society is: why must, why can, why is it necessary to interpret this category differently [here], than in the capitalist economies?

The second economy was developed in the capitalist national economies, it not only exists there also, but is spreading more and more. In these societies it makes no sense to apply a breakdown of the economies on the basis of private and nonprivate sectors, since apart from the few economic activities in the government's hands, the overwhelming majorities of the national economies are in various forms of private ownership.

Thus, in the capitalist national economies, the activities which belong in the second economy are identified not on the basis of what is the form of ownership of the production tools operated during the activity, but rather, the dividing line is the observance, or nonobservance of obligations specified by the state, related primarily to the paying of taxes and other acts. The fundamental dimension of being listed under the second economy is the legal or illegal character of the performed economic activity.

In my opinion, therefore, it is not justified in the socialist society either, to break down the economy into first and second spheres on the basis of the difference of the ownership conditions.

We can agree to that question with the above quoted definition, that the second economy in one of the approaches represents "the methods of making use of the ability to perform work outside the socialized economic sector". However, it is expedient to detail what belongs in the socialist economic sector. One of the main criteria, declared or undeclared, of being outside this category, is the existence or absence of being regulated, or the taking advantage of the opportunities of "wriggling out" of being regulated.

In socialism, the socialist (state or cooperative) form of ownership is the prevailing one, but this does not mean that the legal private sector is not regulated. Management and regulation of the economy can be done by various methods; obviously, the economic operation of a major enterprise employing several thousand people can and must be influenced by different means than that of a cooperative employing a few dozen people, not to mention the private sector. In regulation, the differences in order of magnitude also cover qualitative differences, but this is explained by the qualitative differences hidden in orders of magnitude of the economic units. Therefore it is not justified to remove the legal private sector from the first economy just because the extent and character of regulation are different [from the socialized sector]. Quite to the contrary, this is the very thing which insures that the legal private sector is part of the first economy.

It also represents a point of interconnection between the private and the socialist sectors, that the private sector works not only for the population but also fills orders from the socialist economic organizations.

Inclusion of the private sector in the second economy is unjustified not only because of the second economy concept of the capitalist societies, the existence of regulation and legality, but the regrouping does not correspond with the second part of

the definition either. The incomes derived in small-scale private industry [craftsmanship] cannot be listed under the processes of redistribution among the population itself, because for the person operating in the private sector this is a source of income derived from his main occupation and is regulated by the socialist economic management.

In this case it cannot be an [acceptable] contrary justification that this is true only for that part of the activity which appears in filing the tax return, and not for the part omitted from there, because it is commonly known that there are problems even at the major enterprises concerning the accurate observation of accounting procedures — there is maneuvering there, too, between the many little openings, in order to achieve a more favorable position —, but just because of this it is not justified here, either, to list such a part of the activity under the second economy.

Among the activities which form a part of the definition, judging the situation of those working in household plot operations, and of those enjoying incomes from this source, can be questioned.

The evaluation done in 1978 by the Central Statistical Office [KSH] proves that the household plot and auxiliary [agricultural] operations have strong ties to the socialist producing units. In the case of families in agricultural producer cooperatives, these agricultural producer cooperatives did all the work an almost half of the household plot areas. In reality this means that in lieu of the household plots the members received money or products from the producer cooperatives, and the household plot land was being farmed together with the community land.

On the remaining other half of the household plot lands, the producer cooperative's machines helped out in cultivating them. The producer cooperatives participated in farming not only the household plot operations, but also of the auxiliary farming operations, though to a lesser extent.

Participation of the producer cooperatives in cultivating the household plots and assigned lands is a process gaining strength. While in the early seventies, redemption of the household plots with money or product hardly ever occurred, in recent years the "theoretical household plot" is gaining more and more ground. This indicates the beginning and expansion of a process which will lead to the "collectivization" of the household plots. The farming of a significant portion of these land areas will become closely connected to, or intertwined with the farming of the producer cooperatives which are in the socialist sector. The incomes derived from this cannot be classified either as secondary distribution, or uncontrolled, or unregulated, therefore the household plot and auxiliary farm operations belong much more under the first economy than the second one.

Among the elements listed in the definition, undoubtedly the qualifications of tip, lubricating money and appreciation money are most critical from the viewpoint of adjudicatability. Lubricating money and tip exist in the first as well as second economies as these are defined, because of the shortages, habits and traditions which affect both areas. (Interpretation of the lubricating money in the second economy would deserve to be analyzed separately, within the given conceptual sphere.) Lubricating money, appreciation money and tips occurring in the first economy are closely attached to work done in the socialist sector. These sustain themselves and spread largely because of the operating problems and difficulties of activities performed in the first economy. We can question the concept according to which

successful operation of the socialist sector belongs under the first economy, but its operating problems and part of the consequences deriving from it belong under the second economy, even though formally all three income forms fulfill the criteria of being listed under the second economy.

Besides the things mentioned above, the producing for self-consumption, and work of service character performed for one's own purposes is also listed under the second economy. These activities have, or can have, income saving, expense preventing and shortage relieving effects, but on the one hand these are not illegal activities, and on the other hand under the circumstances of the market's economics I do not consider it expedient to qualify such activity as strictly economic, since today a part of it is much rather activity of a personal nature, performed at the expense of one's free time.

From the foregoing follows that the definition crystallized during the course of research -- and which was prepared by the method of exclusion -- lists such activities under the second economy which differ from each other with respect to a number of their essential economic, social, and political characteristics; therefore on the one hand treating them as one category can be questioned, and on the other hand the activity listed as belonging to the second economy does not always fully conform to the criteria given in the definition either.

2. The Other Definition

The study dealing with the second economy was made in the Theoretical Research Institute for the Trade Unions [SZEKI], but it works with significantly less clear-cut categories and dimensions than the first one.*

The Definition Used in this arrangement is as Follows:

"Secondary economy in the socialist society is the summary of all those economic activities which individuals conduct without any (or with lax) social organization, from which they derive incomes unregulated by social consciousness, and which therefore are outside the centrally organized distribution system.

Thus, in defining the secondary economy, the basic viewpoint in separating it from the "primary economy" is the degree of social organization. From the viewpoint of examining these tendencies, secondary definitive (identifying) viewpoints are: lawfulness (legal or illegal), statistical record or recordability (can we, and do we want to, measure the activity and include it in the national income, in society's activity, and the income derived from it in real income, etc.), and taxation (are we able to levy tax on these activities and incomes)."

I will omit the word-for-word quoting of grouping the activities (because of its length), but I will cover a few of its debatable definitions.

The basic question in connection with this approach -- just as it was also with the previous one --, is: why must the second economy be interpreted differently

* Growth Trends of the Secondary Economy; SZEKI TAJEKOZTATO [SZEKI Informer] Budapest No 3, 1979.

in the socialist economy from the nonsocialist one? Unfortunately neither study poses this question, thus neither one provides an answer for it either. Clarifying this question would be of basic significance from the viewpoint of understanding the SZEKI topic, since without any justification or proof, just by one statement sentence it qualifies as of minor importance. The criteria of key importance in the concept of second economy in the capitalist societies, or, its legality (illegal or legal; regulated or unregulated).

And social organization, which has been promoted to the basic viewpoint, does not say much by itself. The economic operating organs of a given national economy or people's economy [sic] can be of extremely many types with respect to the extent of social organization. Presumably the statement is not exaggerated that the better developed an economy is, and the more asset complex its structure of activities is, the more levels there are in its inventory -- also from the viewpoint of social organization --, by which it accomplishes its economic operation. Certain activities in the economy can be accomplished rationally if they are less regulated uniformly and centrally, and in general this is based on conscious recognition and decision. Just by certain economic operational tasks getting solved in a socially less organized form does not in itself separate them from the primary economy. On the contrary: this is how the first economy is able to retain them.

It cannot be automatically said about legal economic activities conducted under more lax than the general formats, that the incomes derived from them ignore socially conscious regulation. There is no doubt that economic management intervenes in the way incomes are developed in, for example, the private sector, in a less direct form than at the enterprises, but it does still regulate them. (Wage and income regulation at the enterprises is not the only possible method for influencing the size of incomes derived from work.) Those taxpaying, social security, etc. obligations also, which operate in spheres other than the enterprises or cooperatives, are also part of the centrally organized distribution system.

The study by SZEKI uses the degree of socialization, the irregular and occasional nature of the incomes, and its compatibility with the character of our society, as dimensions for isolating the second economy.

The grouping criteria are quite difficult to interpret. Thus, for example, in the case of activities resulting in irregular income, it remains hazy what the irregularity of these incomes consists of (for example, its size, infrequency, etc). There is nothing irregular about incomes derived from those activities which belong under the first economy also according to this study (part time jobs, auxiliary jobs, overtime, employing the retired); those are work incomes derived from the primary distribution.

The incomes of people who are active in the legal private sector, and of those self employed, are also work incomes derived from the primary distribution.

This "irregular income" category covers incomes derived from main jobs as well as from side occupations, and also incomes not in proportion to the work done, or obtained without work. The weakness of this concept consists of the fact that just as in the ideas professed about the socialization of economic activities, it assumes the first economy to be extremely monomorphic. It considers non-irregular only those incomes received from the enterprise or cooperative for the main job. Except

for the sociopolitical benefits, it considers everything outside this to be irregular, regardless of its source, method of obtaining it, etc. Thus in the final analysis the "irregular income" category says nothing, is unsuitable for identifying the phenomena, just as it is [unsuitable] also for measuring the extent of social organization.

I will not repeat my viewpoint here about those more important activities listed under the first economy, which occurred also in the definition discussed in the foregoing, but the things written there naturally apply here, too.

SZEKI's study breaks down further the non-first economy into second and third economies. The latter contains the nonsocialized activities (economic activities and incomes outside the economy) involving occasional incomes.

Dividing the area of activity, qualified as non-first economy, into two further spheres — it seems --, is without any economic or social basis; "occasionalness" and "irregularity" are not interpretable categories.

It is difficult to explain why, together with the population's money lending deals conducted among themselves, the savings deposit system operated within a socially organized framework was also removed from the first economy, and it is also not clear that if someone accumulates his savings from his earnings received from a state enterprise in an OTP [National Savings Bank] savings account, why this is not part of the primary economy.

These few determinations shown here as examples are also indications of the hope [sic] that by ignoring the evaluation of economic and social points of view, it is possible to keep breaking down the economy ad infinitum, without this having any theoretical or practical significance.

II. One Possible Interpretation of the Concept of Second Economy

It can be felt also from the comments I have made thus far about interpreting the concept of second economy, that the opinion I have formed about defining this phenomenon is close to the concept of second economy as applied in the capitalist societies. In my opinion, in socialism also the illegal economic activities belong primarily under the second economy.

In addition to several other characteristics, there is also one difference between the socialist and nonsocialist societies, which expands the circle of activities that can be listed under the second economy. Namely, this is the difference in judging the role of work. It is not my intention to disect this question in detail, but it should be mentioned here that socialism's system of values is based on work, thus the goal is that everyone should share in the goods in proportion with the work he does, and if possible, no one should be able to obtain incomes without work, based on the accumulation of capital.

Accepting this goal, but seeing the inconsistencies of reality, the incomes derived from capital also belong under the second economy in my opinion, regardless of whether this is accomplished within a socially organized framework or not. From this viewpoint, it is also immaterial whether the basic capital was obtained by work, or was formed in some other way (for example, from inheritance), and whether or not utilizing it requires supplementary work.

Thus, in summary, those illegally conducted economic operations, and the income-obtaining opportunities deriving from the accumulation of capital, which are not controlled by society, are organized individually and are not connected or are loosely connected to doing work in a socially organized manner, belong under the second economy.

The following main activity groups belong under the second economy's sphere of activity:

-- all forms of unreported employment in the private sector,

-- various kinds of work performed for the population without obtaining an operating license (skimming),

-- performing work in the functioning socialist economic organizations, institutions, using their tools, for private purposes (working on the sly),

-- activities of enterprising character, conducted for profit, without a permit (brokering, agency, silent partnership), etc.,

-- renting out privately owned real estate or real estate rented from the state for the purpose of obtaining a profit;

-- the population's illegal buying and selling deals among themselves for the purpose of obtaining a profit;

-- the money lending deals between private persons.

The second economy's concept and operating area introduced here is significantly narrower in scope and contains fewer elements than do the other two definitions mentioned. Though indirectly so, an approach of this type has the intention of directing the attention to the interrelationships between the economy's parts which operate in ways differing from each other, in contrast with those efforts which think that they have discovered differences even where there are not any, or where they are very constrained to show such.

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AGRICULTURAL ACHIEVEMENTS FOR 1980 PUBLISHED

Budapest FIGYELO in Hungarian 15 Oct 80 p 13

[Article "This Year's Results of Agriculture"]

[Text] Due to the changes in economic conditions of agricultural production, the farms' interest in the first half of 1980 increased in those branches that require less live labor and investments as well as higher income, reports the Ministry of Agriculture and Food Industry--Stagek. The changes in profitability influenced the production's structure. In some cases this resulted in a better use of natural conditions but adverse changes have also occurred.

The Cause of Raw Material Shortages

The acreage planted with grains was 45,000 hectares less than planned. Of this the wheat and corn planting area was below but that of barley and oats were above the projections. The cereals had favorable yields. In spite of the summer flood, standing water, and ice and storm damage, the farms recorded the highest crop averages ever. The yield significantly exceeds the projection for the year.

The decline of several years of planted rice, fiber-producing plants, and vegetable acreage continued. Potato and legumes were also planted on less ground than before and below the projections. The planting of oil-yielding plants including first of all, sunflower, continued to grow. Stalky, green, and mass fodders were planted on land that was less than last year's but more than the projection.

Animal raising is developing essentially in the planned direction. Cattle stock declined a little more than planned but milk production increased by more than 3 percent. Beef cattle production conforms to the plan. Among hogs, sows declined somewhat in number. This is partly due to lower profits and thus less interest on the part of the smaller products. Slaughter poultry production--due to favorable markets and material incentives--is again increasing, after a temporary stagnation. The food industry produced 0.6 percent more in the first half of this year than before. The lower-than-planned increase is due to the lack of raw materials--which is due to the late ripening of some plants. Most branches increased their output but the poultry and egg and the preserving branches produced less than in the first half of 1979. The raw materials necessary to fulfill the production plan are expected to be available. In some areas, however, processing will concentrate in a time period that is even shorter than usual. The production of forestry and lumber industry satisfactorily conformed to the plan.

The results of food-producing branches

		1980 January - August The same period of last year = 100%
1. Marketing of agricultural products		
Plant and gardening products, total		123.3
including:	cereals, industrial, and other plants	142.2
	vegetables	85.4
	fruits	114.1
	wine	85.0
Livestock and animal products, total		100.6
including:	live animals	100.5
	animal products	101.0
Agricultural products, total		107.4
2. Food Industry		
Socialist food industry		99.1
including:	meat industry	98.8
	poultry and egg processing industry	100.8
	dairy industry	100.2
	canning/preserving industry	97.1
	milling	93.0
	brewing	102.0
3. Foreign trade in food, live animals, and food industry products		
Imports -	ruble accounts	86.2
"	dollar and other accounts	93.8
Total imports		92.5
Exports -	ruble accounts	91.8
"	dollar and other accounts	112.0
Total exports		106.1

Source: MEM - Stagak

The enterprises' labor policies were favorably influenced by the changed economic conditions. The number of persons engaged in agriculture increased to a small extent mostly due to an expansion of auxiliary activities, but manpower in the food industry and forest management was lower. The productivity of live labor increased in all 3 branches.

Less Money for Investments

Agriculture shipped 2.2 percent less products to industry and commerce than in the year before. Its shipments to the free markets declined by 18 percent. This was the result partly to less cereal available from the previous year's crop and partly to late ripening as already mentioned. As the result of consumer price increases, the food industry increased its internal marketing only by 0.3 percent, which is less than projected. The export of agricultural and food industry products was 4.5 percent less in the first half of 1980 than in the year before. This was 1.3 percent less in value. Imports decreased by 14 percent in volume and 12 percent in value during the same period. Thus, the positive trade balance increased by 7.2 percent over that of the first half of 1979.

Investment activity decreased as a result of less availability of development resources and higher risks. Investment volume was 10 percent less in agriculture, 35 percent less in the food industry, and 10 percent less in forestry in the first half of 1980 than in the year before. The enterprises devoted their investment assets to finish projects already started, to replace worn machines and equipment, and for investments in machines that improve production efficiency.

Dangerous Economization

The changes in economic conditions and markets had important effects on the enterprise management and economy. More than before, the economic decisions were decided by investment and profit indices and other financial aspects. To counteract the effect of the harsher economic circumstances, short-term activity became important.

The farms could not lay the groundwork to the 1980 plan's tasks in every respect. The lower profit levels of 1979 narrowed the sources for investments from the inside. The production and the savings levels fell especially below the requirement. In addition, monetary assets to cover individual production expenditures developed unfavorably.

Due to the changes of conditions of enterprise management, the procurement of industry-originated products (machine parts, fertilizers, herbicides, etc) declined. Some of the products that were needed for production were assured by purchasing them ahead of time but the farms also attempted to lower their purchasing by more efficient product and inventory management. However, lower purchases may result in lower production in some of the farms.

The change of regulating indices and in marketing conditions affected the various branches of the food industry in varying ways. In the first half of the year the profitable enterprises had 21 percent higher profits than in the first half of 1979 but the money-losing enterprises' losses increased by 68 percent. The 5 billion ft total export of the food industry was profitable in every branch, even when counting export-related accounting. The improvements were highest in the meat, cereal, and poultry industry. Improvement was noted also in the wine and tobacco industries. However, in the other branches profits were less than in the first half of 1979.

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PRICE CHANGES NOTED IN AGRICULTURAL BULK BUYING

Budapest FIGYELO in Hungarian 15 Oct 80 p 133

[Article by Huba Radnoti, "Bulk Buying Experiences"]

[Text] Commissioned by the cooperatives, the regional National Council of Agricultural Cooperatives' regularly follow the marketing of agricultural products. At the beginning of the year—to partly off-set the production cost increases—new bulk buying prices and standards were put into effect. The producers are mainly interested in the practical effects of the centrally-decided and contractually-fixed price increases, as influenced by product quality and the objectivity of their classing.

According to information received from several regional associations, broiler chicken's prices rose by 5 ft per kg. In Vas County, the average price paid to the cooperatives was 30.67 fts in the first quarter of 1980 (25.32 fts in 1979), and 31.22 fts. in the 2nd quarter. This is somewhat above the original projections. The higher price is due to the higher quality of the poultry. Second class quality was marketed through different channels.

In Csongrad County, the wholesale price of poultry increased by 16.7 percent in the first half of 1980, instead of 15.9 percent, as planned. Even this was not enough to offset increased production costs. According to preliminary calculations, profit continued to drop and the willingness to produce fell. Several units reduced production and plan to phase out poultry.

The poultry processing plants' willingness to pay in time has significantly improved. Late payments, which have caused so much trouble in previous years, ceased. The enterprises are living up to their contract obligations.

In line with the ruling on wholesale beef prices, the basic livestock price had to be raised by 2.50 fts. Counting bonuses and other increments, this amounts to a 12.8 percent average increase on the average. The price increase which was designed to offset the production cost increases was accompanied by a tightening of the quality standard. As a result, in some parts of Szabolcs-Szatmar County, price of fattened bulls increase has reached less than one-half of the planned wholesale price. In Vas County, they concluded that fattening by feed grain—which is an important goal in our production policy—does not result in higher quality because the extra 2 to 3 months of fattening increases suet content which, in turn, lowers the quality and meat class.

Preparation for beef export is also unfavorable. The meat-packing enterprises contract for export only 1 to 2 months before delivery. One cannot develop a feeding strategy, suitable for the demands of the foreign markets in such a short time.

The average wholesale price of pork sides approaches the value indicated in the price directives according to reports from Fejer, Hajdu-Bihar, and Bekes Counties but is still a little below it. The average price was unfavorably influenced by the increase in the number of hogs that are in the so-called "above weight limit" class. As an example, while only 6 percent of the Hajdusag hogs was in this class in 1979, in the first half of 1980 their ratio rose to 12.3 percent. This is partly due to the late acceptance by the meatpacking enterprises and partly to the deficiencies in feeding technology.

Cooperation between the producers and packers improved in several regions. In Pest and Gyor-Sopron Megyes the packers regularly inform the cooperatives on the quality and price level of the hogs they will buy and advise on improving the efficiency of hog-fattening. To spur better-quality hog-breeding suitable for home, some enterprises offer premium prices to the producers and prepare a program to strengthen economic links.

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HALF-YEAR ACHIEVEMENTS OF CHEMICAL INDUSTRY SUMMARIZED

Budapest FIGYELO in Hungarian 8 Oct 80 pp 1, 6

[Article by Laszlo Racz: "The First Half Year in the Chemical Industry"]

[Text] According to the national economic plan's projections, the volume of chemical industrial production in 1980 should increase by 6.8 percent. In contrast with this, production decreased by 2.3 percent in comparison with the first half of last year. The largest decline is noted in the petroleum industry where production is 90 percent of last year's level. As a consequence of measures enacted during the year because of energy savings, the level of petroleum refining also falls short by about 1 million tons of the volume processed last year. This central measure by itself decreased the growth of chemical industrial production by 5 percent. Not counting petroleum refining, the chemical industry's production increased by 2.7 percent. This last item of information shows correctly the chemical industry's actual performance.

Production

Production in the organic and inorganic chemical industries increased by 1.4 percent. Mainly the production of the Tisza Chemical Combine, the Nitrochemical Industrial Plants, the Borsod Chemical Combine, the Budapest Chemical Works and the Pet [city] Chemical Works increased. Compared to last year, powdered PVC production increased significantly (14.5 percent), as did the production of plant protecting chemicals (11.3 percent) and ethylene and propylene production (5 percent). At the same time, production of nitrogen- and phosphorous chemical fertilizers decreased (by 3 and 16 percent, respectively), but also less chemical fibers were produced (by 2.8 percent). The decrease of this latter was caused by raw material (caprolactam) supply and by sales problems.

Under the effect of central measures, production of the petroleum refining industry decreased by about 10 percent. Within this, gasoline and diesel fuel production decreased by 10 to 12 percent, heating oil production by nearly 20 percent. The energy supply was smooth, even in spite of this. Similarly, the domestic natural gas-product production is down by about 8 percent. According to the plan this should have decreased by 15 percent, but due to the longer heating season at the beginning of the year it became necessary to increase the projection. There were also no problems in natural gas production and supply.

At the beginning of the year, the pharmaceutical industry struggled with material supply problems, and they succeeded in eliminating these only in the second quarter. As a result of this, several pharmaceutical items were listed as shortage items in the first half of the year. In spite of the problems, the pharmaceutical industry increased its first half year production by 4 percent. Production accelerated mainly in the recent months, and the pharmaceutical industry is expected in this year also to be the chemical industry's most dynamically growing branch.

The paint industry's production decreased by 6 percent. In spite of the decrease, satisfying the population's needs was well balanced. During the [first] half year there were production and transportation problems in some of the traditional oil paints (as a consequence of difficulties in obtaining flax oil).

The chemical industry's household and cosmetics branch increased its production by 3.6 percent. Domestic commerce's [first] 6-month needs significantly exceeded the needs of last year's identical time period, but industry was successful in organizing a smooth supply. The behind schedule arrival of imported raw materials caused problems in the production of some products (mirror and window cleaners, laundry soaps, etc.), as did the tensions which seem to be becoming permanent in the supply of packaging materials. At the same time, the appearance of several new products on the market--fruit-scented soaps, new aerosol products, etc.--improved the quality of the population's supply.

The rubber industry's production remained essentially at last year's level, but production increased dynamically in truck and bus tires (by 18 percent) and hoses for deep-well drilling (10 percent).

Production increased most (21 percent) in the plastics processing industry. This will make it possible to process the domestic plastic production which has been growing rapidly in recent years.

Productivity

The productivity of live work increased by 4.8 percent (without the petroleum refining industry), but decreased by 8 percent in the petroleum refining industry. Thus the above average growth of productivity continues.

Among heavy industrial branches, employment has been decreasing the fastest in the chemical industry since 1978. For this year the enterprises planned a 1 percent decrease in employment, but it has in essence already decreased by 2 percent in the first half of the year. Significantly exceeding the average, employment is decreasing by between 5 and 10 percent at the Charcoal Producing Enterprise, at Forte, at the Budapest Chemical Works, at United Chemical Works, in the Hungarian Viscose Factory and at the Cosmetics and Household Chemicals Enterprise. Decisively, the decrease is the result of manpower management. The ministry's guide principles determined the extent of manpower savings [which had to be achieved], down to the subbranch level. The enterprises built this into their yearly plans, but "overfulfilled" them already in the first half year.

At all chemical industrial enterprises the production increment was in its entirety covered by the increase in productivity. The sole exception is the Hungaria Plastics Processing Enterprise, which also achieved the highest productivity increase (20.5 percent).

In addition to the petroleum refining industry, productivity decreased in the paint industry (by 3 percent) and in the rubber industry (by 1 percent). In the paint industry, productivity declined in spite of a decrease in employment. [sic]

The international productivity comparison studies continue. Each year the enterprises determine their relative productivity levels and study the dynamics of improvement. This year, regional productivity associations also aid this work. (See FIGYELO, Nos 6 and 23, 1980)

Export

The chemical industry provides 70 to 75 percent of the heavy industry's export in both [socialist and capitalist] relationships. In the 5-year plan time period now in progress, the growth of the chemical industry's nonruble-related export became extremely dynamic and in 5 years will nearly have quadrupled in value. With this performance the chemical industry will in 5 years become one of the leading industrial branches in non-ruble accounted export.

It has been causing problems for decades that the import of ehcmical industrial products grew faster than their export, consequently the chemical industry's export-import balance continuously deteriorated. A favorable change in this trend was first seen during the Fifth Five-Year Plan. The export of chemical industrial products has been growing at a significantly faster rate since 1975; as a result of this, the deterioration of the balance stopped during the first 2 years of the plan time period, and has expressly been improving since 1978.

In the first half of this year, the nonruble accounted export of the chemical industrial enterprises surpasses that of the same time period of last year by more than 50 percent. The petroleum refining industry and the Pet Nitrogen Works achieved outstanding results. At both producing units the nonruble related export doubled. By approximate calculations, the price increases and volume growth both accounted for about half of the export increment.

The value of the chemical industry's export to socialist countries increased by over 15 percent, and [the chemical industry] in the first half year fulfilled 50 percent of its delivery obligations in the international agreements. In socialist relationships the organic and inorganic chemical industries, the Nitrochemical Industrial Plants and the petroleum refining industry increased their exports more than the average. Extra export by these reached values of between 60 and 150 percent.

In overall terms, the first half year's export of the chemical industrial enterprises was profitable. This statement refers primarily to the nonruble accounted export, where the foreign currency production index of the products calculated on the basis of total cost improved by 2 forints in one year, remaining below the value planned for 1980, and can be judged good even at the national economy's level. The profitability of about 70 percent of the export is very favorable. As a consequence of the improvement in the [foreign currency] production index, export's specific need for subsidy has decreased. Even in the first half of the year about 70 percent of the export required no subsidy.

In their first half year's export to capitalist countries, the chemical industrial enterprises produced about 1.5 to 2 billion forints. This can be considered

favorable, but it also shows a very wide spread. The export profits of some enterprises producing raw materials were very favorable, while it was unfavorable for a few enterprises. We can look for the reasons for this in the market problems (low contract prices), and in the large value of inventory increase during the year. By year's end the capitalist export of the pharmaceutical industry's enterprises may also become profitable, with more dynamic export increases.

The chemical industry's socialist export is not quite as promising; here the [foreign currency] production costs are deteriorating in comparison with 1979. The deterioration occurred in spite of the fact that the profitability of more than half of the socialist export continues to be very favorable.

The Effect of Regulations

Under the influence of the 1 January changes in prices and regulations, the profit growth of chemical industrial enterprises has become more moderate. While the growth of production and export shows an accelerating trend in the [first] half year, a larger amount of the profits was realized in the first quarter and a smaller amount in the second quarter. According to the balance, profits were at 64 percent of last year's first half, and 53 percent of last year's corrected [time-adjusted] profits. The chemical industry in the first half year fulfilled only 38 percent of the 1980 annual profit plan. The United Pharmaceuticals and Nutrition Materials Factory, and the Kobanyai Pharmaceuticals Factory showed net losses in the first half year. Sales of the United Pharmaceuticals and Nutrition Materials Factory declined, its inventory of its own products increased. Its losses showed a decreasing trend in the second quarter and are expected to be eliminated by year's end.

Average wages at the chemical industrial enterprises increased by 5 percent in comparison with the first half of last year. The increase is smallest among the heavy industrial branches. Comparing the dynamics of the average wages and of production, it can be established that the increase of wages exceeds the growth of productivity. In the petroleum refining, paint and rubber industries the wages increased while at the same time productivity decreased.

Average wage increases of between 10 and 12 percent materialized in the Tiszai Chemical Combine, the Pet Nitrogen Works and in the United Pharmaceuticals and Nutrition Materials Factory. Wage increases below 2.5 percent were given by the Peremarton Chemical Industry Enterprise, the Chinoin, the Budalakk [Buda Varnish] and the Taurus [factories].

It causes a problem for some of the enterprises that an increase in the wage development index--with respect to the low base value determined during the repricing process--does not represent an actual improvement in efficiency. In the interest of preventing further unjustified wage increases, we have instructed the enterprises, by means of a memorandum, to review the basis of the wage development indices, and to be moderate in wage management in the second half year.

The chemical industry's production will further accelerate in the second half year, and by year's end the growth will reach 3 to 3.5 percent, even including the petroleum refining industry. During the time period of the Fifth Five-Year Plan as a whole, annual production will increase by [an average of] 8 to 8.5 percent. Over the average of 5 years, the chemical industry will remain the national economy's fastest growing branch.

Productivity's growth rate will further accelerate in the second half of the year, and on the basis of comparative prices it will reach 5.5 to 6 percent for the year. Over the average of five years, the dynamics of production is 8 to 10 percent growth per year. Actually this extremely high productivity growth rate has been going on since 1970, and for ten years it has been the highest among all industrial branches; it is true, however, that the effect of investments which were started up [during this time], also plays a role in this.

Increasing exports is the chemical industry's most significant achievement. In socialist relationships it fulfilled its plan in every year of the Fifth Five-Year Plan, and nearly doubled its export during the plan's five years.

Since 1975 the growth of nonruble related export has been 30 percent per year, while an annual average of $[illegible]00 million [USA dollars] over-the-plan export was achieved. So far on each occasion [each year] they overfulfilled their annual export plan. During the Fifth Five-Year Plan, about $250 million over-the-plan deliveries were realized from overfulfillments alone!

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BRIEFS

NEW SHIPPING LINE VESSEL--Today in the port of Gdynia a flag will be raised on the latest vessel of the PLO [Polish Ocean Lines], the universal general cargo vessel, "Gen Franciszek Kleberg." The vessel, which was built by the Warski yard in Szczecin, is one of the largest in the liner fleet. She has a carrying capacity of 17,200 tons and is one of the fastest, capable of a working speed of 23.5 knots. The vessel can carry conventional general cargo, chemicals, technical and edible fats, and 548 20-foot containers. She will ply the Australia line. However, she is the last vessel ordered in Polish yards by the PLO; there is no confirmation for further orders. The PLO is an important firm. It belongs to 19 shipping conferences, and maintains 11 joint liner services like Balt-Africa and Balt-America, but it has one of the oldest liner fleets among important owners. The program of new vessel purchases necessary to maintain its position in the shipping market has been realized according to current requirements. The program of modernization up to 1985 provides for 56 vessels. So far only contracts for the delivery of 4 22,000 dwt conro vessels from France have been concluded, and 4 ro-ro vessels from Spain of 21,000 dwt will begin working in 1982. The conro vessels ordered in France will be delivered next year. The first one launched at the end of September this year was named "Tadeusz Kosciuszko." All four will be operating on the North American line, and the ro-ros from Spain will operate on Australian lines. [Text] [LD120552 Warsaw Domestic Service in Polish 0600 GMT 11 Oct 80]

SUMMERTIME ENERGY SAVINGS--According to Henryk Podsiadly, departmental director in the main inspectorate for energy, the savings of electric energy during the summertime period between 6 April and 27 September amounted to about 410 million kilowatt hours. [AU031818 Warsaw TRYBUNA LUDU in Polish 27-28 Sep 80 p 2]

CSO: 2600

SMALL-SCALE INDUSTRY ROLE IN LOCAL RESOURCE USE DEFINED

Bucharest REVISTA ECONOMICA in Romanian No 40, 3 Oct 80 pp 3-4

[Article by Mihai Caramzulescu]

[Text] Superior utilization of all the available local resources, materials and labor in each Romanian county is a primordial requirement in the effective growth of the overall economy. In this context, great emphasis is placed on small-scale industry, which is the only one capable of broadly utilizing the local resources and turning them into significant items for industry and the population. As stated by party secretary general Nicolae Ceausescu at the recent Congress of People's Councils, the output of small-scale industry needs to be significantly expanded for its being instrumental in the more rapid rise in the national income and the overall wealth of the country and in the improvement of the overall well-being of all our people. The provisions of the draft Law on the development of small-scale industry, which was published recently and submitted for public debate, is aimed at meeting these requirements. The draft's provisions envision the increase in the output of small-scale industry from about 1800 lei per capita on the average to 5000-6000 lei per capita. For the overall economy, this will mean an annual output of 120-140 billion lei in the next decade.

The emphasis in small-scale industry is on the production of consumer goods, household items, building materials, and services. Small-scale industry streamlines also include production, repairing and reconditioning of parts, components and subassemblies for the population and industry plus structuring and production of goods in cooperation with other economic units.

Small-scale industry covers a very wide sphere. It includes production and service units under people's councils, artisan and consumer cooperatives, the industrial production units within the framework of agricultural production cooperatives, other small units that belong to various local and central economic bodies, and the activity of small scale artisans conducted in compliance with the legal provisions.

The basic idea which underlies the growth of small-scale industry is making best use of existing raw materials and supplies, of reusable materials, by and large of local resources.

Active Involvement in Putting Useful Minerals to Better Use

Small-scale industry plays a major role in reinvigorating the rich and valuable local traditions of our people in various areas of activity. In this context it needs to systematically focus on expanding extraction and processing of various types of rocks for their being utilized as building materials. This must be done because so far there has been an inadequate effort in terms of organizing the operation of some quarries of rocks (including their being processed into bars and plates), extraction of ballast and sand, use of some small deposits of marble, calcite and alabaster, utilization of calcareous rocks, of volcanic tuff, shale, schists, clay (including natural drying of clay in brick form).

It is known that now there are situations when, for the purpose of processing in existing units, certain construction materials, and especially ballast and sand, are transported over distances of 200-300 km, sometimes even 500-600 km, with shipping being a factor in considerably raising the costs.

This occurs in the context of each commune, each locality having, in light of its location, specific traditions in completing construction projects by chiefly using local material resources. Consequently, small-scale industry can and must revive these creditable and effective traditions and thereby do its share in achieving significant savings in terms of construction materials in short supply and involving high energy consumption levels such as metal, cement, and bricks burnt with high-grade fuel.

Moreover, about 35 percent of Romanian counties contain mountain areas with known geological reserves of hard rocks of granitic and other types which weather wear and time. Nevertheless, asphalt still is in high demand and widely used in modernizing roads in and between localities, even though conditions exist for building paved roads from quarry-cut rocks or even out of rocks from rivers. The maintenance costs for these roads are 6-7 times lower than those for asphalted roads. This economic aspect needs to be taken into consideration, because, although the initial effort is greater in the case of using rocks, the amortization of investment costs takes a shorter period of time.

Furthermore, this country has a tradition in using relatively simple procedures for putting to good use small-size deposits of useful mineral substances, which can provide an important input into resolving problems of local economy. These problems include utilization of peat, which occurs in northern Moldavia and eastern Transylvania. Peat is a good fuel but also can be utilized as a natural fertilizer and, as such, has for many years been an export item for various countries. Unfortunately, its utilization has been unjustifiably discontinued. Furthermore, there are various areas in Romania, and we only point out the Caransebes area, where high-grade lignite deposits occur. Putting these deposits to good use would result in meeting the needs of some socialist units and also resolve problems of heating for the population. Also, in the area of Brad town (Hunedoara County) and in other parts of Apuseni Mountains, in Maramures, in the Eastern

Carpathians, various semiprecious stones were known and put to good use in the old days. The residents have now abandoned this pursuit. But small-scale industry must also concern itself with other useful mineral substances such as ferrous and nonferrous and gold and silver mixtures, rare metals and suchlike whose processing can proceed either on a local scale or in conjunction with the industry of countrywide importance.

Effective Methods for Use of New Raw Materials and Energy Sources in the Economy

In the above-mentioned context, special attention must be paid to new sources of energy. In all the localities it is possible to produce biogas, a fuel that is inexpensive and easy to utilize. Hence, each people's council needs to organize the serial production of the prefabricated items and the provision of the required equipment at accessible prices, which allow for a rapid expansion of this technique. Moreover, favorable conditions exist for the development of microhydroelectric power stations, eolian power stations and solar energy capturing units. Very little has so far been done in this area. The local people's councils continue to request supplemental amounts of fuel and energy from the central fund, although based on initiative and care it could be ensured that shortly, at least the population's consumption increase would be covered by usage of and capitalization on nonconventional sources of energy.

Studies conducted so far indicate that at least 15 counties have proper conditions for developing in a short period several hundred microhydroelectric power stations on inland rivers in mountain or hilly areas. They could take over a part of the current consumptions of the national electric energy system and save -- in the first stage -- 10,000-15,000 t/year equivalent conventional fuel.

Furthermore, industrial handling of some vegetable resources is very efficient for small-scale industry. There are large amounts of osier, straw, reed, sorghum, corn husks, rush and other such raw materials which the residents' skill can turn into attractive household items whose uniqueness proved them also to be in very high demand for export. For instance, wickerwork made by units of small-scale industry in Tulcea County are successfully marketed in 15-20 countries, with a rate of return of under 15 lei/dollar. Moreover, there should be greater concern for a far broader utilization of natural medicinal herbs or crops, specifically for the processing of these plants and other plant and mineral raw materials for extracting valuable chemical components, dyes, for making cosmetics and other products.

Our country is among the richest in forest fruit, mushrooms and various secondary agricultural resources that can be processed by small-scale industry. Consequently, we could achieve the substitution, for instance, of imported extracts or concentrates used in preparing refreshing drinks and concomitantly in ensuring the export of such products which are much sought after in various countries.

In addition, necessary and feasible is the utilization of the wood that results from windfallen trees and hygiene felling. As a rule, these resources occur in barely accessible areas. Based on legal approvals they can be processed by small-scale industry at a utilization level of up to 3-5 times as high as the initial value of the raw material, inclusively by turning out furniture with specific local features. Forestry work also involves large amounts of twigs, leaves, and bark which are now lost to a great extent. Small-scale industry can in many ways be instrumental in transporting from forests and processing these materials which in other countries are included among most valuable raw materials.

Small-scale industry ought to focus on processing and making good use of scrap raw materials, reusable materials, parts and subassemblies resulting from the dismantling of some fixed assets, of discarded durable goods from people's households. A few figures on the economic efficiency of such activities are very illustrative. For instance, scrap plastics redeemed as such are priced 1000-1500 lei/t. Sorting and washing brings the price to 2500 lei/t and shredding, to 3000-3500 lei/t. If granulation -- which provides the raw material for the plastics processing industry -- is achieved as well, the price reached is 4500-5000 lei/t, and processing into finished products brings the price to more than 10,000 lei/t.

Equally efficient is the reconditioning of some parts and components which result from redemption. According to the procedure in some units, the median cost for reconditioning a part represents 15-25 percent of the cost of a new part, and in most cases the quality and durability obtained is similar to those of the new part.

Comprehensive Definition of Small Units' Role

It is essential that all activities which are organized focus on achieving a few objectives which are decisive factors for ensuring the highest possible efficiency of small-scale industry, predominantly along the following avenues:

a. Creation of broad and diversified networks, operating in existing small areas, which are as close as possible to the sources of raw materials and customers;

b. Use of machines and installations, tools and devices which have become available in various economic units or based on repairs and modernization of discarded fixed assets, by ensuring their redistribution, transfer, hiring or purchase, in compliance with legal provisions;

c. Attainment of low energy consumption rates by using to the greatest extent low-grade fuels, secondary energy resources and other local resources;

d. Expansion of production and services by work at home, thereby ensuring the priority involvement of women, disabled people, retired persons, and so forth;

e. Expansion of the contract work system, of the piece rate or of the percentage rate must underlie the structuring of this activity so that each working person may achieve incomes in direct ratio to the quantity and quality of the work done;

f. Minimization of the transportation volume, utilization, wherever possible, of simple conveyance facilities over short distances -- little carts, wheelbarrows, tricycles and of horse-drawn vehicles -- whilemuch as possible avoiding the fuel consumption that is required in the case of mechanized transportation.

Experience so far indicates that in small-scale industry the provision of fixed assets for 1 million lei output is only 50-30 percent of the provision required in large-scale industry and the provision of work in terms of energy is 20-40 percent lower. All these figures prove the efficiency of this form of production and services which can be based on minimal provision of equipment but on concerted organizational efforts on a countrywide scale.

A particularly important aspect of small-scale industry activity involves the fact that it is instrumental in providing more jobs. This applies to both the localities or areas which have a surplus of female work force and to the units in rural areas, where this industry can employ all the work force all the year round, a fact which will help to increase the cooperativized peasantry's incomes.

As specified in the final section of the draft Law submitted for public debate, all the activity of small-scale industry will be overseen by the executive committees and bureaus of people's councils, which will be responsible for guidance and control in the territorial area involved. The focus at this stage is on analyzing and determining all the fields in which small-scale industry will develop, incorporation of its activity into programs for this year and on a long-range basis, and promptest provision of the facilities required. In this context, provisions will be made for the completion of the tasks set by the party leadership in the area of expansion of small-scale industry and some actual needs which result from the current stage of our economic development will be better met.

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PROSPECTS FOR WAVE ENERGY UTILIZATION ASSESSED

Bucharest ENERGETICA in Romanian No 5-6 May-Jun 80 pp 205-207

[Article by engineer Rear Admiral Constantin Tomescu, director of the Romanian Institute of Marine Research at Constanta, and engineer Mihai Enache, a principal scientific researcher at the Romanian Institute of Marine Research: "Prospects for the Use of Wave Energy in the Socialist Republic of Romania"]

[Text] The Percentage of Wave Energy in Romanian Energy Resources

Keeping in mind the importance of using all the energy reserves that can contribute to improving our country's energy resources, it appeared necessary to evaluate the resources of the Black Sea. The following resources are considered potential reserves that could possibly be used, to the degree of the evolution of prices for classical fuels and the development of production technologies: wave energy, energy from the temperature differences of water at different depths, wind power and solar energy collected with the help of installations mounted on floating systems.

In addition to these, one can mention the energy from the difference in salinity from one level of water to another and the energy from marine currents, with these having a smaller percentage than the others mentioned. Although the value of the energy potential for these resources has not been precisely calculated up to now, it is nonetheless felt that the wave energy of the Black Sea has the largest share compared to the others. Waves contain the most concentrated specific energy per unit of surface area, compared to wind power and solar energy, directly tapped at sea level through different technical procedures. On the basis of estimates made to date in different projects, the manageable technical energy potential of waves on the Romanian coast was estimated at approximately four TWh/year, at the level of current knowledge. This figure can be compared with the figure of 38-40 TWh/year for the manageable technical potential of the rivers in our country.

As can be seen, although it has reduced possibilities with regards to the energy potential of waves, when compared to other seas and oceans, the Black Sea can contribute to energy resources with a quantity of energy equivalent to an annual savings of fuel of approximately 1.5 million tons cc.

An analysis of the structure of electrical energy production at 1985 and 1990 levels, taken from documents on energy prospects, shows that from a total production of electrical energy of 90 and 110 TWh, respectively, nonconventional energy sources and recoverable energy sources will account for 4.4 and 11 TWh, respectively. For the year 2000, it is estimated that approximately 20 percent of the country's energy production will come from nonconventional sources. In this estimate, it is felt that the following could be exploited: solar energy, wind power, geothermal energy and energy obtained from bio-gases produced through fermentation. Wave energy does not explicitly appear here and for the other sources it does not specify separately the effective reserves.

The Development of Technologies for Using Wave Energy on the International Level

An analysis of existing achievements on the international level show that to date the sole effective application of wave energy is the supply of electricity to certain optical signaling systems and to certain meteo-oceanographic bouys. Thus, up to 1979 in Japan, approximately 300 illuminated bouys that had been built and put into use over different periods were powered by generators driven by waves. This is the system based on the principle of the "liquid piston"-air turbine. The installed power of the electrical conversion system is between 20 and 200 W, depending on the size of the bouy.

Both Japan and Great Britain, where involvement is at the most advanced stage, intend to electrical or other types of energy, with a possibility for industrial use, once they build certain large scale operational installations (100-500 kW). We are speaking of marine power stations with a capacity of at least 1-10 MW, built on floating platforms that also contain its utilities. It is felt that this will provide a production of electricity that is competitive with other conventional production systems, given the extremely favorable action of the sea and the evolving technological progress that will be adopted.

Currently, we feel that in the exploitation of wave energy there seems to be on the international scene three directions that offer possible prospects for our country:

- small installations, with 500 W maximum power, used in optical beacons and radios to signal courses or certain dangerous areas; the energy obtained is completely used at that location, with storage provided by batteries; thus, anchored or drifting meteo-oceanographic beacons can be powered;

- medium power installations, of approximately 10-20 kW, used to power certain isolated marine equipment, such as oceanological observation points or platforms, as well as to provide auxiliary power for oil drilling platforms. The energy is used concomitantly with its production and in parallel with the basic energy system in use, with the problem of storage being a complementary one;

- high power installations, up to 10-20 MW, truly independent energy complexes; in this system, the problem of storing electricity or of converting it to another form of energy becomes a major problem, since the system will operate isolated, far from shore, and the use of power lines to shore would unjustifiably increase the price of delivered energy.

In this stage, the use of high power marine power stations, we will have the problem of using the energy on the spot under conditions of high efficiency, something that will be possible only if the user can accept an intermittent and undetermined schedule of energy delivery. Therefore, it first appears necessary to store the energy either in order to deliver it under a uniform schedule or in order to transport it to shore in a concentrated form.

Romania's Specific Conditions in the Field of Using Wave Energy

In analyzing the perspectives for using wave energy in our country and the potential benefits of the diverse forms of energy that could possibly be obtained, the following has been kept in mind:

- the study of this technology on the international scene and the trends that are showing up with regards to possible uses;

- the price of fuels, metals and other raw materials;

- the conditions specific to our country.

The specific conditions of our country require taking into consideration the following premises for analysis:

- the Romanian coast has reduced possibilities, both with regards to the production of energy annually (approximately 50,000 kWh/meter per year at sea) and the average available power (approximately 7 kW/meter at sea); these values have a direct influence upon the optimum installed power in any type of collection system adopted, being several times lower than the values considered economical in other locations in the world oceans for wave energy collection systems;

- the price of electrical or mechanical energy obtained in this manner will always be greater than that obtained (either on land or at sea) from wind power installations;

- the technical support necessary for this activity is barely in the development stage, with oil exploration and exploitation under maritime conditions still in the beginning stages and other marine industries, such as aqua-culture or geological exploitation, under study;

- in the case of wave energy, an especially complex technology that complements other technologies and is multidisciplined is being developed with regards to the number of scientific fields that must make contributions;

- the interdisciplinary character of wave energy technology requires significant investment efforts in research and development, efforts that can only be justified after certain complex economic analyses that take into consideration energy reserves and the possibilities for use;

- the evolution of prices in the energy market still has not attracted in a practical manner those resources with higher delivered energy costs.

The overall technological complexity is practically identical with that of underwater work technologies whose costs and activities are especially expensive, both in relation to the price of the products obtained and in relation to the building costs of certain installtions that are of vital importance, but only sporadically used.

The Prospects for Using Wave Energy in Romania

In Romania's case, we feel that in the coming years the following uses will be able to be extended:

- The 1982-1985 Stage: installations with approximately 100-250 W of power used for illuminated beacons, radio-beacons and navigation lights in isolated areas and difficult access areas, as well as for powering oceanological measurement systems.

- The 1985-1990 Stage: installations with approximately 5-10 kW of power used to supply electricity to certain observation and research platforms and oil and geological exploration and exploitation platforms.

- The 1990-2000 Stage: installations with 100-200 kW of power used for the basic supply of electricity to certain isolated industries of small scope located in different areas along the coast.

With regards to the use of certain high power installations, on the order to 1-10 MW, it is felt that they would not be economical during the next 20 years in the Black Sea.

All of the above estimates, however, must be validated for each particular situation by a technical-economic study comparing it to other energy alternatives. Only after such a comparative economic study can it be stated which of the variants of supplying the user is preferable under conditions of technology and price.

Keeping in mind the considerations made to date in the different works regarding the value of the energy potential of certain nonconventional energy sources, we comparatively estimate the following evolution of their introduction into the economic circuit:

Energy Resource	Planned Potential (TWh/Year)				Total Potential (TWh/Year)
	1985	1990	1995	2000	
Solar Energy	0.5	2	5	10	30
Wind Power	0.1	1	3	5	10
Wave Energy	-	0.1	0.5	1	4

This estimate was made keeping in mind that the use of solar energy and wind power benefits from an important technological head start and from the support of other technical procedures that have already been broadly assimilated in our industry, as well as from conditions of greater economy for both methods compared to wave energy when forecast on a world-wide scale until the year 2000.

Beyond these relatively succinct, but nonetheless real considerations, we note that the use of wave energy will also be rational for Romania at a certain stage for the following reasons:

- by their specific nature, the installations for collecting and converting wave energy will be able to make an important contribution to activities to protect the coastline because of the fact that they will absorb part of the waves' energy; in this context, the technical-economic indicators will become advantageous, keeping in mind this complex use;

- in the event of the parallel development of collection systems for solar energy and wind power on floating platforms, the inclusion of wave energy collection installations in complex platforms for the production and storage of energy will ensure higher investment and production indices for the entire system;

- in addition to the advantage that it is free and replenishable, this source of energy also has the advantage that it is nonpolluting and does not need cooling water;

- from the point of view of ecological implications, no unfavorable modifications of any type are foreseen at this time;

- the installations can be built using domestic means with regards to planning, research, design and construction, with them being close to the technology and difficulties of offshore oil drilling and exploitation, a field in which our country will continue to increase is efforts and experience.

Under conditions where, in the year 2000, Romania's estimated production of electricity will reach approximately 130-140 TWh/year, the production of one TWh/year, which wave energy from along the Romanian coast will be able to provide at that time, according to the most optimistic estimates, will represent less than one percent.

Faced with the unfavorable prospects of meeting energy requirements both domestically and on the international level, it is time for wave energy to be taken into consideration for uses where it will be competitive. Similarly, it is necessary to continue research in this field in order to be able to make the correct decisions when the energy policy and the prices for other resources experience new changes.

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USE OF AUTOMATIC DATA PROCESSING SYSTEMS DISCUSSED

Bucharest ERA SOCIALISTA in Romanian No 20, 20 Oct 80 pp 11-13

[Article by Mihai Draganescu: "Data Processing and the Technological Policy"]

[Text] The technological policy pursues the providing of economic development and of progress in general, including the solving of the problems in the sphere of economics or ecology that arise at a given time in the existing social framework. It is part of the general policy of the socialist state.

The social and economic implications of data processing are now becoming so great that it is not only one of the fields that are subject to the general technological policy but itself raises the problem of establishing a "political technology."

Political technology is seen as a field that studies the social consequences of new technologies and examines technologies possible or desirable to achieve, in order to help the current society evolve toward a higher phase, such as communism. At the same time, it devolves upon political technology to study the consequences of the new microelectronic, data-processing and cybernetic technologies for man's pyschology and hence for society, the changes that are occurring and will occur in the structure of the work force, in the utilization of the people's time in production and in their life outside of production, and a whole series of other aspects. Political technology can recommend the adaptation of society in advance to new processes. It offers somewhat longer-term thinking, but not exactly of the remote future.

Now, when a new industrial revolution is beginning--the second one, which is coming to radically change industry

and the organization of production—a technological policy that does not consistently pursue the creation of an electronic and data-processing infrastructure would become anachronistic, generated by a lack of understanding of the evolution of the current world. In this regard, it should be pointed out that the directives of the 12th RCP Congress provide, for our country, as a main direction of technological development, the mechanization, automation and cybernation of production, with a special accent being put on technologies that increase labor productivity.

The great effort to organize as well and efficiently as possible that which belongs to the world of the first industrial revolution, despite the merits of such an action, cannot actually take the place of the efforts that must be directed toward the creation and introduction of the means of the new industrial revolution, which is causing another organization, along with the natural and considerable growth of social labor productivity.

Political technology can formulate requirements regarding technology and even regarding science, in order to satisfy, in the future, the needs of society, establishing a number os social functions that the technical systems are to fulfill, studying the way in which these functions can be achieved. Consequently, it also addresses itself to the scientists and the creators of technology and technical systems.

Consequently, political technology includes two major aspects, one that addresses itself to the mode of management of society and another to the mode of innovation. It combines the social and the technological—how exactly the social can favor those technologies that contribute the most to economic and social progress, but also how exactly science and technology must direct their efforts in order to satisfy the great requirements of the society in the making.

The Microelectronic Revolution Requires the Use of the Peak Technological Performances

It is probably interesting to mention a few elements of technological policy devised in our country in 1966-1967 and the way in which we view them today, retrospectively, but also in the light of the future trends.

A main new element of the technological policy devised in 1966-1967 was the transition to the conception and manufacture of electronic devices of

silicon, in other words, the transition to silicon technology. There also were viewpoints--among planners, as well as among technological specialists--that supported the maintenance of germanium technology, because we possessed it then and could have been excused from new efforts. Some achievements in the laboratory that seemed to show that germanium can compete with silicon were also raised as arguments. Nevertheless, it being judged that silicon would become the predominant substance in electronics, the transition to the new technology was adopted.

It is now felt that silicon will dominate all electronics up to the end of the century. In fact, silicon is becoming a substance that will persist, like steel, taking into consideration that meanwhile the so-called microelectronic revolution has begun and that there still are big reserves for progress in silicon technology. Thus, according to some evaluations,[1] the production of transistors with submicron dimensions will be accomplished, which will lead to the obtaining of microprocessors (silicon chips) that will be able to perform between several million and several billion operations per second. A substance that comes close to silicon is a compound of gallium and arsenic, but it seems that it will merely complement silicon for the cases in which it will be necessary to perform operations with even greater speeds than silicon permits.

The microelectronic revolution--sometimes also called the silicon revolution[2]--is the basis for the second industrial revolution, along with automation and data processing. The devising of versatile industrial robots, distributed versatile automation and centralized versatile automation suited to the different fields would not be possible without microprocessors and without the new microelectronic devices with very large-scale integration (VLSI).

In 1979, the world market for microelectronics was $11 billion, and the growth of it by 20 percent per year up to the middle of the decade is expected. Regarding microprocessors, the growth will be 50 percent per year.[3] Consequently, in reality, it can be said that the new industrial revolutionary process is being caused by microelectronics, therefore, in fact, by the microprocessor, therefore by the electronic computer with its whole procession of programs and microprograms.

In a report (1979) of the National Computing Center in England, titled "The Impact of Microprocessors on the British Economy," it says that this country has no other alternative but to go ahead with silicon technology or "go out of business."[4] The report says that, in the last analysis, microelectronics affects the production processes in toto, including the mode of work and the structure of the work force. France, Japan and other countries are trying to keep very close to the level that the United States has attained in the field of microelectronics.

Although our orientation toward silicon was correct, in exchange we probably have not understood a few peculiarities of the microelectronics

industry, so that, despite the efforts at development made, sometimes with fine successes, we are nonetheless lagging behind. First, electronic products must be cheap, and the maintenance of the high prices of the electronic computers in our own production has become almost incomprehensible when there are significant and sure reserves for reducing their cost. We hope that measures in this regard will be adopted as soon as possible, which would favor the flourishing of our electronics industry and the wider and wider utilization, in our country, of the means offered by electronics.

Second, political technology, putting the accent on the functions that technology can offer to society, shows that we must utilize continually the most advanced microelectronic devices, because only with them will we obtain the necessary functional flexibility and, at the same time, the economic possibility of accomplishing it. Only on a microelectronic basis is it possible to achieve the automation stipulated in the directives established by the party for the next stage and will it be possible to carry out a wide process of computerization of economic and industrial activities. In consequence, it is necessary for our technological policy to establish, in each stage, how exactly the advanced microelectronic devices, continually more advanced, probably without cessation, up to the end of this century, are to be provided. Political technology makes it clear that microelectronics is becoming vital to society, there being potentially included in it the functions that society needs for man under communism--for man in production, and for man in town and in nature.

Data Processing--an Essential Part of the System of Social Intelligence

Another argument of the technological policy in the vision of the trailblazing years was the idea of a national data-processing system. This idea is still valid. In fact, from the outset, it was expected that a long period would be necessary for achieving such a system but it was felt, justifiably, that all the actions in the fields of computer technology and data processing must be subsumed to the idea of a national data-processing system. This was and is the framework of the technological policy in the sphere of data processing.

However, the vision of political technology places the requirements regarding data processing in the framework of what can be called "social intelligence." Social intelligence is necessary for solving social problems. Information constitutes an essential component for social intelligence. The informational component of social intelligence presupposes, on the one hand, the association of information with any object and any process in a way suited to the performance of all human activities, in order to utilize the automatic means of data processing, of decisionmaking and management. In addition, the utilization of data-processing means must also offer the synthetic elements needed for decisions. On the other hand, it also presupposes wide access for man as an individual to the information that is necessary to him for knowledge, for his mental formation, for participation in social life--which involves in a positive sense his intelligence and that of society on the whole.

Data processing is thus becoming an essential part of the system of social intelligence, it itself including subsystems for intelligent automatic processing of information. By including artificial intelligence, data processing is continually extending its sphere of activity, and its definition must be quite comprehensive. It does not refer only to automatic data processing and only to the syntactic structures from the moment when we automate and important semantic aspects of natural language. Its definition as "a science of the rational and automatic processing of information for serving the human activities in science, technology, industry, economics, culture and society in its entirety"[5] could be considered a sufficiently comprehensive definition. It is true that 10 years ago such a definition was subject to the restriction of information understood as a syntactic structure, but this restriction must be lifted. At the same time, the definition also imposed the restriction of the processing of information without the direct intervention of the human brain.

Is this restriction indeed still valid if automatic processing of information also occurs in the brain?

Although as a technology data processing deals with the artificial, nonetheless data processing understood as a basic science cannot be limited only to the technical horizon, it having to tackle the problem of information on all levels of the material world. It could then be that the lifting of the two above-mentioned restrictions would not suffice.

The definition devised at the first international conference in the field of data processing (the SPIN [expansion unknown] definition, Spain, 1978) says that data processing is "the aggregate of the fields connected with the design, construction, utilization and maintenance of automatic data-processing systems, including the part of equipment, the part of programs, the informational and human elements with their impact in all fields of activity."[6]

The fact that it is necessary to take into account the human element in data processing represents an objective reality. Data-processing systems are influenced by the human element perhaps more than any other technical systems. But in our definitions, too, without restrictions, the human element has a dual presence--one through the rationality of the processing of information, which is offered at least indirectly by man, another through the serving of the human activities in the most diverse fields, involving the former and the latter in data-processing systems, actually a mutual involvement. Both objective human elements, through rationality, and subjective ones then make their appearance. But rationality seems essential, it having to also include the subjective, which it understands in a rational, scientific way.

I will not dwell on other definitions of data processing, taking into account that the two definitions presented earlier can be considered satisfactory, they emphasing the dynamic character of the sphere of inclusion of

data processing. The problem of a new definition of it will be posed only after basic data processing outlines its horizons better.

Raising the problem of intelligence as a phenomenon of the material world, data processing is directly involved in the formation of social intelligence. And social intelligence operates with data and information whose organization and processing are becoming essential to society. It is known what a considerable effort the activity of analysis and organization of data in correlation with the economic and social reality represents, involving, as an intermediate link, the modeling of this reality. Data bases themselves are becoming models of reality. Our technological policy in the field of data processing puts a big accent—in the current stage and in the future—on data bases.

Our entire activity in the field of data processing is beginning to be oriented around data bases. This presupposes not only the existence of suitable systems of data-base management, of distributed systems of data bases, of terminals for introducing the data and interrogating the data bases, but also the devising and substantiation of a view regarding the electronic manipulation of the data in society.

The data refer not only to the economic and social processes but also to the whole reality that surrounds us. The analysis of data, a field of activity that is taking on greater and greater scope, and the digital world of data with all that it implies from the viewpoint of acquisition, transmission and processing, of retrieval and transformation into information with sense, represent activities on which we must train all our attention. The data-processing process is difficult. It is a continually evolving process, with progress being obtained in a conscious way, but in correlation with the process of evolution specific to the field of data, whose stages cannot be omitted even if the most perfected equipment were possessed. However, it is clear that we are attaining such stages of the field of data that require superior and diversified data-processing equipment and programs.

The Combined Effort of the Achievers and the Users of Computer Technologies

A final aspect to which I want to refer in this article on the elements of thinking of the trailblazing years in the field of data processing is that of confidence in the intellectual capacity of the Romanian technical personnel, of the engineers in the fields of electronics and automation, in the fields of mechanics and other technical branches, of the mathematicians and economists to master computer technology. This confidence is based on the Romanian Communist Party's general view of relying on our people's own forces. Valuable elements of the young people have been attracted for many years to peak fields, like physics, mathematics, electronics, automation, economic cybernetics, which provided us from the very start with a supply of personnel of great quality with which we were able to tackle the difficult field of data processing. This confidence has turned out to be well

founded if we review the progress achieved in recent years. The confidence was justified, but it must be confirmed further through products of computer technology, data-processing products and data-processing systems of a high technical level, which would ensure the fulfillment of the requirements of efficiency that the party and the state are now laying before data processing.

We are also entering a new stage with regard to the training and utilization of personnel in the field of data processing. At present, 43,000 working people in over 1,360 data-processing units, including 102 computing centers, the others being computing offices and stations, work in data processing. The economy has over 500 electronic computers and minicomputers. Along with the development of the production of minicomputers, the total number of computers will experience significant growth in ensuing years.

The appearance of distributed data-processing systems, of micro- and minicomputers, of terminals at places of production and workplaces, in offices requires that the users themselves know how to use this equipment, which no longer makes it necessary to employ whole categories of operators. In the case of office computers for scientific and technical calculations, there is no need for personnel specializing in data processing, they being utilized directly by the specialists in various fields. We will also have to proceed likewise for invoicing and accounting machines. They will have to be utilized directly by the specialized economic personnel. Only the personnel necessary for the work of analysis and programming and the personnel absolutely necessary for operation and maintenance will then work in data processing.

As a result of the above things, the problem of training the two types of users is raised. Those who manage industrial, economic and social units and those who use the various types of equipment and terminals in their everyday operational work. It is said, justifiably, that the technology of data processing is invested primarily in people, in the great number of users. However, their effort must be combined with that of the specialists, who offer them the means most suited to the work that they do.

It is known that managers have in general a certain aversion to keyboards. The ideal thing for them would be a terminal with visualization, with which they could converse in natural language, by voice.

Natural language, voice, graphic interaction with the computer, programs of artificial intelligence are the new elements that will revolutionize not only the computer-assisted methods of education but also computer technology. Functional products of education or functional modules of education incorporated into the data-processing system or even the technical system in which it operates will be offered in the future.

The development of data processing and computer technology is to be done in the technological and economic context defined by the 12th party congress.

The directives of the congress provide as a main orientation the automation and cybernation of production, natural in the current stage of the scientific and technical revolution in our country. The automation and cybernation of production, and the proper functioning of all industry and the whole economy, presuppose information that, through data-processing technology, offers more efficient ways to utilize resources. A data-processing infrastructure is thus necessary, it becoming just as important as the country's structures for power production, raw materials and agriculture.

In view of the new coordinates that electronics and data processing offer, it is becoming essential to develop the basic and applicative research in these fields, to widely utilize the results of Romanian research in practice, for continually increasing the efficiency of their application in the economy and society. It is a wide-open way to continually increase the contribution of data-processing technology to the growth of labor productivity--in production, in design, in technical, economic and administrative activity and in other fields--to achieve the Romanian people's ideals of progress.

FOOTNOTES

1. Larry W. Sumney, "VLSI With a Vengeance," IEEE SPECTRUM, April 1980, pp 24-27.

2. TELOMDE, No 1/1980 (an issue devoted to electronic components), p 32.

3. From NEWSWEEK, 30 June 1980, p 34.

4. DATA SYSTEMS, February 1980, p 11.

5. Mihai Draganescu, "The Management-Data Processing Relation" (1971), republished in "Sistem si Civilizatie" /System and Civilization/, Politica Publishing House, 1976, p 337.

6. "Main Working Document--SPIN Conference, 1978." Also see: Marius Guran, "Probleme ale Informatizarii Societatii" /Problems of the Computerization of Society/, 1980.

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NINE-MONTH FOREIGN TRADE BALANCE DATA

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 28 Oct 80 p 3

[Article by Milorad Urasevic]

[Text] The results of the Yugoslav economy's foreign trade over the first three quarters of the year cast doubt on the justifiability of the increasingly frequent reproaches of the government administration for "meddling" in export and import transactions; this criticism, which originates in organizations of associated labor, is made up to the highest delegate bodies and is intended to give assurance, seriously shaken even now, that the country's payments deficit can be kept to $2 billion.

It is worth recalling that toward the end of last year a law on temporary projections of the country's balance of payments and exchange balance was adopted because of the impossibility of fulfilling the agreement and of accepting the insistence of the Federal Executive Council that the country's payments deficit this year be established at an amount which can be supported without disruptions in discharging due payment obligations. That law made it possible to adopt the resolution on the country's development policy during this year and to continue the effort at reconciliation, which ended in late July with adoption of the order on the unified projection of the balance of payments and exchange balance for this year, which repealed the law.

Without entering into the numerous and to some extent objective reasons dictated by external influences, much less those of an internal nature which are undoubtedly decisive, a mere 2 months--August and September--were sufficient to reduce the unified projection to nothing more than words on paper.

It is worth bearing in mind here that when the amounts by which the various republics and provinces were to increase their exports this year and to reduce or possibly increase their imports, consideration was given to the objective position of the economy of each of these sociopolitical communities--which was a precondition for fulfillment of this agreement--but the behavior displayed varied extremely and has departed from the mutually adjusted proportions, as can be seen from the figures in the table.

Exports and Imports as Planned in the Unified Projection and the Results for the First Three Quarters of This Year

	Planned for 1980		
	In Millions of Dinars		Ratio of Exports to Imports, %
	Exports	Imports	
Bosnia-Hercegovina	24,508	35,826	68.4
Montenegro	2,482	5,785	42.9
Croatia	42,578	67,963	62.6
Macedonia	8,850	15,787	56.1
Slovenia	35,053	40,198	87.2
Serbia proper	43,115	52,332	82.4
Kosovo	3,868	8,370	46.2
Vojvodina	13,416	27,018	49.8
Undistributed	--	--	--
Total	173,870	253,279	68.6

	Actual Results for the First Three Quarters				
	In Millions of Dinars		Percentage of Fulfillment		Ratio of Exports to Imports, %
	Exports	Imports	Exports	Imports	
Bosnia-Hercegovina	24,595	37,144	100.4	103.7	66.2
Montenegro	2,503	5,259	100.8	90.9	47.6
Croatia	40,597	78,980	95.3	116.2	51.4
Macedonia	7,850	14,959	88.7	94.8	52.5
Slovenia	35,086	52,482	100.1	130.6	66.9
Serbia proper	42,978	59,095	99.7	112.9	72.7
Kosovo	3,916	7,961	101.2	95.1	49.2
Vojvodina	13,955	43,677	104.0	124.6	41.4
Undistributed	734	13,500	--	--	5.4
Total	172,214	303,057	99.0	119.7	56.8

The figures in the table are very clear and sufficiently indicative, and in large part they are the result of an interpretation expressed at many meetings and carried over to the news media, an interpretation that to some extent was erroneous. Constant emphasis was put on the "successes" achieved in exporting, but without adequate warning about the growth of imports and of the most essential element in this process—the negative difference.

According to the unified projection, for the country's payments deficit to be held at $2 billion, the trade deficit would have to be kept to 79.409 billion dinars, which, converted at the altered rate of exchange of the dinar, is $2.908 billion, but that amount has been exceeded by more than three-fifths with only three-fourths of the year gone.

Since exports over the first three quarters, to be sure, are only 1 percent below the plan for the entire year, while imports have increased only slightly less than one-fifth, the deficit has reached 130.483 billion dinars, or $4.793 billion, which means that on this basis alone the country's payments deficit by the end of the year will be twice what was planned. Slovenia first of all and then Vojvodina, Croatia and Serbia proper made the greatest contributions to this situation by increasing their exports considerably more than was planned; they account for about three-fourths of Yugoslavia's total foreign trade, which means that the share of other sociopolitical communities is negligible and cannot greatly alter the situation.

The deterioration of the world situation, especially thanks to the state of war in the Near East between nonaligned countries friendly to us, is making conditions considerably more difficult to carry on foreign trade from now to the end of the year. On the other hand in certain industries there are shortages of imported materials for processing, which could have a considerable impact in terms of failure to fulfill export obligations, and that makes it very difficult to find a way out.

However, it is precisely in the coming 2 months that "turning off the faucet" on imports of everything that is not indispensable should have its impact, and sufficient attention has not so far been paid to that fact. Whereas on the one hand one cannot find organizations which are motivated to export straw and hay, a livestock feed which is burnt and is spoiling in our fields, we are still importing large amounts of wheat, meat, coffee and other indispensable food products, but also those foodstuffs we could do without. We are continuing to import huge amounts of sand, stone and a vast variety of articles which are literally rotting and going to waste throughout the country. For instance, in the first 7 months of the year, since detailed data are available only for that period, 228,000 tons of scrap iron were imported instead of last year's 168,000 tons, and the cost was 893 million dinars instead of last year's 524 million. Imports of scrap paper are also on the rise, and an enumeration of similar "choice items" would really take up a great deal of space.

When all this is borne in mind, it unfortunately turns out that the intervention by government agencies on behalf of this Yugoslavia with its socialist self-management, is still urgently necessary, since only in that way is it possible to prevent the anomalies in foreign trade which up to now have not been eliminated in any other way, and their consequences are very harmful.

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INVESTMENTS IN FIXED ASSETS, JANUARY-AUGUST 1980

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 14 Oct 80 p 8

[Article by R.V.]

[Text] In the first 8 months of this year, investments show a nominal increase of 24 percent, with a rate adjusted for inflation of 6 percent. The anticipated structural changes are not being achieved, because non-economic investments continue to grow more rapidly than economic investments.

The tendency toward rapid growth in investments that was manifested in the first 6 months has been halted in the third quarter, with the amount of expenditures for this category being 1 percent less this August than in August of last year. Since price changes in construction and in equipment markets have been pronounced, real investments are actually down by about 15 percent. According to preliminary data, the slowing in the rate of investments continued in September.

According to sources of funds, payments from organizations of associated labor in the economy grew in August, in comparison to the same month last year, by 13 percent, while those from non-economic organizations rose by 9 percent. Investments by banks decreased by 5 percent, while investments through banks fell by 25 percent, those from self-management interest communities by 5 percent, and those from sociopolitical communities, by 40 percent.

In the January-August period investments grew nominally by 24 percent, with an actual growth rate after inflation adjustment of 6 percent. Although regarded as a whole the actual rate of investment growth is not very high, the anticipated structural changes are not taking place, since non-economic investments continue to increase faster than economic ones.

Judging from available resources and measures undertaken, it can be expected that the tendency toward a slowing of growth in investments will continue in the coming months. This is a matter of obligatory participation and temporary halting of both non-economic and non-productive investments. This trend will be supported by monetary and credit policy, which will include in its framework a limited growth in credit by quarters, in order to bring commodity and monetary factors into harmony. Actually, these measures will have more impact on new investments than on those that are already underway.

In republics and provinces it will be necessary to insist more resolutely on the observance of measures that have been negotiated.

Investments according to source show that in the first 8 months, works paid for by organizations of associated labor in the economy increased by 19 percent over the same period of last year, while payments from non-economic organizations of associated labor rose by 42 percent, from self-management interest communities by 23 percent, from banks by 25 percent, and from sociopolitical communities, by 8 percent.

The uneven growth in investment according to source affected the change in the distribution of total investment among categories of investors, since the shares non-economic organizations of associated labor and banks was increased, while the shares of economic organizations of associated labor and sociopolitical communities declined. In consequence, the banks' share of investments, which had already been dominant, continued to increase, while the share of the economy decreased.

Regarded by republics and provinces, in the eight-month period investments in Bosnia and Hercegovina increased by 29 percent; in Montenegro investments doubled in comparison to the preceding year, while they grew by 18 percent in Croatia, by 25 percent in Macedonia, by 26 percent in Slovenia, and by 21 percent in Serbia. The breakdown for Serbia shows a 20 percent increase in Serbia proper, 40 percent growth in Kosovo, and 16 percent in Vojvodina. The high rate of growth in investments in Montenegro is the result of investments for reconstruction of the areas damaged by the earthquake of April of last year.

Table: Capital Investment (in million dinars)

	VIII 1980	I-VIII 1980	VIII 1980 / VIII 1979	I-VIII 1980 / I-VIII 1979
Total investments	28,838	263,260	99	124
Economic organizations of associated labor	10,298	85,362	113	119
Noneconomic organizations of associated labor	3,122	25,855	109	142
Self-management interest communities	1,342	11,897	95	123
Bank resources	12,454	125,372	95	125
Investments through banks	1,280	10,693	75	119
Sociopolitical communities	342	4,081	60	108
In the above:				
communities	177	2,019	71	116
republics and provinces	103	1,385	54	96
the Federation	62	677	49	109

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RATE OF EMPLOYMENT TO 1985 DISCUSSED

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 28 Oct 80 p 8

[Article by Dr Miodrag Panic: "Dilemmas Concerning the Growth Rate of Employment"]

[Text] The relatively high level of economic activity over the last 10 years or so has been making it easier to solve problems of unemployment (the growth rate of employment has been 4.2 percent) and has contributed to the accelerated transformation of the economic and social composition of the population. However, the problems of employment and hiring still remain one of the central unresolved issues of our overall socioeconomic development. The main problems are manifested in the underutilization of the present work force and the relatively large number of able-bodied individuals seeking employment in the coming period.

The total number of persons employed in the socialized sector at the end of 1979 was about 5.5 billion, which included about 3.4 million people with specialized training, or 62 percent. However, total work time of the labor force is not being used efficiently, since of the 7.5 hours of regular working hours about 5 hours are effectively worked. Use of personnel potential is also inadequate. That is, about 70 percent of the time of personnel with junior and senior postsecondary training is utilized, and their knowledge is used at a level of about 60 percent (according to surveys of economic chambers). The result of all this is that improvement of the composition of the labor force with respect to skills has not yielded the effect it should have in terms of higher efficiency in the conduct of economic activity.

Assessments of the Period up to the End of 1980

In carrying out the current medium-term plan up to this point the average growth rate of employment in the socialized sector has been 4.2 percent, while the plan called for 3.5 percent. We should expect that this rate would be a bit lower for the entire planning period, although it is difficult in the last year of the 5-year period to slow down the trend of hiring that already exists. After all, this growth rate of employment has only

partially contributed to resolving the problems that have accumulated from the previous period, but it has not brought about any significant reduction of the pressure for jobs.

The demand for jobs is greater than the supply, especially in the economically underdeveloped republics and especially in the Socialist Autonomous Province of Kosovo. The problem of pressure for jobs might to some extent be solved in those regions through greater mobility of the labor supply since labor resources are relatively exhausted in the most highly developed republics (especially Slovenia).

The total influx of trained personnel over the 1976-1980 period will be slightly higher than planned (820,000, as against the 800,000 planned), and about 760,000 of them will be employed. With the unemployment carried over from the previous period, it is estimated that at the end of this year we will have about 300,000 trained persons who are unemployed.

Hiring up to 1985

Overall estimates show that at the end of 1980 there will be about 750,000 unemployed persons, which means that for the first time in several years the volume of unemployment is remaining at practically the same level. However, the share of unemployed trained and skilled people is continuing to rise, and it is particularly notable that 54 percent of all people seeking jobs are under age 25. This number of unemployed persons can be explained by the existence of the mismatch between the educational system and the needs of associated labor for personnel trained in particular fields, by the faster rate of return to Yugoslavia of workers temporarily employed abroad, by the inadequate mobility of the labor supply, by the underdevelopment of the vocational guidance system and a personnel retraining system, by the lack of long-range development programs, especially programs for development of personnel in a large number of organizations of associated labor, and so on. We should also emphasize the tendencies toward a considerably faster growth in the number of management and administration personnel as compared to production workers, which is mainly the consequence of institutional changes in society and in the economy as well as of a number of subjective shortcomings, above all shortcomings in the distribution of income.

It is expected that the labor force will grow more slowly than the total population up to the end of 1985; the average annual growth rates are expected to be 0.6 percent and 0.8 percent, respectively. At the same time manpower will increase more slowly than in the period up to now, when an average annual growth of 0.7 percent was recorded. Nevertheless, the number of those seeking employment will be very sizable in the period up to 1985 as well. Formation of the total group of workers seeking jobs will be affected by structural and demographic factors, and they will be manifested through the following: a) the influx of labor supply, above all young trained people graduating from school; b) registered unemployment;

c) transfer of manpower from agriculture, which will be relatively intensive in the coming period; d) return flows of foreign migration; and e) able-bodied but supported nonfarm population which will also seek employment in order to raise the family's standard of living.

It is estimated that there will be about 1,700 people hired in the coming period, while the growth of employment would be about 1,060 persons, or 3.5 percent per year (the growth rate up to now). This would bring the total employment in the socialized sector to about 6.7 million in 1985. Self-employment should also increase by about 100,000 persons at least, which would bring the level of total employment in this sector to about 500,000.

In the context of these considerations we should also take into account the policy of stabilizing economic flows, which inevitably signifies adoption of a slower rate of development, which would mean an average annual growth rate of the social product of about 4 percent in the coming 5-year period. However, we must bear in mind that this would result in serious problems in the hiring sector (the 2.5-percent growth rate of employment that goes with this solution would not provide employment even for the entire current inflow of young generations of trained personnel).

It is realistic to expect that the effect of the stabilization measures and restrictive investment policy will be manifested more strongly in the first years of the next medium-term period and that in the subsequent years more significant results would already be achieved in overcoming development problems, above all the payments deficit. There is a basis, then, for forecasts to the effect that the growth rate of employment, after a certain stagnation in the next year or two, but with a considerably higher growth in the later years of the coming medium-term plan, will nevertheless attain the projected growth rate of 3.5 percent for the entire next 5-year period. This is in fact confirmed by the growth rates of employment attained in the two previous 5-year periods.

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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2068

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2 December 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

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CONTENTS

GERMAN DEMOCRATIC REPUBLIC

Highlights of 1980 Leipzig Fall Fair Results Published
(INFORMATIONEN, Sep 80) 1

Material Considerations for Rail Investment Program Analyzed
(Bernd Kaatzke; SIGNAL UND SCHIENE, Sep 80) 4

Briefs
New EC 1022 Computer in Erfurt 14

HUNGARY

Economist Interviewed on Aspects of Manpower Management
(Janos Timar Interview; FIGYELO, 22, 29 Oct 80) 15

POLAND

'TRYBUNA LUDU' Reports on PZPR Warsaw Committee Plenum
(TRYBUNA LUDU, 13 Aug 80) 25

Benefits of Trade With Polonia Discussed
(Zbigniew Klejn; TRYBUNA LUDU, 13 Aug 80) 28

Commentary on Black Market, Tourism Noted
(Daniel Passent; POLITYKA, 18 Oct 80) 31

Book on Role of Industrialization Planning Reviewed
(Janusz Ostaszewski; TRYBUNA LUDU, 20 Aug 80) 34

ROMANIA

Principal Factors of 1981 Plan Outlined
(Toma Melinte; REVISTA ECONOMICA, 24 Oct 80) 36

Problems in Preparation for 1981 Production Viewed
(Mihai Iosifescu; REVISTA ECONOMICA, 24 Oct 80) 42

New Provisions for Payments Between Socialist Units
(Gh. Marcu; REVISTA ECONOMICA, 10 Oct 80) 48

Export Industries To Be Represented at Bucharest Fair
(C. Mircescu; REVISTA ECONOMICA, 10 Oct 80) 52

YUGOSLAVIA

Draft Agreement Outlined for Underdeveloped Regions
(OSLOBODJENJE, 9 Oct 80) 55

Conference on Drainage, Irrigation Systems in Kosovo
(JEDINSTVO, 21, 25 Oct 80) 57

Shortcomings, Plans, Status
Drainage Projects

Briefs
Yugoslav-Iranian Trade 59
Food Production in Macedonia 59
Macedonian Farmland Reduced 59

HIGHLIGHTS OF 1980 LEIPZIG FALL FAIR RESULTS PUBLISHED

Bonn INFORMATIONEN in German No 16, Sep 80 pp 9-11

['Background' report by FRG Ministry for Inner-German Relations: "Leipzig Fall Fair 1980"]

> [Text] Approximately 6,000 export firms participated in the Leipzig Fall Fair 1980 (31 August to 3 September). The exhibitors came from 13 communist-governed states, 8 developing countries, and more than 20 Western industrial states. Just like last year, the GDR, whose export firms initiate approximately two-thirds of their sales at the Leipzig fairs, provided the largest contingent with its offers from 2,800 combines, export and industrial enterprises. The FRG was again the second largest after the GDR with 595 firms spread over an area of approximately 20,000 square meters (of a total of 290,000 square meters). Approximately 900 participants came from other Western industrial states.

While previously the spring fair was almost exclusively a technical fair, and the fall fair a pure consumer-goods fair, now both types of products are displayed both in spring and in fall. Capital goods at the 1980 fall fair were characterized by 8 lines with strong international participation: chemistry with the specialty of agrochemicals (with participation from 22 states), chemical installations (17 states), plastic machines (8 states), textile and shoe machines with the specialty of progressive textile technology (20 states), polygraphical machines (14 states), street vehicles (17 states), medical technology (17 states) as well as tools and woodworking tools (11 states). A total of 800 export and production firms of the capital goods industry from 25 states exhibited.

In the area of consumer goods, exhibitors from approximately 45 states were represented. They occupied approximately 45 percent of the exhibition area. Internationally most represented with firms from 35 states was the line of food and luxury food items.

According to the available data, the total number of exhibitors has decreased by approximately 260, and the number of developing countries by 3. The exhibition area was increased a total of 10,000 square meters. The participation of firms from the FRG and West Berlin did not change much compared to last year. The

decreasing trend of the last years did not continue (in the fall of 1979, 596 firms exhibited, in the fall of 1978 it had been 629; in 1977 648 firms had come to Leipzig, in 1976 it was 671). In view of the fact that the five-year plans for 1981 to 1985 had not been concluded yet, no major business deals with FRG firms were transacted.

Erich Honecker, secretary general of the SED and chairman of the State Council of the GDR, visited the booth of the Hoechst firm and announced, among other things: "I can see, in the name of the GDR government also, that we are very interested in the continued normalization of the relations between the GDR and the FRG, and that we are fully aware of the fact that the continued normalization of these relations will contribute to furthering the process of detente in Europe, that in connection with that it will open new horizons for the cooperation between the two German states, and simultaneously help the process of cooperation as determined in the Helsinki accords."

Guenther Gaus, head of the FRG representation in the GDR, had previously said, among other things: "The FRG government welcomes the favorable development of trade between the two German states. The chancellor and the government are always willing and ready to broaden relations in all other areas also, to bring about normalization as far as possible. The chancellor agrees with your understanding.... that all efforts at continued normalization are an outstanding contribution by both German states to maintaining the peace. We want continued contacts and talks."

GDR Foreign Trade Minister Horst Soelle and Secretary of State Dieter von Wuerzen of the FRG Ministry for Economics negotiated at the fair about a new skeleton agreement between the two German states, which will run for 5 years. According to it, a purchase of 1.25 million tons of lignite briquets, with an additional option of .25 million tons, is planned. This option included, the amount exceeds by 100,000 tons the amount set in the contract which is ending now. Delivery of lignite to West Berlin is to be negotiated separately. West German firms will deliver machines for lignite processing worth DM 10 to 20 million as a countermove to the new contracts.

Secretary of State von Wuerzen had already worked out a skeleton agreement at the 1979 fall fair, according to which the delivery of crude oil to the GDR and purchase of mineral oil products from the GDR were set on a long-range basis and the annual deliveries from West German bituminous coal mines to the GDR amounting to DM 250 million were included. Last year's agreement covers a 6-year period (1980 to 1985).

On September 6, Secretary of State von Wuerzen evaluated the new agreement over Broadcast Free Berlin as follows:

"What is new in this agreement...is that we are deciding on 5 years, not on the amount. And what is new is also the fact that this is to be tied to a deal according to which we deliver machines to the GDR for processing this lignite. This is interesting because through this processing--which consists of a special pulverization process whereby this coal becomes better suited for use in, e.g., the cement industry--the market potential of lignite is increased here in the FRG."

Von Wuerzen further emphasized in the interview that GDR Foreign Trade Minister Stoelle has "expressed very clearly that he is interested in the intensification and expansion of this inter-German trade, especially in the area we call basic industry, i.e., delivery of machines, of electrotechnical goods, consumer goods and other things."

According to the scarce reporting in the GDR media, it was also agreed that the GDR will deliver to the FRG within a 5-year period foundry accessories worth 26 million Valuta Marks (VM), as well as special chemicals worth VM 5 million.

Reports regarding other GDR trade agreements do not allow any final conclusions about the actual extent of GDR exports and imports.

Export: Among other things, agreed with Western states was: projection, montage and putting into operation of high-voltage, measuring, steering and control technologies for a chemical fertilizer firm in France, delivery of a roll-turning machine to Austria, pianos to Greece, Norway and Italy and dolls to Great Britain.

The GDR will deliver to the USSR: hydraulic cylinders worth 10 million rubles, roller offset printing machines also worth 10 million rubles, electronic measuring technology worth 25 million rubles, as well as textile accessories, chemical raw materials and auxiliary materials. Additional agreements regulate deliveries in areas such as measuring technology, machine-tool industry, electrotechnology, packaging machines and metallurgy. For 145 million rubles, the GDR wants to build refrigerator ships and bulk freighters for the USSR.

The GDR wants to deliver to Afghanistan and Vietnam automatic rotary cranes and other hoisting equipment, to Cuba plant protective sprays and pesticides as well as 4,200 diesel engines, to Brazil knitting machines and weaving frames, and automobile tractors to the Mongolian People's Republic. Zambia and Ethiopia are to get tractors, Angola textile products worth VM 5 million as well as electric circuits and transformer stations.

Import: According to reports in NEUES DEUTSCHLAND, the GDR has negotiated for the following imports, among other things: crude iron, rolled steel, and other metals from the USSR, also "large numbers" of heating units for residential construction, as well as chemical products. From Finland the GDR receives fork lifts, from Austria track laying machinery, and rugs and pelts from the Mongolian People's Republic.

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MATERIAL CONSIDERATIONS FOR RAIL INVESTMENT PROGRAM ANALYZED

East Berlin SIGNAL UND SCHIENE in German Vol 24 No 5, Sep 80 signed to press 15 Aug 80 pp 211-214

[Article by Bernd Kaatzke, engineer, chief, rules section, Central Office for Investment Allocators, Deutsche Reichsbahn (German Railway System): "Evaluating the Seventh Construction Conference: Effectivess in the Investment Process of the German Railway System"]

[Text] The investment process which per se is complicated and comprehensive is characterized as a component of the reproduction of basic assets and, in the existing structure of the GDR Railroad, by a high degree of effective division of labor. With consideration of the decisions made by party and government in respect to investment activity and of the most recent legal regulations and innerenterprise controls of this process the author deals with several aspects which influence the efficiency of the investment process in connection with the GDR Railroad.

0. Preliminary Remarks

As a transport enterprise the GDR railroad is responsible for meeting the needs for transport capacities with minimal cost. The efficiency of the investment process is influenced not only by the GDR Railroad's technical units for investments, but also by the responsible structural units, for example, in the preliminary stages in planning construction technology and in the utilization of newly created or expanded basic assets.

1. Preliminary Stages

1.1 Studies of Basic Assets Management

On the basis of analyses of condition (technical and moral wear and tear), the utilization of existing basic assets, transport requirements, the findings of research and development, territorial conditions and capabilities and of long-term designs and programs, studies concerning the management of basic assets must be undertaken by offices which administer basic assets (in the case of rebuilding) and by those which work with basic assets (in the case of expansion) as a

prerequisite for justifying the need for investments. In this, the point of departure must be the general realization that not every technical, technological or economic problem can be solved in only one way, but rather that various possibilities are conceivable for solving the problem. Appropriate planning may take place only if the result of studies concerning basic assets management demonstrates the need for an investment as the only possibility for solving the problem.

Practice has proved that reserves are still available here in that, for example, no damage or not proportional immediately visible damage occurred when there was a substantial delay in starting operation in the transport process or in the auxiliary and secondary processes for which investment was planned. Thus, even in the case of essential investments there must be a very precise study of how long existing basic assets can still fulfill their function with defensible maintenance costs. In addition, variants must be investigated which possibly will solve the problem only for an interim period (for example, clustering, reduction in distances between blocks, automation of routes or relief trains over other routes if there is a need to increase handling capacity).

1.2 Investment Proposal (Formerly Request Program)

The findings which were gathered in the process of studying basic assets management, in particular the finding that an investment is unavoidable, must be worked into the investment proposal by the offices proposing the investment.

Since the designation "request program" resulted in a false interpretation of the data which are made available to the technical office for investments for further preparation and implementation, the new designation "investment proposal" is being introduced in 1980 via an investment decree from the GDR railroad, replacing the GDR Railroad's investment guideline of 8 March 1972. The misinterpretation of the concept "request program" stemmed from the fact that investments were simply requested without providing any proof of the necessity and extent of the investment.

The experiences of the past few years in the request program reveal special problems in obtaining up to date inventory data in respect to existing basic assets. Since they comprise the basis for evaluating the condition of existing basic assets, it is absolutely essential that in the future inventory data for sections of routes, stations, structures and buildings which are to undergo expansion or renovation be acquired or updated to reflect the most recent status in a sufficiently timely manner by the responsible offices which administer basic assets.

Therefore, the claim that a decision on investments planned for the next Five-Year Plan period will be made too late cannot be accepted for the absence of inventory data which have been completely updated. Inventory data which are lacking or which have not been actualized have a substantial influence on the efficiency of implementing investment by virtue of disruptions during preparation and in the course of construction. In the future, if up-to-date inventory data are not available, there still can no longer be such extreme situations as designing a signal box right over an underground cesspool if the designer undertakes a site inspection prior to beginning his work.

If at the time of submitting the investment proposal there is still some construction work at the future building site and if therefore the location of structures and buildings, underground lines, and so forth, cannot be finally fixed in the inventory data, then in any case reference to work still in progress is essential in respect to such inventory data.

2. Project Specifications

The project specifications for preparing an investment are developed as a responsibility of the GDR Railroad's technical units for investments. The project specifications must establish specific goals for the level to be achieved from a technical, technological and economic point of view. Moreover, the data essential for first-rate preparation must be completed and the interrelationships must be extensively clarified in respect to the GDR Railroad enterprise, the territory and to future contractors.

The scope and number of documents to be prepared are determined by the specifics of the investment and coordination. Although according to current legal regulations [1] the subject matter includes only data, specifications, evidence, objectives, and so forth, the deadlines and indexes for further preparation and implemention, which come up for confirmation with the project specifications, are a binding standard, that is, the efficiency of the use of investment capital is extensively determined by the project specifications, and further preparation and implementation are measured in terms of the observance of the indices and values being confirmed.

In this phase the following are particulary important for efficiency:
--rejection of requests by the primary service branches involved which are not directly associated with the concern of the actual investment or which can be achieved even with a lower cost
--examination of requests with respect to the outfitting program, space program, useable areas, observance of normative provisions, and similar things
--minimizing followup investments, especially for replacement and moving
--consideration of the highest scientific-technical level and agreement about the possibility of realizing the shortest construction times
--specification of the most real values possible for the investment cost on the basis of normalie provisions for cost, recycling projects, empirical values, and similar things
--orientation toward also designing or scheduling recyclable solutions if certain cuts in space design, utilization of surface area, and so forth, are necessary
--minimizing redesigning and designs for adjustments
--optimization of enterprise conditions to realize construction with consideration of the principle "rail movement and construction."

The biggest problems in this phase always occur when the responsible technical units for investments disagree with the participating service offices and administrative agencies in respect to related requests which come up in connection with collaborative actions. In principle, decisions on such problems must be based on the idea that anything not absolutely essential for solving the investment task has nothing to do with the investment. However, in connection with an investment full attention must be devoted to working and living conditions.

It is absolutely necessary to give consideration to minimization in the case of follow-up investments [2], particularly for reasons relating to the possibility for unhindered work on a construction project. Possibilities for minimizing stem not only from appropriate site selection, but also from compact methods of construction, extensive maintenance of existing construction with the help of underpinnings, retaining walls, reconstruction jobs, and similar things, and from precise checking of the necessity for replacement construction in general.

Buildings and structures which are no longer used at all and which for reasons of unobstructed construstion must be torn down must not lead to replacement involving completely new purposes. In the investment outlay consideration can be given only to demolition or scrapping, respectively.

In the phase of developing the project specifications, studies must also be made as to whether full capacity must be created in the first phase, or whether specific expansion stages at graduated intervals can also meet gradually increasing needs.

3. Policy Decision

The phase of developing the documentation for the policy decision, including review, obtaining expert opinion and the making of the policy decision itself, is characterized as preparation for the investment. The GDR Railroad's technical units for investments are responsible for preparing the investment. They have the task of guaranteeing the joint efforts, called for by the legislative organ, in the phase of preparing a specific investment, and in the process of preparation they must also provide clarity with respect to the

--basic technological, functional and construction-based solution, and the solution relating to construction technology
--necessary material and financial costs
--schedules for the course of realization and starting operation
--integration with respect to interrelated targets and guaranteeing materials.

The manager who is authorized to do this may make the policy decision only if, with demonstrated clarity, the specifications confirmed in the project specifications are observed or improved and thus the economically most effective solution of the investment task is documented. In this phase the economically most efficient use of investments depends to a substantial degree on the binding bids by the contractors and, especially in this case, on the binding price quotation which is a component of the binding bid.

The difficulties which at present still exist in the economy in respect to balancing construction capacities often resulted in the fact that at the time of making the policy decision no contractors were identified who could have submitted a binding bid for their volume of supply and performance. If, in spite of that, policy decisions were made (in connection with which the technical units for investments drew support from the fact that they themselves are responsible for calculating the costs of the total investment), nonetheless on the other hand it must be unambiguously stated that the clarity thus demanded is not present [illegible] respect to the requisite costs or to the scheduled course of investment. With the new legal

regulations on balancing [3], the prerequisites are created for the fact that, in the future, balancing based on the project specifications will be done within 8 weeks and thus the contractors would have to be known at least theoretically at the time of the policy decision. The efficiency of the use of investment capital requires that the binding bids be thoroughly checked by the technical units for investments in respect to their necessity and their scope. Beyond that, the binding price quotations must also be checked for observence of the price law. The GDR railroad's practice in passive price control proves that substantial investment capital can be saved in this area. In this, the lower share of capital saved can be attributed to genuine breeches of price, the higher share to essential capacities which are not of the scale as bid and inefficient technologies.

One of the most important criteria of efficiency is construction time. It is determined by the technology being used and by the effieiency of the enterprise doing the work (shift operation, total capacity per year, and other things). Beyond that, in jobs done under the enterprise conditions of the GDR Railroad, it is very substantially determined by the available idle periods and by the idle conditions incorporated, respectively. An example: the normative provision for output in the second tamping round, given a 4-hour idle period, amounts to 1,350 meters of track, if the idle period is doubled to 8 hours, the normative provision for output is 3,500 meters, that is 800 more than twice the track length tamped.

3.1 Binding Price Quotation

The binding price quotation is the upper limit of the industry's price which is to be agreed upon for the delivery or performance offered. It can contain estimated prices, especially if the binding bids were determined on the basis of bid projects, reuse projects and on price indexes or other more highly aggregated prices.

In cases where capacities can only be finally determined with the working design, then estimated prices must in any event be incorporated in the binding price quotation in respect to the policy decision. Estimated prices are provisional prices. They must not be exceeded when converted to final prices or when settling up for verification.

As already shown, in the case of longer idle periods not only is greater output achieved and thus early completion, but the output per unit is also cheaper. With a 4-hour idle period the second tamping costs M17,988 per km. With an 8-hour idle period it is M7,068 per km. As a result, the possible normative output of 3,500 meters in the above-mentioned example in the 8-hour idle period costs about M24,300. In planning related to construction technology, therefore, economic questions must also be taken into consideration.

A further possibility for increasing efficiency consists in using the occassion of otherwise necessary idle periods to accomplish other jobs which can be done under the same idle conditions.

With increasing transport capacities the possibility of making longer idle periods available is further limited. Thus, the construction sector is forced to be able to work efficiently in shorter idle periods generally, to allow for and acquire expensive basic assets, respectively. But if these are used in shorter idle periods,

on a single-shift basis they are not even fully utilized. Since the idle conditions are controlled via the price, that could be an occasion for considering whether the goods-money relations between the construction and transport sectors are generally efficient.

3.2 Simplifications in the Investment Preparation Process

Every earlier decision on any investment increases the period of time for the indirect technical and technological preparation of implementing the investment and thus increases efficiency. The possibility of confirming the project specifications as general policy takes this into account, if, supplemented by calculations of useful effect and determinations of cost, respectively, they are in keeping with the following criteria:
--investment measures, that is, investments without a construction and assembly share
--investment projects in which the share of construction does not exceed 10 percent of the investment cost, yet is not higher than M500,000 and
--renovation investments totalling up to M5 million.

In the process of preparing the documentation for the policy decision intermediate decisions which made the project specifications specific can also be provided for. In this, attention must be paid to the fact that the cost from studies of variants which are still in progress or from the inclusion of research and development results which are still not available must be contained in the project specifications toward the safe side since changes in decisions will in any case have a substantial impact on the efficiency of the investment process. Finally, mention should also be made of the fact that workable partial projects can be set down in the project specifications for which separate policy decisions are possible as needed.

In subdividing an overall project into partial projects the principle of utilization is decisive since only in this way can there be an increase in efficiency in the form of a more rapid start of operation of partial capacities.

4. Guaranteeing Materials

Guaranteeing the materials of the projects include
--determining the requirements for design, construction and assembly capacities and for equipment and material
--submission to the appropriate balancing organizations
--balancing itself, inclusive of targeting the balanced enterprises by the balancing organizations
--and contractual obligation.

The technical units for investments are responsible for determining requirements and submission on the basis of the project specifications. Concentration and high efficiency of investments can, on the part of the investment allocators, be provided for with the plan and with the submission of requirements in respect to the balance sheets. Whether they are actually achieved can first be seen from the result of the balance sheet.

The new legal regulations [3] assume that, in developing the drafts of the year's plan, there will clearly be definitive consideration of unsolved problems in balancing which could not be cleared up in comprehensive consultations either. To the extent the balance sheet was not produced or was not produced in complete form, the wish for concentrated realization cannot be upheld in the plan, either. In this case decisions become necessary about whether a start should be made at all or whether in the case of continuation projects cessation is not the economically more favorable solution.

The need for cooperative efforts in the construction sector is at presently jointly submitted and defended by the balancing organizations within the context of the overall need for cooperation in respect to the construction industry, by the technical units for investments of the agents of the investment allocators. The balancing of these cooperative efforts for our own general contractors and main contractors is thus a prerequisite for fulfilling their contracts. This innerenterprise control by the GDR Railroad should be subjected to review since it is not in line with Para 13 of the decree concerning implemention of investments [4].

In reviewing the current innerenterprise control by the GDR Railroad there must, however, be a guarantee that the GDR Railroad in respect to certain political districts, continue to be involved. That is nonetheless also the practice at present in the case of the construction sector's investments and would not need to encounter fundamental problems.

4.1 Use of General Contractors and Main Contractors

General contractors and main contractors who do not carry out their tasks in accordance with the current legal regulations are not suited to guarantee concentrated implementation and starting operation ahead of schedule. Thus, legal regulations [4] provide for the use of general contractors only if their efficiency, their experiences and demonstrated cooperative relations in preparation and implementation will result in a high degree of economic usefulness. Moreover, there must be a high degree of reproductibility of their buildings and installations which are to be realized under general contractorship and of their design and coordination efforts. In addition to coordinating and managing an investment by means of directing capital development, use of main contractors is viewed as an essential element in increasing efficiency. In respect to guaranteeing main contractors must develop, design and build complete functional facilities. Performance exclusions are not permitted in respect to the scope of performance which is reflected in the terminology of general contractors and main contractors.

4.2 Contractual Guaranteeing

The contractor is obligated to bind the balanced and targeted outputs contractually with the investment allocators. In respect to the efficiency of the investment process there are two aspects in particular:
--contractual binding must be accomplished in good time prior to beginning work. This also applies for design work.
--Contracts are to be shaped in such a way that the material capacities, which have been balanced for the annual goals, are also guaranteed by contracts with appropriate technologically or economically based interim schedules.

Unfortunately, current contract law does not provide the opportunity to implement materially balanced and targeted annual goals as a component of contracts. The tasks of the legal advisors and people who draw up contracts, therefore, consist in finding a technological or economic justification for a specific production level which is required at about the turn of the year, in order to guarantee the balanced annual goals in the contracts, too.

Shaping contracts with the help of the contract court must be implemented earlier to the extent that a solution, which is in keeping with planning and balancing, cannot be found in the case of solutions for which the responsibility is solely between contracting parties. Decisions by the contract courts which are not available until much later in the current year for the most part no longer guarantee realization of the project at the planned level for the year.

5. Investment Implementation

With projects which are realized over a longer period of time new findings from research and development can still have an influence on the efficiency of the investment. Therefore, even in the implementation phase, the legislative organ also permits change in order to include new findings, among others, from the innovators movement. Nonetheless, the basic assumption must be that the inclusion of such new findings must be put into proportion to the economic effects of redesigning and possible disruption of the progress of construction in respect to time. Thus, it is not a question of including the results of research and development at any price, but rather in a reasonable economic proportion to the overall effects.

The efficiency of implementing investment in the case of construction under enterprise conditions is influenced by three essential factors. These concern:
--guaranteeing proposed idle times at the scheduled time
--use of established idle times by the contractor
--observence of idle times by the contractor.

Exceeding GDR railroad regulations for operation and construction [Betra] or their non-use is mostly a sign of unsatisfactory technological preparation for the jobs in the GDR railroad regulations for operation and construction in so far as the cause does not come from too late guaranteeing of idle times by the transport sector.

In delayed guaranteeing of the idle time there should be a basic review of whether it can then be used at all. In this, it must not be assumed that in the case of delayed guaranteeing the contractor may automatically exceed the idle time by the same amount of time.

5.1 Purchase

The GDR Railroad's technical units for investments of the agents of the investment allocators, as the contracting partners in respect to the contractors, are responsible for the purchase in terms of contract law. The innerenterprise controls by the GDR Railroad provide that in the case of purchase in terms of contract law transfer to the using offices or the offices that administer the basic assets will

take place at the same time. This is thus necessary because the directorates of capital development of the GDR Railroad have no capacities at their disposal in order to maintain basic assets which in the meantime have been purchased in terms of contract law. Moreover, the users themselves must be able to join in establishing specific deficiencies which possibly will impair usability and must be eliminated by the contractor.

5.2 Entries on the Assets Side

If investments are purchased and paid for in terms of contract law, then on a short-term basis posting into the basic assets inventory must be done by entries on the assets side. Since even the work of contractors must be purchased and paid for according to contract law, if they have contractually bound only parts of usable facilities, then use is not simultaneously possible in a number of purchases. Capacities which have been paid for, but not yet entered on the assets side burden the GDR Railroad as unfinished investment. The GDR Railroad pays a production fund tax for this. In respect to the efficiency of the investment process it is thus of the utmost importance to use to the full extent the existing regulations concerning partial entry on the assets side, not to permit outstanding debts in the assets side for used facilities and to coordinate construction in the technologies in such a way that capacities of other contractors which are not yet available for use are produced without delay.

6. Use of Newly Created Basic Assets

In respect to efficiency, two aspects should be mentioned here: the full utilization of the newly created basic assets by the using offices of the GDR Railroad and the implementation of performance guarantee claims by the agencies administering the basic assets for deficiencies, which might still occur, against the contractors.

7. Concluding Remarks

The specific aspects presented concerning the efficiency of the investment process are integral components of the general goals for implementing higher demands for quality of investment and construction activity. In evaluating the Seventh Construction Conference the following goals, among others, must be stressed:

--strengthening the material-technical base of the economy in order to increase economic performance in our republic with consideration of the unity of economic and social policy

--proper development of construction and design capacities, especially for complete track construction, railroad bridge building and the further electrification of main routes

--upgrading planning and managing activity, for example, by closer association between the plan parts for science and technology, investment and construction production

--guaranteeing the economically most favorable order of priority and sequence from the beginning of investment up to entry on the assets side

--constructive further development of cooperation by the structural units of the

GDR Railroad which are involved in the process and also with the State Planning Commission, the construction industry, local councils and the balancing organizations, with the goal of creating prerequisites for stable planning and balancing for the entire period of implementation

--upgrading preparation in respect to information and a head start in respect to time through comparisons of variants, calculations of optimization, inclusion of the contractors, increasing the share of bid projects and reuseable solutions, direct cooperation by the design, construction and assembly enterprises of the GDR Railroad

--lowering the construction costs by about 15 percent and shortening construction times by 30-50 percent

--material and energy economic planning, preparation and implementation of investments

--increasing our own production of rationalization means.

FOOTNOTES

1. "Decree on Preparing Investments, 13 July 1978," GBL [Legal Gazette] Pt I, No 23, p 251

2. "Decree on Planning, Preparing and Implementing Followup Investments, 13 July 1978," GBL Pt I, No 23, p 257

3. "Decree on Construction Balancing and Balancing of Construction Planning and Design, 15 May 1980," GBL Pt I, No 15, p 127

4. "Decree on Implementing Investments, 27 March 1980," GBL Pt I, No 13, p 107

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CSO: 2300

BRIEFS

NEW EC 1022 COMPUTER IN ERFURT--[Photo caption] In the VEB Starksstrom Anlagenbau (power plant construction enterprise) in Erfurt a modern EC 1022 computer began operation recently. Now the staff of the computer center are concentrating on completion of data acquisition and office space as well as of the volume archives by the end of the year. Then the computer, which will help eliminate 25 workers, chiefly in technology and design, will substantially support the production preparation. In all an annual yield of 5.7 million marks is expected to accrue to the operation. [Text] [Erfurt DAS VOLK in German 29 Oct 80 p 1]

CSO: 2300

ECONOMIST INTERVIEWED ON ASPECTS OF MANPOWER MANAGEMENT

Budapest FIGYELO in Hungarian 22, 29 Oct 80 p 5

[Interview with Dr Janos Timar, chairman of the Labor Studies Department of the Karoly Marx Economics University in Budapest, by Csaba Vertes, no date given]

22 Oct 80, p 22

[Text] Recently, more and more newspaper articles and statements are appearing to the effect that noteworthy and sound changes have characterized our manpower management, and in general our manpower situation. To illustrate, here are several partial quotes from various evaluations and analyses: "...the resolute positions taken by the supervisory authorities have prompted the managing organs to make more realistic evaluations of the manpower situation." Or: "...the practice of increasing personnel or retaining reserves at any cost is no longer a general phenomenon." Then: "There are indisputable signs and results in response to the measures taken for discovering and making use of manpower reserves," and in fact: ...the positive processes which began earlier are speeding up." Next: "Dealing with people, making the labor of workers more effective...that is, improving the level of manpower management have been given a greater role in the activities of enterprise leaders at the different levels." And finally: "We had no special problems this year with manpower planning, and I believe that at our enterprises this is the result of a change of attitude evident among the leaders...We considered the situation and it occurred to us that we could do nothing about the manpower shortage by means of hand wringing and wailing."

Of course, after most of the quotes there is the certain "but" (as for example: ...but the favorable process is still not general...") although most of the statements and evaluations ascribe the changes in manpower management to the "resolute positions taken by the supervisory authorities," "to the stricter requirements" and--as a consequence of all these things "to the changes of attitude" among the enterprise leaders. In some cases, like a minor motif to the main theme, other opinions are also spoken and written. For example: "Under certain circumstances and conditions an enterprise may be forced to reduce its manpower demands even if there is still some unemployed manpower in the district where it operates. Such circumstances may be created by the economic environment and the general economic situation."

This is where we started our interview with Dr Janos Timar, university professor and chairman of the Labor Studies Department of the Karoly Marx Economics University.

[Answer] I also think, said Janos Timar, that we may be witnesses to unusual and by themselves favorable changes. For example, according to the labor turnover statistics for the first half of the year, as compared to the year before, the ratio of work departures initiated by employers almost doubled. Let me add that this is still scarecely one-fifth of the total manpower turnover. Despite this, the phenomenon itself is actually unusual by us, and it indicates some easing of the tensions--the sharp contradictions in supply and demand--of the labor market. But in analyzing and evaluating the changes in the manpower situation, we cannot ignore the statistical facts which illustrate the general management situation.

According to the August data of the KSH [Central Statistical Office] the production of the socialist industry on basis of gross production value declined by 1 percent as compared to the same period for last year. The number of employed declined by almost 3 percent and the number of physical workers by more than 3 percent. And the essential thing is that productivity—calculated on the basis of gross production value declined by 1 percent as compared to the same period for last year. The number of employed declined by almost 3 percent and the number of physical workers by more than 3 percent. And the essential thing is that productivity--calculated on the basis of gross production value per one employee--rose only minimally. On the basis of such a statistical picture it is difficult to agree with views like those alluded to from time to time by FIGYELO that the present manpower situation is characterized only by favorable changes. I have read, for example, that the enterprises are mobilizing their internal reserves better than ever before. But the foregoing data indicate to me the opposite, namely the retention of growing manpower reserves.

Even without a penetrating analysis it can be seen that the present manpower situation, now as always, reflects the general management situation. The manpower situation has changed only to the extent that the general economic situation has also changed.

[Question] I sense certain contradictions here. The statistical data indicate on one hand that the enterprise attitude is still characterized by efforts at retaining manpower reserves; and on the other hand that the changes--hopefully temporary--can be ascribed to the low rate of economic development. That is, declining production and declining manpower...

[Answer] And what you are asking is how do we arrive at unchanging or increasing manpower reserves, are you not? Well, in this way: the undeniable reduction in the demand for manpower was not caused either by efficiency or productivity growth. But the extent, importance and effect were re-evaluated by the enterprises in a characteristic way: it is impossible to tell when the possibility for a greater ratio of production growth will exist, and therefore—what is sure is sure--we will adjust to the actual situation only in some manner. The enterprise attitude is characterized by a certain degree of reserve. Those who count on an upswing do not believe that in such a case they can regain the necessary manpower. On the other hand—and perhaps this is even more characteristic--the leaders who would dismiss employees superfluous for the enterprise would not frequently encounter understanding in their society, and neither is this made easy by social policy conditions. Hence they must consider manpower reduction twice.

[Question] That is to say, the situation has not changed much in practice?

[Answer] I have not counted but I am repeating about the third time that there are, to be sure, changes underneath in which the signs of rationalism can be detected. But these changes are only the first steps to the desired turn, and the reasons for these steps are not the "new attitude" belonging to efficient management but some adjustment to present economic difficulties. Despite this--and again I can only repeat--for the time being the enterprises cannot conduct a much more rational manpower policy than at present, and are not even capable of it.

I will only say this: In the capital city district the manpower problems have not eased. And they have eased only a bit in the most developed industrial centers. I have read, for example, that it has been impossible to open the physical therapy department at one of the new health institutions in Budapest because of a lack of manpower. At the same time, I read that some of the graduates of higher institutions of learning are having a considerably harder time nowadays to find work than before. I am thinking, for example, of mathematicians, physicists, and lawyers, but I might also mention some of the technical professions as well. On the other hand, there is no problem at all, for the time being, with jobs for manual workers, on the contrary in fact...That is the equilibrium situation--in respect to manpower--cannot be judged "globally" as favorable since the stresses of employment characteristic of certain structural and geographical areas have eased only to a small extent, namely, we are facing new problems, and for their solution we have not developed useful and reliable means and methods.

Let me comment a bit more on the optimistic views regarding employment efficiency. If we are speaking of a somewhat more efficient employment and work performance, then I too support these views to a certain extent. After all, the equilibrium of the payments balance has improved substantially in the recent past. But even in knowledge of this fact I cannot leave out of consideration the stagnation in the productivity level and the wage costs that are increasing out of proportion to work efficiency. Sooner or later, the two together pose a danger to our competibility; and therefore we can question the present results relating to employment efficiency. Apparently we should not forget all our old slogans, for example: "Productivity is the most important!"

[Question] Let me quote from one of your earlier studies which appeared about 3 years ago and at the time created quite a stir: "It is possible and likely that the tight situation brought on by the manpower shortage has contributed to the increase in work productivity. But this hardly helps to improve quality and raise the level of modernity; in fact, it is bringing the industrial enterprises into a more and more difficult situation. Therefore, from the viewpoint of the future of the processing industry it is not the maintenance of the manpower shortage but the development of employment equilibrium which is the proper goal and which it is advisable to help by increasing the manpower supply, in addition to a more effective regulation of the manpower situation."

[Answer] I must believe I wrote that 3 years ago and not on basis of the situation existing at the time but rather on the basis of some kind of earlier economic development ideas. Your having quoted it, however, gives a suitable occasion for my noting that there is no forecast or goal which can be dealt with by an eternally valid truth. We should become more and more used to the fact that we must move from theories and concepts which are valid for today to other paths and methods as required by a change in circumstances.

To return to the statement you quoted, it is obvious that a growth in the manpower supply has not been a real possibility for some time now, and I should not need to relate in detail why not. But I do not believe that the earlier ideas and efforts relating to the expansion of manpower sources—under the circumstances existing at the time--were in error. As a matter of fact, we must be particularly careful to see that we do not make a virtue—or a theory--out of a temporary need. If we believe in the future possibility of a dynamic development for our economy--as I believe in it--the manpower cover, or if you will, the expansion of resources will again be back on the agenda. We must keep our attention on this because the related ideas--given the nature of the workers--must be dealt with in perspective. Their realization depends on population policy measures, the school system and schooling practice, prevailing social policy, and many other factors. In this connection, I still accept the above-quoted view which I have been repeating for about the past decade and a half.

There is no international experience which would substantiate the formula of "a developing economy only with declining or stagnant manpower." On the contrary, it is a trend which can be internationally generalized that where the internal manpower sources are insufficient the movement of the international manpower market becomes more and more lively. And if we permanently exclude the possibilities of participating in international manpower circulation (I hasten to note that I am establishing only the present fact and I have no dispute with the present practice related thereto), we must take account of all its consequences. For example, the fact that fewer and fewer people will accept simple and heavy physical work. This is so even if in the interest thereof—and from the development aspect in an irrational way--the actual earning ratios are distorted and come in conflict with our declared goals. Sooner or later we must consider from a money payment point of view what areas of work we shall value upward and what areas downward, and what will be the consequences of this practice on an innovation, for example, defined by material incentive, or in final analysis on social relations.

And because the world manpower market is characterized by other relations, we must after thinking all this through perceive that for tradesman working at low pay in the most important development job areas, a foreign offer of a job represents in given bases a lure that is difficult to reject. This is true not only for political but also for material reasons. And let us not delude ourselves, it is precisely in these work areas that there is no shortage of such offers. This cannot be included among our most important problems, but it cannot be overlooked.

[Question] Let us stay with the directions of internal movement in manpower. According to the most recent analyses, 120,000 persons in the past 5 years have left their industrial jobs and another 20,000 the construction industry. Agricultural manpower declined at a considerably slower rate than expected (and recently it has increased), to mention only the most important characteristics. The employment policy concept prepared for the Sixth Five-Year Plan is counting on these same processes to continue: declining industrial and construction industrial manpower and a minimal decline in agriculture (something of an increase perhaps, depending on the development conditions of auxiliary activity); and as compared to the past 5 years the possibility of a more modest and differentiated manpower increase in the infrastructural branches. I shall add--because it is perhaps characteristic--that some of those leaving the socialist sector are finding work in the private sector, where the number of workers has increased by 6 percent in the past two half-year periods. In prospective, how can we evaluate these directions of movement?

[Answer] That depends on how long of a perspective, how many years we are speaking of.

[Question] I was thinking, as we have already discussed, that the present relatively modest, rate of development is hopefully only a temporary phenomenon.

[Answer] Proceeding from here too, it is still difficult to engage in forecasts. One thing is sure, in evaluating a significant decline--one that varies rather considerably from the plan--we cannot disregard the economic situation. Examining it from this point of view, it is logical and necessary that we are speaking of a process which should be judged positively here and now. It is obvious that our industry today does not need 120,000 more workers. And of course, it is also proper that these 120,000 persons have gone to places where society has need for their work. But still I am disturbed by those newspaper articles and various evaluations which find these processes to be permanent trends, and as such comment on them with unconditional and unanimous approval. I will say no more than this, and let me put it unmistakably: there is no international experience, no economic theory, and nothing at all outside the present temporary situation on basis of which we could unconditionally and from the viewpoint of our development evaluate optimistically the stagnation in the number of agricultural earners, or even the slight increase experienced in recent months. This is an unusual phenomenon and I must suspect not only "in perspective."

The following also provides food for thought: How much work expenditure did it require to produce the total volume of products sold on the domestic and foreign markets? According to the estimates of the KSH, the volume of production produced on household and small farms--calculated in unit manpower--represents a full year's work of about 600,000 to 800,000 largely nonagricultural workers. Let us add to this the one million workers in the agricultural branch in the statistical sense. And if I subtract the certainly large army of employees in the auxiliary branches, it is still doubtful how much longer and to what extent the actual profitability in the export of otherwise qualitatively competitive agricultural products can be maintained.

I reject possible charges of "hostility to agriculture" because there is no reason for me to debate the results of the branch and even less to debate the need of development. But the manpower stagnation and the phenomena indicating extensive development can hardly be suited to a long-range picture of economic development.

[Question] Can this process be reversed?

[Answer] Of course it can be reversed. This is partly a question of revenue regulation and partly of modernization. But let me continue with the directions of movement in the manpower supply, because here we find a striking phenomenon. When I read that the number of pensioners of working age, the number of those on disability pay, and in recent years even the number of "dependent" men of working age, I must inevitably think of the second economy. I do not dispute its role and its right to existence, but here too there is living within us some kind of dual contradiction. While we acknowledge it and emphasize its importance, we also give voice to undeniable feelings of antipathy. Not accidently--behind the second economy a series of negative phenomena can be discovered. I do not want to detail these since I want to stay with the above-mentioned facts, for example that the

number of pensioners of working age is increasing. I hardly believe that they are actually in some way disabled. I hardly believe they all actually participate in the family work distribution willingly or not, or even with enthusiasm take on the housework of the working women. It is much more likely that most of them are looking for possibilities of material realization in the nonlegalized sphere of the second economy. The question stemming from this constantly broadening phenomenon is how would it be possible to legalize these activities in a conflict-free way from the viewpoint of consumer interests and common social bases.

In summary, I judge the present situation and manifestation of manpower management as being in harmony partly with our present economic situation, and favorable from the viewpoint of momentary requirements. But in this process the role of the effects of spontaneous economic conditions is much greater than that of well-considered and forward-pointing undertakings. I know that it is difficult to change the methods of personnel and labor policy which have become petrified over the decades. And still we have the greatest need for this change if we want to use the new circumstances for accelerating the growth of technical development, efficiency, and productivity.

20 Oct 80, p 5

[Question] As we continue last week's interview, let us change the subject. It is well known that the main causes of the manpower problems--in addition to the uneconomic use of manpower and the low and declining number of those age groups that are entering on work--is the operation and structure of the teaching system. Of course, the teaching system cannot greatly modify the volume of the manpower source, but it could considerably lessen the tense contradictions between the composition of manpower demand according to occupations and the training of those entering on work for the first time.

For a long time there were intense discussions over the role of the schools. It appears that now this has subsided and the mood for debate has died down. What does this indicate?

[Answer] In the work of the Mexican World Congress of Economists held in August of this year, surprisingly great emphasis was put on the problems of harmony or conflict among the requirements of teaching, trade-training, and socio-economic demands, continued Janos Timar, university professor and chairman of the Labor Studies Department of the Karoly Marx Economics University. With this I only want to indicate that a world-wide debate is being conducted on this subject, that we are faced with a multitude of unsolved problems, and that viewpoints and opinions are contradictory in many respects.

The debates in Hungary have fallen silent, but this does not mean in my view a slackening of the spirit for debate and even less a possible indifference. I think it rather indicates that many of the problems have been clarified, and the various points of view have converged to a great extent. I shall note that the period of the "great debates" was also characterized by the polarization of certain views because of misunderstanding or misinterpretations. In comparison to many countries of the world, we are moving ahead in that a professional understanding which defines progressive action is being developed in the most critical questions.

[Question] For example?

[Answer] For example, it appears that we have succeeded in agreeing on the basic principles for structural reform of the school system. Or it is no longer a matter of debate whether economic requirements should be taken appropriately into account in school trade training.

[Question] Let us spend a little time on the former debate--which you say is no longer a matter of debate--that is whether schools must undertake to meet economic demands. In certain views one can read a question whether school training can be subordinated "one on one" to the prevailing and relatively rapidly changing requirements of manpower demand?

[Answer] To a question put in this way, one can only answer with a definite no. Incidentally, there never was a goal or program to create such a relationship of subordination.

[Question] It seems the history of our trade training indicates something else. The twists and turns, the detours and from time to time the inconsistencies of our trade training can be ascribed directly to the rapid changes in manpower demands adjusting to economic development. But I need not point only to trade training; there are many signs which indicate that the plans for manpower needs or trained workers have influenced to a great extent the planning and organization of public education. The harmony between the two is of course an important matter. But it seems that behind the process is the assumption that only the manpower requirements of the economy indicate--as a kind of "complex index"--those social demands according to which public education must operate and be formed.

[Answer] If I remember correctly, the basic question was put this way: Can school training be subordinated "one on one" to the requirements stemming from manpower needs? Putting the question in this way, my reply again is no, and in this manner it can never even appear as a goal. It is another question in what way and principally to what extent do the manpower needs of the economy influence the development and activity of public education.

It follows from the nature of the matter that current or even medium range economic goals and manpower demands cannot guide public education. But the long-term development programs which embrace all of society and the long-term manpower forecasts stemming therefrom or expressing these have a really essential role--they must have--in the development of education. Without harmony between the two there is no education planning and "organizaton," and of course there is no planned manpower management. I am convinced that these long-term plans--although certain details may have to be frequently modified--are already forecasting the main processes to the end of the century. The question is, however, what path education itself will choose. Adjustment to momentary demands may somewhat reduce the present tensions, but will cause all the more serious contradictions tomorrow. But if we only act according to the requirements of tomorrow, we should not look for the possible solutions primarily in the present tensions. It is not certain at all, for example, that in a decade or decade and a half we will not have to deal with unforseen conflicts. And this is one of those dilemmas whose recognition will feed the world-wide debates going on around education.

Let me again refer to the congress that was held in Mexico. It becomes evident, for example, from a case study which analyzes similar problems in the FRG that they are constantly neglecting the planned, long-range development of education and trade training. They do not devote adequate attention to the possible coordination of population, education and employment policy. Therefore on one hand they have to resort to repetitive, ad hoc and post facto intervention; and on the other hand--as is specially stressed by this study--trade training, if you will, develops "one on one" as required by the momentary demands of the manpower market.

[Question] The problems of others can hardly be a consolation to us, but even in connection with the FRG--I must return to the reliability of planning and long-term forecasts. Because in the end what help is it to education if--despite the supposedly reliable projections of the main processes--"certain details must be frequently modified." The consequences of these modifications inevitably react on education as well.

[Answer] If we can agree that the other alternative, that is, the adjustment of education to the momentary changes in socio-economic conditions--and thus to the changes in the manpower situation as well--is obviously impossible, we might avoid further dissecting of this question. But still I would like to bring up here a sentence or two because I believe that behind the question there are some old, fixed, mistaken and illusory notions about the role and essence of planning work. Perhaps not by accident, I admit.

Let me give a simple example. If someone wants to travel, let us say, from Budapest to Pecs by car, but is not yet familiar with the road leading there, what is the proper way of going about it? To start out in the general direction until someone directs him to Baranya? Hardly. Or should he prepare a precise and detailed plan to which he rigidly clings so that even if he encounters a new road, he will still continue according to the plan on the old road? Hardly. That is, the route plan can be used if among the known conditions it indicates the most favorable direction, and if--on the basis of constant adjustment to real circumstances--this plan is modified as necessary as one proceeds.

The essential thing is not the once formulated plan, but the constantly renewed planning which is embodied in a system of partially overlapping, controlling and rectifying plans. We must also know that when we commit ourselves to more and more detailed planning we are increasing the probability of error. The manpower needs for certain--more or less homogenous--occupations can be planned with relative certainty: for example, within 15 years the number of skilled workers and engineers that will be needed including mechanical engineers or lathe operators. In this case an error, say of 10 to 15 percent is acceptable because such an error can be countered by the flexibility of supply and demand. But we must consider well the "precise" forecasts of the number of physicists, for example, or film operators that will be needed.

[Question] Is the example taken at random?

[Answer] Similar things may occur elsewhere. And the mistake in such cases is mostly the necessary consequence not of a planning error but of our illusions linked to planning. This is not consolation, of course, for the disappointed physicist or film operator. And here I would like to turn to the problem of individual ambitions

as against the needs of society. There is an obvious contradiction between the two, and this can hardly be avoided no matter what solution we select. Under present day conditions and social dimensions these conflicts do not arise at all from a rigidity in manpower forecasts as certain people assume. School enrollment limits--although few know this--are never mechanical copies of data for forecasting manpower needs. If according to forecast signs in a given period of time--I will give here only one figure--we will need, for example, 1,000 agronomists, this never means that we must prepare to train 1,000 agronomists. Rather somewhat more, and in other lines somewhat less than is "necessary." Because the plans always include the assumed effects on the balance of movements stemming from occupational mobility. That is, flexible planning counts from the beginning on the fact that individual decisions are strongly influenced--beyond personal endowments and capabilities--by the earning relations of occupations, working conditions and circumstances, social prestige, family traditions, and the influence of parents and friends to mention only some of the more important motivational factors.

Perhaps the effect of the factors should be "clearly" ignored from an economic point of view, but socially we must regard it as a rational factor as long as the conditions and circumstances evoking mobility do not change. This also indicates that--at least in Hungary--planning does not put education into a bind; on the contrary, with long-range forecasting it will promote the working out of a well-considered and conceptual development policy.

[Question] And still it cannot be denied that the educational and trade training institutions live under the spell of "training numbers."

[Answer] There is much truth in that, but we should also examine the causes. The application limits are not legally "obligatory plan indexes." These are approximate figures which of course the school--and this is already another question--and generally the administration for instruction deal with as an obligatory directive which must at the most "be overfulfilled." And not only in the sense that "in the process" everyone raises the limits; rather if the applicants are too few in some places they will accept even those who they know are unsuitable for the given studies. And once accepted they are made to finish school, the university. It is not accidental that Hungary, for example, in respect to the relative number of students at higher level institutions lags behind internationally. We are often reproached with this by many. But on the other hand in respect to the relative number of graduated specialists, we are far ahead of the majority of countries that are more developed than we are, but this is hardly mentioned.

[Question] And can it be attributed to this that there is a constantly more prominent oversupply of trained people, for example, which in the end leads to losses stemming from incongruence?

[Answer] This too is a cause of the "incongruence," or of the fact that the formal training does not meet the formal requirements of the work place. And let us stay briefly on this subject that "it does not meet." It is not the most important thing that the formal requirements of training and the work place coincide and that there should be a congruence that can be statistically measured. This cannot be neglected, but it is much more essential that there be harmony between actual knowledge and the real work place requirements. And behind this is a latent question: to what extent does the formal training cover actual knowledge. For example, is the

economist we send out with a university deploma actually an expert with economic knowledge? Or is he perhaps someone who only slipped through the examinations and at the most is suitable to fulfill some kind of economic type administrative job.

We could say, of course, that life will take care of the desired selection. This is true, but how? How long will it take and at what cost? With reference, for example, to the medical faculty, I would like to avoid allusions that touch agonizingly on everyone. But I must mention that in economic life effectiveness is not realized with a consistency and strictness which would rapidly and inexorably carry out the desired selection. But otherwise we favor the formalities--because in some way these can be measured and registered--and if someone already has the "paper," the diploma, the rest will come along. (Now many personnel officers or other managers inquire about the diploma record or about the thesis prepared for graduation by the job applicant?) Finally, I may risk saying that in Hungary too--although we are in this respect in a much more favorable situation than many countries--mass training has been accompanied by a certain drop in the quality standard.

[Question] Has this led to problems of excessive training?

[Answer] I would not generalize the problem of excessive training. Let us clarify the concept. By excessive training I understand that in some area of specialization we are constantly and substantially training more skilled people than the society or economy is able to employ. In my view this is not characteristic on a mass scale except for one large employment group, the skilled workers. But even the conflicts stemming from this are muted imperceptibly by everyday practice. For on one hand training actually and significantly exceeds the skilled manpower needs, and on the other hand the economic organizations are wrestling with a skilled manpower shortage that resists coming to an end. This is true because the work places cannot operate without unskilled and skilled workers. The more weakly trained skilled workers can easily find jobs in these areas, or those who want to earn more money may find jobs in the better-paid, low-prestige but socially necessary places of work.

[Question] So finally we return to the problem of the school system. And the school system--given its present structure--prepares everyone for continuing learning.

[Answer] At least for continuing learning the skilled-worker training or in high school because what else should a 14-year-old child do who has just finished general school. He must continue to study. Of course, the solution is not the same as arose 20 years ago in the school reform efforts--ignoring conditions and circumstances--to the effect that high school education must be made "general" up to the age of 18 years whereas "concrete" and completed training should be entrusted to the enterprises.

The new, realistic concept now being developed--to the extent I know it--plans the realization of a more supple and flexible system of various grades--largely by using the existing framework--in which the young people may leave as "graduates" at various steps so that thereafter--in accordance with their individual capabilities, efforts and circumstances--they can shape their career "upward." One of the contradictions of the present, rigid school system is that it "fails" a considerable

ratio of the youth or forces them to a "downward" mobility at the beginning of their career. And in social dimensions that is not a good thing; such a forced track is the source of many social and economic conflicts.

[Question] But it is not evident from all this that a modernized school system would keep its present trade training functions, or whether these would be taken over by the enterprises.

[Answer] It would be difficult to fit into the subject of our conversations a clarification of the structural reform of the school system—and this cannot even be my task. But the question is too pointed, and therefore easy to misunderstand. The modern school system always has had a trade training function and it is one of the characteristic and general trends of schooling development that the role of the school is growing more and more important in trade training.

There can also be no doubt that every school type must have a clearly defined goal, and thus it must assure complete training. But no school training can be "complete" in the sense that the young person starting his career will not need to continue his studies even if there is no change in vocation or career. This is one of the most characteristic requirements of our age because of the rapid development of science and the constant change in the employment structure. Those who want to acquire a higher degree of knowledge or want to change their vocation must count all the more the requirements of continuing training.

It follows from all this that "permanent" education follows youthful training, a system of knowledge modernization, continuing training or studies and retraining all the way to the end of the career. The enterprises have a great task here, but they are not the only ones. It is likely that an increasingly large task will fall on the councils, for example in place of manpower distribution. And of course the schools and training institutions will continue to have an important role, with the introduction of more modern forms of training combined with work and more successful methods.

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CSO: 2500

'TRYBUNA LUDU' REPORTS ON PZPR WARSAW COMMITTEE PLENUM

Warsaw TRYBUNA LUDU in Polish 13 Aug 80 pp 1, 5

[Text] The PZPR Warsaw Committee Plenum held on 12 August was devoted to an assessment of production results and current social and economic problems in the Warsaw City voivodeship.

The proceedings were conducted by Alojzy Karkoszka, PZPR Central Committee Politburo member and first secretary of the Warsaw Committee. The plenum passed a resolution requiring that all party organizations immediately review the present socioeconomic situation in their working communities and take action necessary to improve management efficiency. The PZPR Warsaw Committee's executive board was directed to organize the work so that it reflects the most vital problems troubling the working class, the continuous concern regarding fair distribution of benefits to workers, and setting of payments corresponding to input and level of work performed.

During the deliberations the attendees, representing all occupational and social communities in the region, emphasized that an honest effort on the part of all working people will guarantee that the tensions and difficulties in public life will be surmounted.

It was determined that insofar the region was concerned, positive production results were attained: industry in the Warsaw City voivodeship fulfilled this year's production plan, already amounting to 57 percent. Production rose, it should be emphasized, despite lower employment than in the past year and lower than that envisaged in the plan.

But not all enterprises completely fulfilled their product range tasks, as revealed in shortages of certain products on the market. Export goals were not entirely met.

It was not an easy six months. During the first months of the year there were interruptions in scheduled material-co-production deliveries. There were power and raw materials problems. Under these conditions work could not be properly organized. Obviously this affected social conditions and sometimes it affected wages.

In recent weeks talks and discussions have taken place in many plants. They concern the most general problems--market supplies, increased maintenance costs, as well as a series of matters requiring resolution inside the sectors or plants. Ways are being sought to overcome the tensions and difficulties. Concrete demands and proposals are being made.

But not everywhere do these discussions take place in a calm atmosphere. In some plants there are work stoppages. This is, of course, very bad and has an immediate negative effect because work stoppages mean less production of scarce products, disruption of municipal enterprise operation--all of which makes life more difficult for large-city dwellers.

In all party organizations and at all levels, in all capital-city work places, the socioeconomic situation is now being thoroughly and incisively analyzed. Attention is concentrated on creating conditions that will ensure that production and economic goals will be met, on improving working conditions and wage systems, and on social matters.

Proposals made by personnel staffs during discussions and talks were brought up at yesterday's plenum. They refer mainly to the broad sphere of matters relating to working and living conditions. Most of these proposals can and should be settled in the plants, with the cooperation of community organizations, especially with the plant councils.

It was emphasized that one of the basic prerequisites for improving the present economic situation and thus the living conditions, is increased labor efficiency at all levels. Attention was called to the necessity for creating, in all plants, a general climate of definite and personal responsibility for realization of the proposals and demands made and accepted for execution; all decisions affecting the creation of an atmosphere in the plant should be undertaken after broad consultation with the working staff.

The plant directorships, party and trade-union organizations should give particular attention to such matters disturbing the work force as fair distribution of wages, social benefits and improvement in healthy and safety conditions.

A great deal of time was devoted to the need to improve the planning system, coordinate production, to employment policies, and to improve the system of community consultation in fundamental socioeconomic matters.

It is indispensable, it was stated at the plenum, that party ties with the working class be constantly strengthened in order to realize the goals set forth in the Eighth Party resolutions. At the same time, attempts to exploit the discussions and tensions for purposes that are incompatible with the interests of the working people must be opposed.

The plenum passed a number of motions of an immediate and prospective character. Some of them require examination and help from central authorities. The plenum mandated the executive board to take action on the most vital problems troubling the work force. At the same time, it committed the party activists to take the indispensable steps toward ensuring uninterrupted, systematic work in all fields and fulfilling the socioeconomic taks envisaged in the plan.

9295
CSO: 2600

BENEFITS OF TRADE WITH POLONIA DISCUSSED

Warsaw TRYBUNA LUDU in Polish 13 Aug 80 p 6

[Article by Zbigniew Klejn: "Economic Cooperation with Polonia, With Mutual Benefits"]

[Text] This was not wasted time, said one of the participants of this year's Polonia Economic Forum (the sixth), which took place, as usual, during the International Trade Fair in Poznan. The opinion referred to the meetings, but it can also describe the past few years during which the foundations were laid for Poland's broad economic cooperation with Polonia.

When the government's official representative, the head of the Ministry of Domestic Trade and Services, Adam Kowalik, said at the opening of the meeting that "the PPR government is acting and will continue to act to make this cooperation more fruitful, to have it assume definite forms of various initiatives," those present knew that they could believe these words. It was already known that of the 11 law regulations governing Polonia's economic operations in Poland, 9 had been introduced or amended during the past year. Thus the government demonstrated its willingness to entertain proposals from Polonia's economic community, brought up at previous meetings. So it was not surprising that this year from among the 153 participants from 19 countries, 96 representatives of Polonia's businesses took part in the discussions, perceiving a common interest in the development of this cooperation.

Today's Polonia has an economic and technical potential that in many of its countries is a significant factor of economic life. It owns scores of thousands of enterprises, including over 150 firms in the United States with a mean annual turnover of over ten million dollars. Because of this potential and its sentimental attachments to Poland, it can be an important factor in developing our country's economic cooperation with the world.

The sentiment has always been there. But the growth in Polonia's interest now has a concrete basis. It is Poland's growing role on the international arena and above all, our country's rapid economic development. Poland, notwithstanding the difficulties it is now going through, has become an important and stable partner of the developed countries.

Both sides are willing to work together. The opportunities are now great and they will be even greater in the future. There is also visible progress, although there are many difficulties and retraints, both objective and subjective, as with everything new that is not based on experience and is occuring at the juncture of two different socioeconomic systems.

We see this, for example, in the simplest form of cooperation--trade exchange. Who, if not Polonia, it would seem, should be most favorably disposed to Polish goods? The figures will confirm this thesis: During the past five-year plan, turnovers with Polonia amounted to almost a billion dollars and its share in Poland's foreign trade with developed countries increased from three percent to six percent. But the growth of turnovers with Polonia during 1975-1979, which tripled in value, is to a large degree the result of price fluctuations on the world market, and the shortage of traditional export goods has an impact on the expansion of this trade.

Therefore, it must be replaced by other goods, but the Polonia importer frequently is unaware of what is actually available in our country and does not get an answer to his question, or the answer is so long in coming that the order is placed elsewhere. He is annoyed by the slipshod regard for quality and delivery schedules. We have a great deal to do in this area. It is true that the attitude of the leadership factions has been favorable. For years, the "Polonia" Society has pursued this with success. A network of institutions and persons with full authority to act in trade with Polonia has been established. A special Polonia-Poland chamber of foreign trade, "Inter-Polcom," has been appointed. But on the middle levels of administration and commerce the antiquated viewpoints and habits must constantly be fought.

The financial and purchasing capacity of Polonia firms is often underestimated. Naturally, it is easier to deal with large firms, whose attractiveness enhances not only the size of the turnovers but also the method of doing business. These firms, however, hesitate to go outside the range of goods for which Poland is, according to them, the traditional supplier. Nor do the Polonia firms constitute a direct attraction for the negotiator from Poland, and furthermore their owners themselves often in coming to Poland do not allow themselves to be dismissed by generalities. If they want to, they know how to reach the proper authorities with their grievances. But expansion of the circle of Polonia buyers requires familiarity with numerous but dispersed average and small firms and a breaking with the tradition of selling "from behind the desk."

It should be said approvingly that at last year's Economic Forum, the representative of the Ministry of Foreign Trade and Maritime Economy spoke of the need to come out with new types of goods and to attract to these goods the interest of Polonia living far from the metropolitan areas, to go where Polish products are virtually unknown. And since we are speaking of large amounts, we cite as an example the Philadelphia businessman, Edward Piszek, who each year buys over 100,000 tons of fish for processing in his own plants.

Polonia's investments on Polish soil are a new form of cooperation. Over 60 Polonia enterprises are involved; their annual turnovers amount to a quarter billion zlotys. The government has calculated that these firms, which are equipped with modern equipment and technology, will make up the market shortages and begin to export. There are already such firms as the Top Mart jeans factory in Czestochowa and Krakow and J. Soszynski's volatile oils plant in Poznan.

From among the Polonia enterprises in Poland, barely five have signed export contracts totaling 1.5 million foreign exchange zlotys. This is attributed to regulations which have not been finally defined and also to certain groundless fears that exports of domestic firms may go into the turnovers of the government. The fears are groundless since on balance this should be profitable to Poland and, because it is to the interest of the investor to be concerned about the quality of his goods and on-schedule deliveries, he should, as a rule, have steady and reliable customers.

The most promising forms of cooperation with Polonia are the cooperative agreements and mixed partnerships. Also included are co-production and technical cooperation as well as joint ventures with the socialized industry in Poland, the partner's country, and on third markets. A good example of the joint participation of Polonia partners in improving and multiplying Polish export production are the Jean Zarzycki firms from France (a seven-year agreement with "Predom" on deliveries of modern, by their own engineering, household equipment) and Longin Anecki in Great Britain (worldwide promotion of modern hotel and hospital equipment produced in the Food Processing Machinery Plants in Bydgoszcz).

Over 20 contractors have expressed an interest in this form of cooperation. It has a tremendous future for it is within the framework of the intergovernmental agreements that Poland has signed on cooperation by small and average-size enterprises, since in these cases they are sponsored by their governments. For example, France and Italy grant credits and give various types of support to this type of cooperation.

Economic cooperation developed without burdening the country's materials and payments balance is the most dynamic form of Polonia's ties with Poland. Poland today is now able to offer mutually beneficial cooperation to increasingly larger groups of vigorous, educated and wealthy representatives of Polonia. Business does not supplant sentiment in this instance, but makes it more concrete, giving it more modern substances and form.

9295
CSO: 2600

COMMENTARY ON BLACK MARKET, TOURISM NOTED

Warsaw POLITYKA in Polish No 42, 18 Oct 80 p 16

[Article by Daniel Passent: The Fruit of Romantic Ecstasy]

[Text] The last chords of Petr Chaikovskiy's Piano Concerto No 1 (as indicated in the program "the fruit of a strong romantic ecstasy") had just died away and the fashionable audience was descending the marble stairs of our philharmonic hall for the intermission, when I heard that dollars are being exchanged on the black market at the rate of 110-140 zlotys to the dollar.

Representatives of the field of art who came from all over the world (this year the Chinese are creating a sensation although dollars do not concern them) discussed the notations on the Warsaw five-line currency scale in a lively manner: a whole note being equal to 120, a half note to 60, and a quarter note barely 30 zlotys.

The sordidness of a black market, which it is not possible to stop, even reached to the artists absorbed with the concert and their participation in the splendid performance. Everyone, from the hotel waiter who brings breakfast to your room in the morning, to the cab driver who brings you home in the evening--each one is able to make an offer to "change money."

This feature of our landscape likens us to distant countries of the Third World where barefooted emaciated little boys, as well as coolies, sluggish because of undernourishment and the heat, propose illegal transactions to the white people. Despite all of the problems we have had for years, and which now the whole world knows about, this procedure stands in contrast with the level of our country's development--unfortunately it conforms to the decline in morality. Prevailing regulations, which are as appropriate to life as a fiddlestick is to a drum have, in many cases, brought this about.

A foreign tourist who comes to Poland today gets 29.71 zlotys for his dollar (2 zlotys and 71 grosze). The ending, 71 grosze, indicates that it either concerns a very subtle quotation of the current rate exchange--something unfortunately, which is not true, or some kind of bureaucratic decision, "the fruit of a strong romantic ecstasy."

At a time of such a fall in the purchasing power of the zloty, and the shortage of so many goods which are available only for hard currency, how can we expect anyone to be selling dollars voluntarily for 30 zlotys! I will wager a dollar that

Minister Krzak would never sell a private or a state dollar for such a beggarly pittance. What is more, if some Polish institution were to import foreign goods which it then sold in the market place at the rate of 1 dollar for 30 zlotys, its director would be thrown out with a crash for his extravagance.

Thousands of Polish citizens rob their own government in front of our eyes and snatch dollars which should wind up in the Polish National Bank (NBP) on Danilowiczowska Street. We do not have the kind of criminality they have in the UK or the United States. No one attacks our banks because no one expects to find any stock of Swiss francs there. On the other hand, there is a never ending assault on foreigners who are stripped of their dollars in exchange for a shower of zlotys. Everything is possible in Poland, even thieves who pay more than state banks.

Thus this is a procedure which is harmful from a moral as well as an economic standpoint. Great damage has taken place in both areas. The obligatory rate of exchange is thus unjustified from every point of view, and millions of dollars are lost to our country only because it has set its sights too high and does not wish to lower the presumptious 1:30 ratio. Polish earnings from tourism amount to 380 million foreign exchange zlotys annually (about 120 million dollars). In short, mere pennies--a good health resort on the Mediterranean earns more than that. These earnings are not proportional to the hotel, motel and other investments made in past years. However, these are earnings which are cut by 200 and perhaps even 300 million dollars because of the black market.

Prior to writing this column, I talked with a responsible official who continues in his state of strong romantic ecstasy. He defends the 29.71 rate of exchange because he considers that it is an advantageous one for a foreigner. "He will get a good dinner here for 300 zlotys while he will not be able to eat in New York for $10," he says. That is a joke, because the tourist will not eat a good dinner for that money either here or there. The price of a small coffee or a beer in a hotel already is almost 50 zlotys, while a bottle of inferior wine is really sky high.

Even if this rate of exchange were advantageous for tourists, as my interlocuter from the ministry assured me it was, the nature of tourists is such that when proferred an exchange rate at every step which is two, three and even four times better, they cannot resist. This includes even the most sophisticated who patronize the Philharmonic Society, not to mention the swarthy seasonal workers who fly here over the weekend from West Berlin. It is necessary to reconcile oneself to the fact that the moral level of foreigners is pitiful and that our devoted traders do not have to coerce them, they give their dollars, readily and with pleasure--in romantic ecstasy. Even if officials give birth in pain to an exchange rate 10 zlotys higher, that will not change anything--a radical change is necessary. Such a change has not been introduced to date because it was considered that foreigners do not come here to shop, what they need primarily is zlotys for a hotel and meals, and if they had a better official exchange rate available they would simply exchange even less money. This kind of thinking seems to be false. They will not be exchanging less money for hotels and breakfasts because the same people who set the exchange rate also make the decisions about the cost of the hotel and the soft-boiled eggs (in the hotels-with-breakfast system). There remains, sad to say, huckster-type calculation--what is more profitable, earn less on meals, or persuade

guests to exchange money in state foreign exchange offices, and not pass money right and left into the outstretched hands of traders, and even normal citizens for whom this has become common practice. I saw a 5-year-old child, who, having returned from nursery school, told his parents that "a dollar sells for fifty." Appropriately, the parents told him to buy as soon as the dollar is sold in the nursery school at that price. Today, even a child won't believe that the exchange rate is 29.71 zlotys. This matter, as old as the world, was the subject of deliberations (now, we speak with great grandiloquence of "debates") in 1972 by the government's Presidium at that time. A program was even set up, which resulted in nothing, because the essence of the program was such an increase in the supply of attractive goods for zlotys (cars, flats, calculators, ink and end-pieces for ballpoint pens, cutters for pencil sharpeners, plaiting for watch straps, etc.) that the excessive demand for exchangeable currencies would drop. The program, which was based on demand, is now dead, while the black market exchange rate flies about in romantic ecstasy causing financial, moral and even political losses because to foreigners, our country looks like a crowded illegal foreign exchange office.

I see no other solution in this situation than a radical devaluation of the zloty in tourist exchange, which would simply be an admission of a condition which in part is already in existence. If the difference between the official and black market exchange rate were small, then, in the face of a theoretical risk, the black market would be less attractive and at least some tourists would not want to enter into suspicious transactions for the sake of a few pennies.

The official, of course, fears that more dollars exchanged means more zlotys, of which there are too many in Poland anyway, in the hands of foreigners. This is a vain fear because foreigners have those zlotys anyway, not so much from Polish officials, as from people who are more efficient. Thus there is no reason to fear that foreigners will rush to strip our market. Let us put an end to the fiction in which state enterprises are encouraged to export at any cost and approval is even given for export which brings a dollar for 100 zlotys, while we want a tourist to sell us the same dollar for a third of that sum.

There is much to be said for raising the tourist exchange rate, and very drastically at that, so that hotel front doors and washrooms stop playing the role of banks.

It is worthwhile here to give the lie to one other fact, namely, that in past years expenditures on foreign tourism have been increasingly limited on the grounds that there was a need for balancing revenues and expenditures for this purpose. Meanwhile tourists left 380 million exchange zlotys with us, while we gave our people a seventh of that amount (for promoting tourism). At this moment, while the whole world talks about Poland's indebtedness, no sensible person will be proposing an increase in foreign tourism, however, where money is concerned, the truth is best.

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BOOK ON ROLE OF INDUSTRIALIZATION PLANNING REVIEWED

Warsaw TRYBUNA LUDU in Polish 20 Aug 80 p 5

[Review by Janusz Ostaszewski of the book "Pulawy. Planned Control by the Industrialization Process," by Zbigniew Sufin, published by Ksiazka i Wiedza [Book and Knowledge Publishing House], Warsaw, 1979, 214 pp. Price, 50 zlotys]

[Text] Pulawy, a small town with a long history, appeared on the country's industrial map because a chemical complex producing synthetic fertilizers was built there. A large industry sprang up against an agricultural landscape where previously there had been no large concentration of working classes or industrial history. The construction of a large complex over several years and its startup, had a significant effect on the ongoing social processes: it changed the town and its inhabitants.

During the entire time the Pulawy investment was being realized it was being carefully observed by scientists in various specialties. Some of these extensive examinations, conducted over several years, are described by Zbigniew Sulfin in a book bearing the rather complex title: "Pulawy. Planned Control by the Industrialization Process," prepared as part of studies conducted in the field of the socialism-building theory by the Institute of Basic Marxism-Leninism.

It described everything related to changes occurring in the town's society along with the town's industrialization. And so the author writes of the anticipation and hopes of the inhabitants of Pulawy in the new industrial building; how the personnel staff of the complex was formed and how it participated in the town life; on the relations between the "old" and "new" Pulawy residents; on the changes that occurred in the conditions and way of life of the entire community due to industrialization; in the people's incomes and their relationships to their jobs; and in their life styles.

The experience accumulated during the course of these observations and research enabled the author also to treat the entire problem in a larger context and to formulate conclusions on the planning role in control by industrialization.

Industrialization of the country is not a goal in itself. It is subordinated to social goals. Hence the book's thesis on planning integrality states that social, economic and spatial planning must be closel integrated into a homogeneous planning system. Such a method of control by industrialization guarantees harmony and equivalence of three simultaneously occurting processes which, in turn, dictates the most correct and desirable course of social change that industrialization brings about. If the correct balances are not maintained, if construction goals in an industry are placed above other goals, then developmental imbalances will result which will have an adverse effect on the formation of new industrial communities."

"The experience of Pulawy," writes the author, "confirms the need to improve the controlling role of planning by expanding its analytic function... It is not enough to simply establish the level of utilization of financial outlays and material tasks. An analysis of factors influencing the realization of tasks outlined, an analysis of changes occurring in social structures, the monitoring of the social effects of industrialization--all these are tremendously important."

Part one is an important complement to the work described here. It contains a reminder of theoretical problems of planning in a socialist society.

In sum, we have here a book which, because it is based on hard facts, contains a series of important guidelines which make it easier to make the correct decisions necessary to undertake investment ventures in regions that have not had an industrial history.

9295
CSO: 2600

PRINCIPAL FACTORS OF 1981 PLAN OUTLINED

Bucharest REVISTA ECONOMICA in Romanian No 43, 24 Oct 80 pp 3-4

[Article by Toma Melinte]

[Text] The 1981 uniform national plan for socioeconomic development is a new link in the creative activity of the Romanian people to implement the tasks outlined in the program documents of the 12th Congress of the Romanian Communist Party. It fits into the rates and dimensions of the Directives and ensures the achievement of the goals and guidelines for the country's socioeconomic development under the 1981-1985 Five-Year Plan. In all its sections the plan reflects the directions of the party leadership, of Nicolae Ceausescu for upgrading the entire economic activity, for fully using the production facilities and areas built, for improving the technical standard of material production, for continuously improving the techniques, for expanding the domestic base of raw materials and energy resources, for promoting a firm policy of rigid saving and wise management of all resources and increasing the degree of utilization of these resources, for upgrading the investment programs, for more sharply raising economic efficiency and firmly applying the provisions of the new economic and financial mechanism.

Set as an integral part of the 1981-1985 Five-Year Plan, the plan for next year envisions more balanced development rates. Touching on this matter in his speech at the plenary session of the Central Committee of the Romanian Communist Party held on 14-15 October 1980 Nicolae Ceausescu stated: We had in mind that we need to tremendously strengthen our achievements under this five-year plan. The 12th Congress specified a development rate of 8-9 percent, one that is lower than that under the five-year plan."

The dynamics which is characteristic of Romania's socioeconomic development in 1981 (for the chief indicators, percentage increases versus 1980 levels, calculated on the basis of prices on 1 January 1981), is reflected in Table 1. The 1981 plan provisions ensure the firm continuation of the policy of industrialization, a decisive factor of the development of productive forces, of the country's socioeconomic progress. The value of net industrial output next year will be 331 billion lei. The increase in Romania's industrial potential is planned in the context of the continuous improvement in the

technical and qualitative level of all products by accelerating the process which involves arrangement for the production of new items, modernization, renewal and standardization of products, development and use in production of new materials with superior features, new high-standard machines and installations with lower energy consumption rates -- decisive factors for the further modernization and diversification of the structure of production. The branches and sectors that are factors in promoting technical progress will further grow at a more rapid pace.

Table 1. Chief Indicators of Socioeconomic Growth in 1981

Indicator	Rise Versus 1980 %
Social product	6.1
National income	7.0
Industrial output	
Value of net output	8.1
Value of marketable output	7.0
Net agricultural output -- on the average --	9.0
Volume of fixed assets in the economy	9.2
Total volume of foreign trade	10.0
Labor productivity in industry based on value of net output	7.0
Value of retail goods sales through socialist trade	6.0
Services to the population	13.2
Fund for remuneration of workers	4.6
Real pay	3.4
Real incomes of peasants derived from work in agricultural production cooperatives and private farms -- per active person --	3.3

The levels and structure of industrial output are determined in light of the needs for maximal use of the production potential of industrial enterprises and built areas, expansion of mechanized operation of facilities, better training of workers and stronger labor discipline, the need for providing technical assistance on all work shifts by adequate assignment of technical cadres. Of course, on this line specific and firm measures are required at all levels.

A facet of industrial development next year involves greater focus on tasks of superior use of raw materials, supplies, fuels and energy, by upgrading the production structures and expanding technical advances and modern procedures and consumption standards and regulations, by greater use of substitutes, maximal utilization in small-scale industry of local resources of raw materials and retrievable and reusable materials. Under the plan, emphasis is placed on the measures which should be takento increase safety in operation of installations, machines and devices, by eliminating stoppages in production processes and reducing the periods of idling in repairs. Action must be taken to improve the quality of overhaul and capital repairs and to ensure the necessary amount of spare parts -- by maximal use of facilities in this area and taking of measures to recondition larger quantities of used

components and subassemblies. Moreover, emphasis is placed on the steps that should be taken to rigidly implement the provisions in the delivery charts worked out on the basis of the tasks contained in the uniform program for cooperation in production between ministries, centrals and enterprises and between counties.

The proper implementation of the plan provisions necessitates full completion of the tasks which involve the physical output -- in terms of the items specified under the plan -- and the value of net output, firm action for the smooth run of the production processes in all the economic units. Plan assignments must be exceeded only for the products which involve better use of energy and raw materials and only if these products have their marketing ensured, on the basis of domestic or foreign contracts or orders.

The plan specifies that the assignments in industry be to a greater extent backed by the input of scientific research, development and introduction of technical progress, whose efforts have been focused on development and arrangement for production of new machines and installations with high technical and economic parameters, in competition with their foreign counterparts and requiring low metal and energy consumption levels; on production of new items and substitute materials which ensure lower relative consumption rates and replacement of materials which are expensive and in short supply, specifically of imports, in the machine building, chemical, metallurgical, and power industries. In the above-mentioned area provisions envision 2,520 major projects, which will be instrumental in better utilizing raw materials, raising the technical and qualitative standard of production and scaling down consumption rates for materials.

We must emphasize that the tasks outlined under the plan for research, development and technical progress cover an area which goes far beyond industry. They involve solutions to all the basic problems of economic and social development of the country by ampler introduction of the Romanian technological concept. Hence, steps are taken to solidify the research-design-production cycle, so that the results of research may be promptly applied in production.

In agriculture the plan envisions the further rise in plant and animal output in the context of wise utilization of all the agricultural and arable area and better use of the technical-material base. Account is taken of the provisions under the programs worked out for the development of the production of grain, industrial crops, vegetables, and fruit and animal husbandry. Under the conditions of a normal agricultural year, the provisions anticipate a net output of 73.8-82.2 billion lei and of production levels for chief products which are higher than the annual average for the 1976-1980 period.

The levels of agricultural output were determined in light of the expansion of the material base of agriculture by provision of 14,300 tractors and 6,000 self-propelled corn harvesting combines, sugar beet harvesting combines, potato picking machines and other farming machines and installations. Moreover, agriculture will receive 1.7 million tons of nitrogen, phosphorus and potassium fertilizer and 51,000 tons of pesticides (active substance).

The year 1981 will see the development of 195,000 hectares for irrigation, drainage projects completed over an area of 100,000 hectares and projects to combat soil erosion over an area of 90,000 hectares. To ensure attainment of the 1981 farm output the plan places emphasis on a set of measures to wisely use all the agricultural and arable area, utilize irrigated areas in full and at the efficiency levels envisioned, apply sensible crop rotation within the area of each agroindustrial council, increase the production capacity of the farmland for completion of improvement projects, eliminate excessive moisture, and combat the phenomena of soil erosion and salinity. Moreover, provisions involve ensuring quality seeds and stock for all crops, extended mechanization of farm operations, good use of all the fleet of tractors and farming machinery, expansion of the production of feed by boosting average per hectare outputs for fodder crops and natural meadows, and so forth.

In compliance with economic needs, the expansion of transportation is contemplated in the context of continuous modernization and upgrading of the structure of this branch, of rationalization of the transport flows. The overall volume of domestic freight transportation in 1981 will be 3.2 percent greater than that for 1980. Hence, the material base of transportation for general use will increase by provision of 170 diesel and electric locomotives, 4900 4-axle freight cars, tipping trucks and trailers with a capacity of 40,200 t, ships, tugboats, pushers, and so on.

In the area of investment projects, in light of their outstanding role in the economy, the 1981 plan provides for measures to raise economic efficiency, integrated into the program for centering the activity on the on-schedule completion of the facilities under construction. Commencement of new projects will be done only after approval of the construction documentation and preparation of all the conditions for completion. In this context the total volume of investments in the economy in 1981 will be 220 billion lei. Measures have been specified for rigid implementation of the provisions in the charts for attainment of the parameters planned, for completion of the construction-assembly projects and ensuring of the delivery in terms of equipment and materials in accordance with the charts for phasing the investment projects and complying with the periods of mechanical and technological tests specified. Much emphasis is placed on providing the skilled work force required for completing this program under optimal conditions.

Great volumes of investment funds are assigned to all the economic branches (See Table 2). As reflected in the table, the greatest part of the investment funds further went to the branches of material production, out of which more than 53 percent to industry and more than 14 percent to agriculture. On this basis, it is anticipated that 750 major industrial and agrozootechnological production facilities will be completed. The 1981 plan further makes provisions for significant improvements in the territorial distribution of the productive forces, a basic factor of our party policy. The resources and facilities involved are part of the ample program for systematizing all the country's territory, with the focus on ensuring the rapid progress of all counties and localities.

Table 2. Volume of Investment Funds for Various Major Economic Branches

	Billion Lei
Industry	118.0
Construction	7.5
Agriculture, forestry, water management	31.3
Research and development	2.3
Transportation and telecommunications	23.9
Trade, public catering, tourism, technical-material supply	5.4
Education, culture, public health	4.1
Housing construction (including hostels for single people)	18.8
Communal administration	5.2

In all economic branches and sectors of activity the size of the production tasks was determined in light of accelerating the role of the intensive, qualitative factors of economic growth, of achieving higher efficiency indices -- a process designed to be a basic feature of Romania's socioeconomic development in the next year. In this context, it must be emphasized that labor productivity calculated on the basis of the value of the per capita net output, which has a primordial importance in increasing economic efficiency, is expected to rise, versus the 1980 level, 7 percent in industry and 8 percent in the area of construction-assembly. The tasks involving increased labor productivity for all branches are based on the greater prospects created in the economy by more rapid introduction of technical progress, expansion of mechanization and automation of production processes, upgrading of procedures and redesigning of products. In the abovementioned substantiation, planners had in mind the program for superior organization of production and work and the vocational training of workers. Reflecting essential requirements of saving raw materials and energy, production costs in 1981, versus the levels for 1980, will be decreased by 12.8 lei for each 1000 lei of output in the industry of countrywide importance, by 11 lei in the area of construction-assembly, and by 10.8 lei for each 1000 tons km in transportation, chiefly as a result of diminished materials expenditures.

As far as foreign economic relations are concerned, the 1981 plan provides for an increase over the level for 1980: 10 percent in the total volume of foreign trade and 13 percent in foreign currency collections from foreign tourism. This ensures Romania's greater and more efficient participation in international trade and cooperation. In light of the complex of phenomena which strongly manifest themselves in the international scene, phenomena which negatively impact on the economy of all countries, and especially on that of developing countries, the plan provisions aim at fully utilizing the prospects for increased export, so that we may achieve a surplus trade balance that assures adequate assets for imports of raw materials, equipment and other products that cannot be turned out at home and also for the significant reduction of the foreign debt.

In this context, the 21 percent rise in the volume of export anticipated under the plan is a minimal task and the wise handling of all kinds of imports is an outstanding task for both the decision-makers and all working people in this country. The plan provisions place much emphasis on greater

cooperation within CEMA and with the other socialist countries, with the focus on the greater decrease in some imports based on the free currency relation, expansion of Romania's economic relationships with all states.

A result of the significantly qualitative development of all the economic sectors, the rapid growth of the national income and on this basis the upgrading of the material and spiritual standards of all the members of our society will be further ensured next year. It must be emphasized that the remuneration fund in 1981 will be almost 228 billion lei, which will ensure the operation on an overall scale throughout the year of the program for increasing the salaries anticipated in the second stage of this five-year plan and that the real pay will go up 3.4 percent and the real incomes of the peasantry per active person, 3.2 percent. The fact that retail goods sales through socialist trade units will grow 6 percent and the volume of services, 13.2 percent points out the concern for improving the supplies to the population and thereby for better satisfaction of the population's growing needs. The 1981 construction volume in terms of housing to be completed is 185,000 apartments. The material base of education and health care and of other social sectors will continue to expand.

The 1981 plan once again demonstrates that the policy of our party and state is firmly oriented toward the rapid, harmonious and overall progress of all branches and sectors, toward expansion of the qualitative facets of development and on this basis the upgrading of the well-being of all our people.

11710
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PROBLEMS IN PREPARATION FOR 1981 PRODUCTION VIEWED

Bucharest REVISTA ECONOMICA in Romanian No 43, 24 Oct 80 pp 5-6, 12

[Article by Mihai Iosifescu]

[Text] The approval by the Grand National Assembly of the Law on the Uniform National Plan for the Socioeconomic Development of the Socialist Republic of Romania in 1981 resulted in the finalization of all the overall parameters that generate the tasks and objectives for each economic unit. It must be emphasized that in compliance with the tasks set, the plan for the next year was the topic of many analyses at all levels, from enterprises and the other production units up to the decision-making central bodies.

The special general assemblies of working people held during the September-October period of this year discussed the tasks allotted each collective of working people under the 1981 plan for Romania's socioeconomic development and in this manner resolved a number of major problems which underlie the proper preparation of production. On this occasion it was stressed that, in line with the tasks outlined by the party leadership, the 1981 plan figures were known in advance and this provided the setting for timely taking the steps to ensure a good start for implementing the plan. The effectiveness of the programs undertaken on this line by enterprises, centrals, ministries, and county organs also is reflected in the fact that by early October 1980 the output for domestic consumption was contracted for in proportion of more than 60 percent. However, it is certain that against this positive backdrop, we cannot ignore some delays and shortcomings that ought to be promptly eliminated so that at all levels we may complete the preparations for the 1981 production, concurrently with exemplarily fulfilling the tasks for the 4th quarter of 1980. The efforts must focus on resolving the problems of full provision of the material base of the plan, the development of the domestic resources of raw materials, the wise assignment and management of raw materials, supplies, and fuels for the various users, matters that were amply discussed in Nicolae Ceausescu's address to the recent plenary session of the Central Committee of the Romanian Communist Party.

The detailed finalization of the structure of the physical output in each unit in this context involves a primary objective, which has a decisive importance for the clarification of all the other problems. Each product is

a resource for hundreds and thousands of users throughout the country and certitude in terms of supplies directly depends on the extent to which production is completely and actually determined for each production unit. This undertaking is not simple and requires not only efforts of each enterprise but also the direct involvement of decision-makers from centrals and ministries, of balance coordinators, and of the central organs of synthesis. Outstanding are a few categories of problems which also were pointed out in a number of general assemblies of working people held recently and which discussed the plan figures:

a. Tying of physical output to the needs of domestic and foreign users. Special problems are posed for metallurgical units, which in a period of at most two weeks must resolve the problem of providing the required amount, specifically for ball-bearing steel and assembly parts steel, special types of pipes for boilers, motor vehicles, technical equipment, tubular materials for the petroleum industry, pull cable for mining conveyor belts, metal cord for the production of tires and so forth. It must be emphasized that although the amounts involved are not significant -- the total volume of these unclarified products does not exceed 150,000-200,000 t -- their economic importance is very great because of ramifications generated. Hence, the technical cadres in the production units, respectively in the ministry, must seek the technical approaches to the provision of these products.

Similar problems are posed in the chemical industry, for instance, in terms of finalizing the production of lacquers and paints in light of not only ensuring the supplies of pigments and dyes but also of the needs of consumption, and for construction materials, specifically autoclaved cell concrete for insulation, which must fully replace polystyrene in the production of large panels.

b. Expediting of design and redesign of some products and procedures that ensure the production of materials, components and products which are required by the economy (and which are no longer imported). This is a highly topical matter in all branches and specifically in the metallurgical, chemical and machine building industries, sectors that have the potential for completing this task. It must be pointed out that the output of major suppliers of raw materials and items for the overall economy and export depends on the arrangement for the production involved.

c. Concentration of efforts on priority completion of the production facilities that are expected to operate in the first part of next year, because the products involved are resources considered in the material balance of the plan. We must point out the unsatisfactory status in the delivery of some facilities especially by the Ministry of the Machine Building Industry, which at the beginning of the 4th quarter of this year had backlogs of more than 28,000 t of equipment destined for investment projects planned to be completed as early as this year, most of them in the metallurgical and chemical industries. Great efforts must be made in terms of equipment delivery and completion of construction and assembly projects and cold- and warm-testing, for the purpose of ensuring the completion of the new drawing mills

for bars and wire at Tirgoviste, Braila and Zalau, for pipes at "Republica"-Bucharest and Roman, of the units at the thermal treatment ovens and of the slab cutting installations at the Galati Metallurgical Combine, of the installations for degasification of steel at the Hunedoara and Tirgoviste Metallurgical Combines, of the thermal treatment oven at the Otelul Rosu Enterprise. In this area, each ministry must structure, under the leadership of the existing central collective, the specific activity for each objective, ensuring technical assistance on the construction site and direct monitoring of all the deliveries required in the supplier units.

d. Concurrently with resolving problems of ensuring the physical output, the balance coordinators must complete all the projects for introduction of corrections that result in light of the final levels of the plan indicators approved. It is a matter of corrections in the figures that involve the macroeconomic sphere but specifically the assignment of resources for the various plan coordinator users -- ministries and centrals, depending on the modifications that appeared in the consumer units. The time which is available is very short, one cannot expect the development of the cumbersome process of communications and confirmations by waves of correspondence. Consequently, there must be direct meetings between representatives of ministries and user centrals and discussions of the amendments and corrections that must be directly made on the old documents, as the problems are clarified. Of course, the coordinating bodies which have authority in approving the balances must be involved in this project so that we may eliminate the very long periods required for elucidating some matters, specifically those regarding the integration of each user into the standardized consumption and reserves rates.

As the material balances are materialized steps will be taken to also complete the forwarding by users to balance coordinators of the specifications, fitted into the corrected rates and levels and the issuing of all the allotments that underlie the conclusion of economic contracts. There is an older, criticizable, procedure of some user units to unjustifiably delay the forwarding of the corrections to the initial product specifications, claiming that some problems involving the quantities allotted in the assignments are not fully resolved. Every year this was one of the chief causes of delays in concluding economic contracts. We mainly have in mind some machine building units under the centrals for the production of chemical equipment and some units under the central for production of transportation motor vehicles. Action must be taken to clarify in a few days, with the branch ministries and the Ministry of Supply, the problems still to be elucidated, in the area of planned physical output and specified consumption rates, so that this important precontractual stage may be completed.

In this context, it is necessary for the Ministry of the Metallurgical Industry and the other ministries to take action for the finalization of the production programs for each combine and enterprise, with steps to adequately meet the needs for raw materials. Specifically, we must avoid the repetition of the situation that occurred this year, when the lack of rolling strips and nondelivery of these strips in compliance with the specified plan levels deprived the economy of large amounts of drawn wire and bars, pull cables,

steel for reinforced concrete and other products which are widely utilized. Moroever, there are more problems that ought to be clarified in this stage of issuing allotments by the branch ministries. Specifically we have in mind the provision in the first half of 1981 of the real sources of supply for some products planned to be obtained in some new facilities or as a result of expanded facilities. This chiefly involves products such as certain types of auto accumulators for whose production the new enterprise in the Bistrita-Nasaud center will make arrangements, emulsion polyvinyl chloride (for the units under the Ministry of the Light Industry) planned to be turned out by the Borzesti II facility, polypropylene at Teleajen, aluminum sulfate at Rm. Vilcea CIPA and Bucharest CIMCC, for the production of paper and other items.

The final goal of all these measures involves most rapidly concluding all the supply-marketing economic contracts, introducing the necessary corrections as a result of the approval of the 1981 plan into the contracts already concluded. As indicated above, the proportion of the conclusion of contracts represents more than 60 percent of the industrial output destined for domestic consumption, but considering also some modifications that must be made in the contracts concluded, the amount of work to be done in a short period of time still is very large. Simultaneous action will have to be taken in the area of firm contracting of the own output and provision of the material base of this output and supply of raw materials, supplies, and fuels. The conclusion of many contracts, specifically in the light, chemical, machine building, and construction materials industries is delayed because people expect some kind of plan modifications or corrections, correlations from the ministry or other such solutions which, even if in some cases they reflect actual needs, should not hamper the contracting for products and resources whose overall related problems have been clarified. We must point out the experience of the Industrial Central for Pharmaceuticals, Lacquers and Paints which, in the context of rise in the material base from the domestic output, arranged production meetings with users, offering substitutes for a number of its products and which can properly meet internal consumption needs, concurrently limiting to the strictly necessary level the use of shortage products based on imports.

In the entire program for finalizing the contracting for 1981 we must have in mind some needs and priorities of the economy which must govern the projects that are undertaken during this period:

1. Strict integration of all consumption levels into the consumption and reserves rates and standards approved. Some enterprises claim failures to meet rates, such as for ferroalloys, coke, graphite electrodes, fuel, and electric power, in the context of nonobservance and failure to take all steps to achieve, as early as in the 4th quarter of this year, the reduction of consumption rates to the level of those planned for 1981. However, the enterprises, centrals, ministries, and research and design institutes have a technical staff with a great creative potential, which must be firmly steered from unproductive, office, activities, toward resolution of research, technological problems that will ensure integration into the consumption rates and achievement of extra savings. Inspections made in several

enterprises under the machine building, construction materials, light and other industries indicated that the material conditions which must underlie integration into the consumption rates planned for next year have not yet been prepared. This ought to be a warning signal to the management bodies of units in all branches in terms of the urgency of the projects in this line.

Furthermore, it turned out that overfilled and immobile stocks have reached a high level and are on the increase, even for some materials for which further requests have been made for massive supplies as early as in the 1st quarter of next year. The control organs in this area ought to take very firm measures to prevent excessive supplies (which deprive other users of resources) and to recirculate the availabilities.

2. Wiser management of material resources and reduction of consumption rates for fuel and energy. As indicated at the recent session of the Grand National Assembly, the increased production of next year must be achieved with absolute quantities of fuel that are smaller than those for this year. This specifically applies to oil products, for which the high and growing prices on the world market and the difficulties in terms of availability limit to the known levels our available resources. There are many enterprises that still are using great efforts and energy to obtain supplemental resources which, it must be clearly understood, do not occur in the economy. Instead steps must be taken in all areas to prepare the conditions for reducing fuel consumption to the planned level, with the focus on the following course of action:

a. Recovery of secondary energy resources, by installing and maintaining in operation recuperators and preheaters in all the thermal facilities established. This is the only way to economize primary energy resources equal to about 3.7 million tcc;

b. Increase in the thermal output of boilers and furnaces to minimum 85-90 percent as a result of modernization. For instance, in the machine building industry alone, there are several hundred forging furnaces and furnaces for thermal treatment where the heat of chimney burnt gas has 700-800°C and a significant thermal potential is not recovered. In the steam power plant network in towns there are many cases when, due to deterioration or even initially nonassembly of insulation in pipes, a large amount of heat is lost in the environment. For instance, in the urban localities of Ilfov County, there were many situations where the thermal ducts were flooded as a result of rain and snow melting and the greatest part of heat was lost for heating the rain water;

c. In the area of transportation the program for optimalizing the flows for mass materials must be rapidly completed. Next year the lists of materials which mandatorily are delivered under optimalized terms cover a double number of products versus 1980 and the project for determining the optimal circuits is lagging, especially in the Ministry of the Forestry Economy and Construction Materials and the Ministry of the Metallurgical Industry, and this delays contracting. There must be firm action in eliminating the situations where ballast products, cement and large panels are conveyed

over 400-500 km, with needless consumption of fuel, instead of promoting local materials in consumption. The plan for the next year ensures the facilities required for the overall use of truck conveyance by utilizing a trailer for each vehicle. However, this involves not only provision of facilities but also better organization in preparing and shipping the goods to each user, determining the routes and loads so that maximum transportation efficiency may be obtained.

In the overall preparations for the implementation of the 1981 plan it is necessary, in the context of tackling, in each unit, of the still unresolved problems, to take priority action to find the solutions that underlie the completion of the tasks for next year, especially in the 1st quarter.

11710
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NEW PROVISIONS FOR PAYMENTS BETWEEN SOCIALIST UNITS

Bucharest REVISTA ECONOMICA in Romanian No 41, 10 Oct 80 pp 11-12, 21

/Article by Gh. Marcu: "New Elements in Making Payments Between Socialist Units"/

/Text/ In the second quarter of 1980 NORMELE METODOLOGICE No 2, 1980 concerning payments between socialist units was approved and experimentally applied for 1 year. These norms were based on the provisions of the Law on Finance No 9 of 1972 as amended and supplemented by Law No 2 of 1979.

In preparing the new methodological norms consideration was given to the increased tasks of the financial-banking staff in checking the achievement of a high economic effectiveness by each economic unit in the complete and more productive use of the material and financial resources and in strengthening order and discipline in the management of these resources. To this end some regulations were introduced to help strengthen each enterprise's responsibility in management of its funds, consolidation of self-management and the most efficient performance of all economic-financial and production activity.

In view of these particular requirements and the banks' responsibility for organizing clearings in the economy, some common norms applicable by all the banks' units and all socialist units served by them were prepared for the first time. As a result these norms contain some features peculiar to the agricultural, construction and foreign trade units in addition to the regulations common to all sectors of the economy. Through this measure the new regulations will be applied uniformly by all socialist units and bank units. In addition to the innovations introduced by the supplements to the Law on Finance, the new norms also include all supplements or innovations published in other regulatory acts that have a direct bearing on making clearings such as Law No 3 of 1979 amending and supplementing the Law on Economic Contracts No 71 of 1969 and Law No 5 of 1978 on Organization and Management of State Socialist Units, as well as other regulatory acts published from 1976 to the present, that is from the last regulation on making payments between socialist units to the new regulation that we are presenting in this article.

An important rationalization is to be noted, consisting of abrogation of a large number of circulars and circular letters prepared by the National Bank and the specialized banks in 1976-1980. When the present norms were edited these were reanalyzed, systematized and adopted if they were still current. This measure helped to

concentrate the whole subject of clearings in a single norm, which will greatly facilitate knowledge and correct application of them by the banks' inspection organs and also by the personnel in the finance and accounting departments of the socialist units.

To facilitate knowledge of the new provisions, we shall indicate below which of them are most important as well as the reasons they were introduced if necessary.

First of all it should be pointed out that the clearing norms determine the field of application of some new provisions of the Law on Finance, making some qualifications and establishing some technical methods of implementing and applying them uniformly. They also more strictly define some powers of the bank units by specifying some functions involving some preliminary controls over the clearing documents and over refusals to pay, postponements of payments etc.

Concerning opening accounts and subaccounts through which payments between socialist units are made, an important simplification made by the new norms is to be noted, consisting of merging the loan account for documents being collected with the current account of industrial and construction enterprises, the requirement for credits for clearing documents being secured by the credit ceiling set in the current account.

It should also be mentioned that the special purpose funds that can be formed by enterprises and centrals according to Law No 5 of 1978 and the Law on Finance (as for example a fund for scientific research, technological development and introduction of technical progress, a fund for social programs etc.) are also required to be kept (for purposes of their uniform management and to strengthen enterprises' self-administration) in the current account, although they could be kept in separate bank accounts in the period before publication of the new norms. Besides consolidating self-administration, the said measures helped to reduce the number of accounts and the number of transfers between them both at the bank and in enterprises.

For investment activity, it is permitted to open separate accounts at the financing banks for each individual fund (fund for economic development, fund for housing construction and other social investments, the central's own fund for financing the investments in new units with juristic personality and for financing important developments, the fund for organizing a worksite, and other funds according to the norms for financing and crediting the investments).

In order to facilitate use of the order to collect by suppliers and to eliminate a number of exceptions and departures concerning the minimum value limit at which this clearing instrument can be used, a single minimum limit of 500 lei has been set for the use of the order to collect with or without an invoice (the previous limit was 5,000 lei) and for the use of the order to pay. The clearing check, with or without a limit on the sum, can be issued henceforth at the minimum limit of 250 lei.

In order to help the socialist units liquidate minor debits of any value, quarterly cumulative clearing of them is permissible with an order to pay on the payer's initiative, while if a debtor does not pay with this instrument the creditor has the right to introduce an order to collect with an unconfirmed statement of account, which is subject to ratification, in the last month of the half-year. Even in case of rejection, this measure will help a creditor by enabling him to bring the debtor to arbitration.

In view of the necessity of expediting clearing of products that are consumed immediately upon receipt, the Law on Finance provides that the documents introduced for such products shall be cleared as soon as they are accepted by a beneficiary, if the parties have agreed to this by contracts and have the agreement of the banks. The products that can be of this nature have been exemplified by norms, and the scope of these provisions has been determined, as well as the power of the regional bank units to judge other products as being of immediate consumption. It should be mentioned that, in addition to food products in a fresh state, immediate clearing without the payer's approval is also permissible for deliveries of water, electric and thermal power, gases and petroleum products the consumption of which is recorded by meters or other measuring devices and which are already consumed at the time payment is requested. We stress the point that for any differences improperly collected by a supplier, the payer has a right to introduce a refusal to pay later on, which is also cleared without approval. This method of clearing applies only to the products and not to performances of operations and services, which will continue to be cleared only upon the payer's acceptance. It should be added that if violation of the legal conditions or abuses are found, the bank has the right to prohibit the supplier from using this system of clearing and the clearing documents will be subject to the payer's approval.

Another problem regulated in the norms is that of the conditions to be met in presenting the clearing documents when industrial equipment, machinery and installations are delivered before the contractual deadlines. Suppliers are required to present (as a supplement to the clearing documents) a copy of the written agreement of the unit benefiting by the investments and the financing bank on the terms of the Law on Finance. It should be mentioned that the new invoice forms also contain a special entry for this purpose, entitled "delivery time specified in the contract," which suppliers or beneficiaries as the case may be are required to fill out.

In their turn the units of the financing banks are required to check and determine whether the industrial equipment, machinery and installations are delivered on time or before the contractual delivery time specified in the invoice. If the said agreements are not attached to the clearing documents or if the delivery time specified in the contract is not entered on the invoice, the documents are returned to the issuers. The beneficiary also has obligations, and at the time of acceptance he must check the accuracy of the contractual delivery time entered on the invoice, and if the equipment, machinery and installations are delivered in advance without his previous agreement, it is his duty to refuse payment until the time specified in the contract.

Another new provision concerns reception in the bank of the documents for clearing the plans (out of the investment funds), which must be accompanied by the report certifying performance of the planning operations, concluded between the planner and the beneficiary, whereby completion of the operations and their clearing on the basis of the legal approvals is attested.

In view of the legal provisions authorizing the supplier economic units to require customers who are repeatedly late in payment to provide them in advance with the sums necessary to make the payments and to request the bank units to report on the customers' ability to pay, the norms have specified the method of reporting and have provided a model letter in an annex. According to this model, the elements to be communicated refer to the total amount of the customer's overdue payments on the date the communication is sent, the amount of the unrepaid credits due on the same date, and the prospective economic-financial situation in the next 20-30 days, that is whether there are prospects of correcting the situation and of obtaining any credits or

whether an aggravation of the difficulties is expected. This communication is drafted by the operative accounting department in collaboration with the credits sector.

Another innovation is the method of presenting to a bank or accepting the clearing documents referring to supplies of products, with restrictions on payment, to economic units where previous control over making the payments was instituted. The norms state (on the basis of the report drafted by an inspector in which the products subject to payment restrictions were determined) that the paying economic units in this situation are required to present to the bank the clearing documents that refer to the raw materials and materials subject to the payment restrictions, accompanied by a letter naming these materials and their value, the supplier, and the number and date of the invoice, also indicating the item on the invoice as well as the due date of the order to collect.

The norms also present the method of refusing payment of these documents and the way to enter these operations, as well as the way to liquidate these documents, and operation that is possible only if the economic unit proves elimination of the immobilizations that caused these restrictive measures to be applied.

Units unable to pay have been provided with the possibility of requesting, in writing, the bank units where the have opened accounts to reserve for them, 24 hours before the date planned for paying compensation and other such payments, the collections from current activity up to the amount of the respective rights.

In connection with the legal order of payment in units unable to pay, the new norms assimilate bank interest and commissions with repayments of credits, while payments of penalties owed by economic units for breach of economic contracts are included in the last order of payments because they are not considered payments accessory to delivery of goods, or performance of operations or services. The norms have also regulated the right of account holders, within the prescribed legal time limit, to request correction of omissions or errors in the account statements even after expiration of the 10 days in which they are required to thoroughly check the operations recorded in the accounts.

To ensure a direct circulation of the documents and to expedite the payments between socialist units, the new norms specify priority use of instruments issued on the payers' initiative. It should be pointed out here that, in order to provide for tight control over the date of receipt from the supplier of the orders to pay with the invoice, which are remitted directly to him, and to ensure collection of the value of the delivered goods as soon as possible, the possibility has been specified of remitting the documents through recommended letters with confirmation of receipt. In this way the payer will have to pay immediately upon receipt and the supplier has a means of control over the date of receipt of the documents, which can also be used to claim penalties in case of litigation in arbitration.

We also note that in investment activity clearing is maintained at the supplier's request through instruments subject to acceptance for construction-installation operations performed and for industrial equipment, machinery and installations delivered.

The measure is also noteworthy that prohibits use of checks in checkbooks with or without a limit on the sum to pay for memoranda of money orders or simple money orders to remit sums through post offices or to pay for fixed assets , inventory items in the nature of fixed assets , supplies or other outlays for which previous control over the payments was instituted.

5186
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EXPORT INDUSTRIES TO BE REPRESENTED AT BUCHAREST FAIR

Bucharest REVISTA ECONOMICA in Romanian No 41, 10 Oct 80 pp 13-14

/Article by C. Mircescu: "A Highly Competitive Export Program"/

/Text/ Ten years ago the International Union of Trade Fairs approved the founding of the Bucharest International Trade Fair, with its headquarters in Romania's capital.

Now in its sixth version, the TIB /Bucharest International Trade Fair/ (housed in the modern exposition complex on the Piata Scinteii) has won a well-deserved international prestige in the last decade as a productive medium for developing international trade and economic cooperation with a major role in developing Romania's international economic relations with partners on all continents.

For a country like Romania, which logs rates of industrial development among the highest in the world along with considerable changes in the structure of industry and in general in the structure according to sectors of the economy, presentation of new export offerings and innovations in industrial cooperation is vital to its further involvement in the world economic cycle.

By founding the TIB and by participating with a national pavilion in over 40 trade fairs and expositions abroad every year, the Romanian exporters express their wish to penetrate the international market "by the front door" through a steady promotional effort and not "by the back door" through price concessions.

Particular attention should be called to the importance of promotional activity in the subject field of the TIB, namely machines, equipment and machine building installations, which are also one of the most dynamic sectors of Romanian industry and the group of products with the largest share (over one-third) in Romania's foreign trade structure.

A review of the growth rates of the machine building industry compared with all industry brings out the consistent strategy of priority development of this sector.

Today Romania's machine building industry contributes 34 percent of the gross output of all industry and supplies over 75 percent of the manufacturing equipment essential to the investment projects for the whole national economy. A high competitive power of the products is maintained by a strong technical creative force, so that about 90 percent of the engineering applied in this sector is original and Romanian.

Industrial sector	Annual growth rate (in percentages)		
	1966-1978	1971-1978	1976-1978
Machine building and machine processing	16.2	16.5	13.9
Including:			
- Machine building	16.8	12.4	13.6
- Electric and electronic equipment	19.3	18.6	13.6
- Metal structures and metal products	16.1	14.0	14.2
Total for industry	12.1	12.2	11.0

Major machine building capacities have been activated in recent years,provided with equipment on a high technological level, such as the heavy machinery enterprises in Bucharest, Iasi, Cluj-Napoca, Craiova and Timisoara that have greatly enlarged the assortment of manufactures and exports of metal processing machines for parts of huge size (weighing up to 150 tons, up to 16 meters long and 10 meters high), such as steam turbines, high-power turbine sets (up to 330 megawatts), hydraulic turbines of the Pelton, Francis and Kaplan types, and rolling mills for sheet steel with widths of 1,000-3,500 meters. Production of manufacturing equipment has been developed and diversified, new capacities for manufacturing automation and electronic equipment have been activated, etc. The specific effect on foreign trade is an increase by 2.3 times in machinery exports in the first 4 years of the current five-year plan.

Romania now has one of the longest lists of machine tool exports in the world, although the machine tool industry has been created in its broad lines in the last three five-year plans. Between 1965 and 1979 the machine tool output increased by 27 times and exports by 32 times. While in 1965 the output amounted to $15 million, $4 million of which were represented by exports, in 1979 it came to $403 million,$130 million of which were represented by exports. Heavy machine tools and machine tools with program control and high technical performances are now exported to the United States, the FRG, Italy, France and Japan.

The electrotechnical and electronic products in the export program Romania is presenting at the current TIB include electronic equipment (both professional and that for automating production processes), modern electronic components, electronic medical equipment, telecommunications apparatus, relays, telephone centrals, electric motors, transformers and electronic microscopes.

Thanks to more than 100 years of experience in petroleum drilling and extraction, Romanian petroleum equipment is rated today among the safest in operation. It consists of a complete assortment of installations, from 1,200 meters to 10,000 meters in drilling depth, and it is of entirely original, Romanian design.

The beneficiaries of Romanian drilling installations now include dozens of countries, such as Algeria, Brazil, Czechoslovakia, the People's Republic of China, the GDR, India, Libya, Pakistan, Syria, Turkey, Hungary and the USSR.

Production of manufacturing equipment for the metallurgical, power, food and other industries is represented in the structures of the respective industrial centrals by models of capacities built in Romania or abroad.

The broad subject matter of the international trade fair to be held in Bucharest from 9 to 18 October under the slogan "Trade-Cooperation-Development" has attracted the participation of more than 1,000 Romanian and foreign firms.

Romania will be represented by pertinent industrial centrals, research institutes and enterprises producing for export. They are presenting both their products on the current list of exports and innovations made in the last 2 years.

The foreign offerings are presented by more than 800 firms in 31 pavilions and on outdoor stands. Of the 26 countries exhibiting alongside Romania, 19 are represented by official pavilions, namely England, Austria, Bulgaria, Czechoslovakia, Denmark, Switzerland, Finland, France, the GDR, the FRG, Italy, Israel, Yugoslavia, Japan, Norway, Poland, the United States, Hungary and the USSR.

Some 150 other firms in Austria, Belgium, Switzerland, France, the FRG, Italy, Japan, Great Britain, Sweden, the Netherlands, Liechtenstein, Spain, the Philippines and Peru have stands for direct, individual exhibition at the fair. We note as usual the presence of many firms of international reknown like SKF, Hewlett-Packard, Rhode and Schwarz, and Iver Karl Rajik in Austria; Brown-Boveri and Gitec in Switzerland; Merkel, Rexroth, Hofmeister and Blocher in the FRG; Renault and Union Industrielle in France; Aerospace and Lea Grant in England; Fiat, Bonvicini, Siemu and Sias Acciai in Italy; Mitsubishi in Japan; Esab and Flygt in Sweden; Philips in the Netherlands; Bell Telephone in Belgium; and Balzers in Liechtenstein.

Alongside the Romanian offerings, the extensive participation of the foreign firms guarantees specialists, technicians and businessmen that this version of the TIB will occasion a useful exchange of technical experience and profitable trade transactions.

5186
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DRAFT AGREEMENT OUTLINED FOR UNDERDEVELOPED REGIONS

Sarajevo OSLOBODJENJE in Serbo-Croatian 9 Oct 80 p 3

[Excerpts] According to the draft agreement on the faster development of the underdeveloped republics and the province of Kosovo in the next 5 years, these republics are to develop 15 to 20 percent faster than the country average, while Kosovo should develop 50 to 60 percent faster than the average. The basis of this policy of development is the association of labor and funds on the principle of income. Work organizations from the whole country, primarily, of course, from the developed parts can best stimulate the economic progress of undeveloped areas through their own interests and obligations to assist and by joint investments. In fact, it is expected that various forms of business cooperation will in future become the foundation of such development. Of course, part of the activity will develop, as heretofore, through the Fund for Stimulating Development of the Economically Undeveloped Republics and Kosovo. Finally, it is expected that some of the funds for this purpose will be provided from the federal budget, and in the use of international credits these areas should have priority over the others.

The draft agreement calls for the [above] fund to be formed so that 1.97 percent of the social product of Yugoslavia is earmarked for this purpose, and one-half of these resources would serve as a base for joint investment, while the other half would be an obligatory loan into which all economic OOURs (basic organizations of associated work) would pay. The monies in the fund would be divided so that 0.42 percent would be allocated for the development of Kosovo. The rest would be divided among the three republics and Kosovo, with Bosnia-Hercegovina getting 34 percent, Montenegro 12 percent, Macedonia 24 percent and Kosovo the remaining 30 percent. In this way 45 percent of the permanent funds of the fund would be invested in the Kosovo economy, 26.7 percent in Bosnia-Hercegovina, 18.9 percent in Macedonia and 9.4 percent in Montenegro.

Funds from the obligatory loan would be returned in 13 annual installments at 5 percent interest. For Kosovo the funds would be borrowed for an average of 15 years at 4.5 percent interest.

In order to stimulate association, it is necessary to propose regulations to partially or wholly exempt [enterprises] from certain contributions [i.e., a form of tax] for a certain period. In their regulations the republics and provinces should establish the conditions and advantages which would stimulate

association. If, nevertheless, [enterprise] linking [association] does not take place, [between enterprises in developed republics and those in undeveloped ones], [developed] republics would have to compensate for this in the form of the obligatory loan.

In regard to supplementary funds, the draft agreement calls for a declining scale. In 1981, thus, 0.93 percent of the [Yugoslav] social product would be earmarked for these funds, but the rate would decline by 0.02 percent each succeeding year. From this amount, 0.16 percent would be allocated for the development of Kosovo, 0.03 percent for Montenegro, and from the remaining part Bosnia-Hercegovina would get 40.15 percent, Montenegro 10.3 percent, Macedonia 18.3 percent, and Kosovo 31.25 percent. Or, of the total supplementary fund Bosnia-Hercegovina would get 32 percent, Montenegro 11.4 percent, Macedonia 14.6 percent and Kosovo 42 percent. The use of these funds would also be regulated by republic and provincial regulations.

Finally, the draft agreement rules that 70 percent of the credits from the International Bank for Reconstruction and Development, and from the European Investment Bank would be allocated for the underdeveloped regions, and distribution to individual areas would be the same as with the other monies of the Fund.

CSO: 2800

CONFERENCE ON DRAINAGE, IRRIGATION SYSTEMS IN KOSOVO

Shortcomings, Plans, Status

Pristina JEDINSTVO in Serbo-Croatian 21 Oct 80 p 3

[Excerpts] Participants at the 9th meeting of the Yugoslav Association on Drainage and Irrigation which was held a few days ago in Pristina made a significant contribution to the search for the best solutions in using existing hydro-systems and those under construction, and in finding possibilities for long-term planning and construction of new water usage undertakings and small storage lakes, and planning for the use of underground water and wells in Kosovo. With considerable investments 10 new hydro-systems have been built which, together with existing systems, are enabling the irrigation of about 50,000 hectares, or 12 percent of the total arable land. With the building of the "Ibar" and "Radonjic" systems and small water storage lakes in the province, about 135,000 hectares of arable land will be irrigated. This will create the conditions for the effective use of water for increasing agricultural production and for the faster development of the province.

But despite the good results in building and organizing the water systems, problems and weaknesses continue to be present, involving, above all, unregulated land areas, fragmented land plots, the use of water without allowing for previous accumulation, the incomplete status of individual water systems, and their poor maintenance.

According to studies, good conditions exist in Kosovo for irrigating over 200,000 hectares, or 50 percent of the arable land. In the coming period the question of irrigation and drainage must be resolved, especially if one bears in mind the significance of agricultural development in the total development of the province.

Drainage Projects

Pristina JEDINSTVO in Serbo-Croatian 25 Oct 80 p 7

[Excerpts] Land improvement in Kosovo up to now has been largely oriented toward irrigation, while drainage has not been given much attention. Several

drainage projects have been worked out for certain small areas but most of these have not been carried out. Only three small systems of about 600 hectares in Prizren Opstina have been built. At the recent conference of the Yugoslav Association for Drainage and Irrigation, Branko Pejovic, agronomy engineer from the Institute for Water Management in Belgrade, said that most of the areas to be drained are in places threatened by floods and that unregulated flood-protection measures have contributed to the lag in building drainage systems.

The construction of two large irrigation systems ("Ibar" and "Radonjic") are in process, so the problem of drainage must be solved in accord with this construction before irrigation can begin. According to studies, drainage must be carried out on about 30,000 hectares, or about 6.5 percent of the agricultural land of the province.

CSO: 2800

BRIEFS

YUGOSLAV-IRANIAN TRADE--In the first 9 months of this year total trade amounted to $125.1 million ($62.4 million in exports and $62.7 million in imports). Compared to the same 1979 period, exports increased by 344 percent and imports by 3,348 percent. About 70 Yugoslav production and export organizations exhibited at this year's 7th international trade fair in Teheran (19 September to 1 October). The commercial success was more than expected, with our organizations concluding over $50 million worth of business to be realized this year and next, especially in consumer goods, electric industrial products, appliances and metal productions. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 5 Nov 80 p 12] The value of our exports to Iran are expected to exceed $170 million by the end of 1980; this is almost 10 times more in volume than exports in 1979. In the January-October period "Generalexport" which conducts business for the Yugoslav pharmaceutical industry shared in two Iranian bids; one represented $263,000 worth of exports of one product and the other, about $1,228,400 worth of several products. The greatest limiting factor is the problem of transporting goods to Iran. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 7 Nov 80 p 3]

FOOD PRODUCTION IN MACEDONIA--In the 1981-85 period bread grain production (wheat and rye) in Macedonia should stabilize at about 370,000 tons annually. Corn production should increase to 150,000 tons which, together with other feed crop expansion, should accelerate livestock raising. Also planned by 1985 is an annual production of 45,000 tons of rice, 250,000 tons of sugarbeets (almost 4 times the present production), about 50,000 tons of sunflowers and rape, and 36,000 tons of tobacco (about 6,000-8,000 tons more than now). [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 6 Nov 80 p 12]

MACEDONIAN FARMLAND REDUCED--The Institute for Agricultural Economics and Organization in the Macedonian Economic Chamber estimates that the land area in this republic is seriously threatened. For instance, it is said that every year arable land declines by 3,000 hectares, and in the last 20 years it has declined by 60,000 hectares. It would be very bad for Macedonian agriculture, it is thought, if productive and quality farmland is consumed by urbanization, industrialization, the electric power industry with its artificial water storage lakes, roads, unplanned construction, and [is impoverished by] the massive migration from village to city. Also of concern is the fact that 25 percent of the arable land remains uncultivated every year. In 1978 this amounted to 111,000 hectares. Pastureland is also decreasing although even

that which exists is only 30 percent used. Nevertheless, Macedonia has increased its agricultural production above the Yugoslav average. At the same time labor productivity in agriculture is growing faster than in other Yugoslav agricultural regions. The social product of the private sector is on the rise. But that which is not being produced on land which has been abandoned or turned to other uses is lost income. [A related problem is] that agriculture operates in an atmosphere of uncertainty in regard to prices for its products. Because of unregulated prices, interest often declines in producing wheat, tobacco, cotton, sugarbeets and sunflowers. As a result there is now a shortage of cooking oil. [Excerpt] [Belgrade BORBA in Serbo-Croatian 6 Oct 80 p 2]

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END

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9 December 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2069

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EAST EUROPE REPORT

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CONTENTS

BULGARIA

Tourist Trade: Over Five Million Visited Country in 1979
(Georgy Eftimov Interview; OTGOVOR NA AKTUALNI VUPROSI, No 8, 1980)..... 1

New Polyvinyl Chloride Plant Commissioned
(RABOTNICHESKO DELO, 4 Sep 80)..... 5

CZECHOSLOVAKIA

Ler Interviewed on Implementation of Set of Measures
(Leopold Ler Interview; SMENA, 7 Oct 80)..... 8

Early Indoctrination of Workers Into Set of Measures Stressed
(E. Semilska; NOVINY VNITRNIHO OBCHODU, 8 Oct 80)..... 15

Trade Union Calls for Higher Work Discipline
(Oldrich Navratil; HOSPODARSKE NOVINY, 10 Oct 80)..... 21

HUNGARY

Situation, Tasks of Energy Management Examined
(Miklos Szocs; KOZGAZDASAGI SZEMLE, Oct 80)..... 24

Development of Budapest Transportation System Described
(FIGYELO, 15 Oct 80)..... 38

Csikos-Nagy Views Experiences of Industrial Price System
(Bela Csikos-Nagy; MAGYAR HIRLAP, 19 Oct 80)..... 46

POLAND

Source of Foreign Trade Indebtedness Reanalyzed
(Zygmunt Szeliga; POLITYKA, 18 Oct 80)..... 51

Wasilkowski Comments on Import-Export Situation
(Andrzej Wasilkowski; TRYBUNA LUDU, 12 Aug 80)..... 56

National Health Fund Allocates Money for Health Facilities
(Bozena Jastrzebska; TRYBUNA LUDU, 4 Aug 80)..... 59

Possibilities of Silicon Use in Polish Industry Explored
(Krzysztof Bien; TRYBUNA LUDU, 12 Aug 80)..... 62

YUGOSLAVIA

West German Comment on Kosovo Use of World Bank Credits
(Viktor Meier; FRANKFURTER ALLGEMEINE, 10 Nov 80)..... 65

Workers' Complaints To Trade Unions Surveyed
(D. Brdar; PRIVREDNI PREGLED, 1-3 Nov 80)..... 67

Employment Plans in Slovenia
(Ljubomir Krasojevic; PRIVREDNI PREGLED, 6 Nov 80)..... 71

Need To Overcome Technological Lag Discussed
(EKONOMSKA POLITIKA, 6 Oct 80)..... 74

TOURIST TRADE: OVER FIVE MILLION VISITED COUNTRY IN 1979

Sofia OTGOVOR NA AKTUALNI VUPROSI in Bulgarian No 8, 1980 pp 3-8

[Interview with Georgy Eftimov, chairman of the State Tourist Committee, by Dora Kamenova: "Answers to Urgent Questions"]

[Text] Question: Comrade Eftimov, the statistical data from the past several years show that the interest in visiting Bulgaria is growing not only in specific countries but all over the world. Why, do you think, are foreigners interested in our country?

Answer: The reasons and the factors of the growing interest in Bulgaria are determined most of all by the consistent peace policy of the Bulgarian Government, the stable and calm environment, which exists in our country, the existing democratic regime for entry and stay, and a number of conveniences for foreign guests, the increased tourist offerings and the improved tourist structure. As a result of the constant concern of the government and the communist party, international tourism in the country is developing not only as an effective branch of the national economy, but, as a means of communication, in establishing closer relations among people from various nations, it has turned into a real passport of peace. Bulgaria is popular in the world as one of the very few countries, which for years has maintained a visa-free policy for the tourists. The customs formalities are reduced to a minimum, and 50 percent premium on exchanged convertible currency is paid to tourist groups. As a result of the improved quality of the tourist conveniences, of the modernization and reconstruction of numerous resort complexes, the opening of new luxury hotels and restaurants, the expansion and diversification of sports and the expansion of additional services that are being offered, the foreign tourists' interest in Bulgaria has grown considerably during the last 2 years.

Following the basic direction for effective development of international and domestic tourism, outlined in many party and government documents, we accomplished new qualitative changes in the tourist services. We offer our guests not only first class hotels, restaurants and cafeterias, but also various services for the useful spending of their leisure time: sports, cultural programs, excursions in the country and abroad, hunting, fishing, meetings and visits of professional interest, additional services. Bulgaria offers all kinds of recreation along the Black Sea coast and in the mountains, including spas, congresses, guided tours and specialized activities. As a result of all that a new successful step was made in the development of the branch. In the last year Bulgaria was visited by over 5 million tourists and during the first half of this year--by 1,497,000; 187,000 more than during the same period last year, 1979.

Question: Increasing the effectiveness of all activities is the main line in the development of the national economy branches. What is being done in the State Tourist Committee to increase the effectiveness?

Answer: The basic lines for increasing the effectiveness and furthering the intensive development of international tourism were outlined in Decision No 481 of the Politburo of the BCP Central Committee of 30 December 1978 and in Decree No 2 of the Council of Ministers of 11 January 1979. These documents clearly and precisely determined the tasks of the tourist trade at the present period; raising the level of tourist offerings on the basis of improving the quality and increasing the quantity of the additional tourist services; raising the middle category by improving the qualification and the responsibility of the personnel in the tourist system; diversification and expansion of the tourist offerings through improvement of the tourist structure by expanding mountain resorts, medical facilities, guided tours, travel and specialized activities; by increasing the public labor productivity in the sphere of tourism through the perfection of the socialist organization of labor and tourist activities.

These responsible tasks are solved by the labor teams, mainly through maximal utilization of the material base, by extending the length of the season and its year-round usage, through perfecting its infrastructure, diversification of the tourist itineraries, according to the season, climate, and region. Our bureaus for complex tourist services offer quality additional and basic services, trips, currency exchange, trade and various goods. In this way we will achieve a shift in 1985 from 40 percent to 60 percent in favor of the revenues from additional services.

These are the ways that will lead us to the achievement of the main goal—maximum currency income for the country, and the realization of maximal effect for the national economy.

Question: You mentioned as one of the factors for increasing the effectiveness the improvement of the tourist offerings. What is most characteristic in this respect?

Answer: Most of all we aim to diversify our itineraries, services, and undertakings. Exceptionally favorable for the development of tourism year-round are our remarkable climate and natural resources, our first-class facilities in the Black Sea and mountain resort complexes, in land and in the spas. That is why, as we already mentioned, we offer various itineraries, for trips, vacation programs at the sea and in the mountains, combined mountain and sea vacations or travel on sea and land, treatment in modern spas at the Grand Hotel Varna in the resort Druzhba, Hotel Internatsional at Golden Sands, Hotel Kaliakra, Hotel Pomorie, in Khisara, Kyustendil, Devin, Sandanski, Vurshets, etc.

Our new programs are characterized by the fact that we not only provide food and accommodation for our guests but we do everything possible to help them utilize their free time with sports, entertainment, visits to historical places and cultural attractions in our country and the nearby countries, visits to industrial plants and agricultural complexes, meetings with outstanding public figures in arts and science, participation in congresses, festivals and sports competitions, hunting and fishing.

Here we should note that we adhere to a reasonable price policy while at the same time we offer a number of privileges to our foreign tourists: favorable prices, advantageous discounts for families with children, food coupons, comfortable private apartments, some with full board, convenient and clean sand beaches, and clean environment.

During the current and the following year our programs for vacationing and traveling are emphasized by three remarkable events: the forthcoming Twelth Congress of the Bulgarian Communist Party, the 1300th anniversary of the creation of the Bulgarian State, and the 100th anniversary of the birth of Georgi Dimitrov. While traveling in our country, the tourists will have the opportunity to familiarize themselves not only with our history and culture, but also to see the achievements of the new socialist Bulgaria, to experience the priority of the socialist regime.

Question: Our readers will be interested to find out what you have to offer to the Bulgarian tourists?

Answer: In the decision of the Politburo of the BCP Central Committee and in the Decree of the Council of Ministers of the Bulgarian People's Republic the tasks of the State Tourist Committee are determined as a department which has to develop international and domestic tourism, and has to be equally concerned with the tourist services to the foreign and domestic tourists. This is our present and future business policy. We aim towards the maximal utilization of our tourist base. Our offerings to the Bulgarian tourists are being developed with special concern. In 1979 the bureaus of "Balkantourist" assisted more than 1.5 million Bulgarian citizens, by providing them with different tourist services. For this and the next year the task is to expand and diversify the possibility for traveling in the country and abroad, at mountain and sea resorts. But there are periods in the year when the state interests dictate that tourist facilities must be used primarily for the needs of international tourism in order to provide the planned foreign currency income. At the same time during recent years we have been making special efforts for the rational utilization of all possibilities to accommodate and serve our citizens even at the peak of the season. We have a good organization and we try to give information on time about the vacancies in the hotels, about the possibilities for taking excursions in the country and abroad. The pressure is greatest in the months of July and August, so in this period we provide favorable possibilities for vacationing in other regions of the country, where we have excellent hotels and restaurants; for example, the small mountainous towns of Karlovo, Sopot, Kalofer, Kotel, Devin, etc. In the sea resorts we offer vacations out of season with considerable price reduction for lodging and food with full board.

For foreign as well as for Bulgarian tourists we have special itineraries devoted to the coming outstanding events and jubilees. There are still trips to the panorama "Plevenska Epopeya," and visits to places and monuments connected with the 1300th anniversary of the Bulgarian State: Shumen, Pliska, Preslav, Madarskiya Konnik.

There is a variety of itineraries for trips abroad. The programs offer the tourists the opportunity to familiarize themselves with the most interesting attractions in the countries visited. Every trip has a timetable which makes it possible for the client to choose the desired time and means of transportation. In addition to the announced groups for 1980, "Balkantourist" can organize additional groups as desired by the public.

In 1980 201,000 Bulgarian citizens will travel abroad in organized tours. Besides the tours in one country there are also tours to two as well as combined trips to Czechoslovakia, Austria, Hungary and Yugoslavia by boat.

Through "Balkantourist" individual excursions to socialist countries could be organized. During the stay abroad basic services could be provided (food and lodging) as well as additional services: issuing of passports and other documents, transfer of funds, guides, etc., according to the needs of the client.

The 16-day out-of-season vacation in Yalta and Sochi is becoming more and more popular.

Important for "Balkantourist" are the excursions to the USSR, especially the ones connected with the 22nd Olympic Games. Bulgaria was the first tourist country in the world with which the VAO Intourist signed a contract for excursions of Bulgarian citizens in connection with "Olympics 80." "Balkantourist" has 27 Olympic tours, in which more than 10,000 Bulgarians are participating.

Question: What do you think is the effect of the present international environment on the development of tourism?

Answer: It is well known that an atmosphere of tension and mistrust has been created in the world; the stagnation grew as a result of the hectic campaign of the U.S. Government against the socialist countries and the boycott attempts of the "Olympic Games 80," which, as is already known, suffered a complete failure. This is being confirmed by the excellent organization of the games and the new world and Olympic records. The exemplary organization of the Olympic Games was made possible by the famous hospitality of the Soviet people. The attempt to boycott the olympic games had a negative effect on some of the "Balkantourist" clients. It should be noted that this year there is a favorable development of international tourism on a world scale. The reasons are the increased prices of oil and as a result the raising of the previously announced airplane fares, our political stability, the economic crisis of capitalism on a world scale, and on the whole the feeling that it is better to wait.

For Bulgarian international tourism the results from the first half of the year are good. Despite the antisocialist propaganda, people of good will prefer Bulgaria as a country with a good climate of hospitality and friendliness, a calm and secure environment. Very few people have been influenced by the "Cold War" propaganda, and anti-Sovietism and so far we do not have disturbing cancellations and the subscriptions are going well.

Question: What are the prospects for the development of tourism in our country during the Eighth Five-Year period?

Answer: We have already talked about the main directions for the development of tourism and about the main task assigned by the party and the government--effective and intensive development of international tourism, in order to make it one of the main suppliers of foreign currency revenue in the country, as well as in increasing its role in propagandizing the privileges of the socialist regime.

The perspectives for the following 5 years are positive. The socialist market will grow at an even pace--10-12 percent average annual growth. The tourist market will be characterized by an increase in interest towards complex tourist services in a combination with active sports, entertainment and cultural activities.

9684
CSO: 2200

NEW POLYVINYL CHLORIDE PLANT COMMISSIONED

Sofia RABOTNICHESKO DELO in Bulgarian 4 Sep 80 p 4

[Article by RABOTNICHESKO DELO correspondent: "A New Giant in Domestic Chemistry"]

[Text] The construction and commissioning of a new plant for chlorovinyl chloride and polyvinyl chloride is an important stage in the development of the Stopanskiya Chemical Combine in the city of devnga and the chemical industry in our country.

On the occasion of its opening, RABOTNICHESKO DELO's correspondent in Varna asked Eng Stefan Stanev, plant director, to discuss its significance in the development of our national economy.

"One of the plant's primary products is a polyvinyl chloride suspension which is produced in eight brands. This diversity makes it possible to fully satisfy all the potential requirements of our processing industry. This vast new production--120,000 tons annually--will fully satisfy the country's needs. An entire range of products such as pipe, shaped parts, building supplies, floor tile, the cable industry, items of household chemistry and others is already assured along with raw material and the prospect for a wide choice of qualities.

"Another product is electrolytic caustic soda. The news with this product is that it is being produced in a concentration of 49-51 percent, far higher than the electrolytic soda available to date. This will open new marketing possibilities.

"The importance and the role of this new plant is not in satisfying the nation's needs alone but also in the export of a large percentage of its production. At the same time, the strategic role of the plant's economic indicators are a characteristic manifestation. For example, in comparison with the existing plant for chloro- and polyvinyl chloride, it has 20 percent fewer personnel but achieves three times more in total production with triple the productivity of labor. The product structure of the plant consists of three basic items: chlorine and caustic soda, vinyl chloride and polyvinyl chloride.

"The traditional and long-standing association that we have had with Soviet organizations, our experience and the active aid of Soviet specialists have provided an exemplary start. Pantaley Myagkov, leader of the group of Soviet specialists, Georgi Mutafov, shop chief, Kiril Tsonev, chief of the Technical Production Department, the technologists and personnel of the chlorine industry

have managed within a short time to organize a program for the development and assumption of capabilities which has been successfully implemented.

"All the potential requisites that can and should be a part of any modern plant are combined in the new plant for chlorovinyl chloride and polyvinyl chloride. For instance, a computer is used in the production of polyvinyl chloride. This means that during the polymerization process, manual control is impossible throughout the entire installation; it becomes possible only in case of an emergency when a given cycle is ended manually. This results in a very high level of optimizing the production process along with a very high coefficient of equipment efficiency. A high degree of intellectualization in the production process is a logical consequence of this. A number of high requirements in regard to educational qualifications as well as professional training are also levied on production and auxiliary personnel.

"The use of an effective raw-materials base to produce vinyl chloride has moved Bulgaria's chemists not only in terms of the complexity of this product but with the prospects for revolutionizing this field of chemistry as well. The traditional acetylene and hydrogen chloride are replaced in the new production process by ethylene and chlorine from the petrochemical combine in Burgas. A number of intensive processes to include the cracking of dichloroethane, distillation of vinyl chloride, direct chlorination and oxychlorination have been implemented in this installation. The production process if filled with a number of metered and automated cycles. There is also a computer here although it is informational in the technological sense. The installation will also be a touchstone in the creative maturity of our technological specialists. As a result of complicated relationships, it is impossible for outside firms to carry out their obligations in commissioning an installation without oxychlorination. Our specialists--chemists, mechanics and others have worked under the guidance of Deputy Director Georgi Slavov, candidate in technical sciences and have used a plan which makes it possible to initiate production of vinyl chloride without oxychlorination. This effort began early in 1980 without the participation of foreign specialists. With a sense of special pride and satisfaction we note the implementation of vinyl chloride production as an independent achievement of Bulgarian specialists.

"Thus far, I have discussed one successful result that would have been impossible if the efforts of all the interested organizations had not combined the many parts of the system into one in order to make the good outcome a possibility. Design and building organizations have put all their knowledge and experience to use. The demands on them have not been the usual nor like those in other projects. The combination of becoming familiar with complex processes and the rich diversity of new and heretofore unknown materials, especially non-metallic materials, have put the contracting organizations to a serious test. Initial shake-down operations in the production of polyvinyl chloride, vinyl chloride and chlorine have been completed. The names of Rumen Dyakov, Pano Panov, Ivan Ivanov, Petko Prodanov, Stanko Ivanov and others deserve respect not only for the fulfillment of their goals but also for the achievement of great efficiency from the high proficiency acquired by their personnel in the process of fulfilling their assignments.

"A workshop has been established in which the production of 14,000 meters of fiber glass pipe was organized under the leadership of Petur Vlaykov, Iliya Georgiev and Milan Milanov. This new stage in fiberglass pipelines solved not

only the problem of corrosion in rubberized steel pipelines but also provides a great deal of experience with these materials while the greater diversity that now exists in the production of vinyl chloride allows for a functionally more flexible operational intervention at all important stages with this material. This is a new stage in the opening and organization of the plant and we feel that it is a qualitatively new concept that will contribute a great deal to successful achievement of the final results.

Inspired by the resolutions of the plenum of the Central Committee of the Bulgarian Communist Party adopted at the 12th Party congress, our collective will invest all its skill and talent in honor of the high party forum.

9003
CSO: 2200

LER INTERVIEWED ON IMPLEMENTATION OF SET OF MEASURES

Bratislava SMENA in Slovak 7 Oct 80 pp 1, 4

[Interview with Leopold Ler, CSSR minister of finance by Jaroslav Hejkal: "Be a Player, Not a Spectator"]

> [Text] With the approach of the Seventh Five-Year Plan each day also brings us closer to the implementation of the Set of Measures for Improving the Planned Management System of the National Economy After 1980. It is, therefore, natural that our enterprises and plants are giving more and more attention to this important document. Its principles will affect each of us in one way or another.

[Question] The economics show a continual development not only in our country but in the world as well. Comrade Minister, in what setting are we going to implement the Set of Measures? Do you believe that its principles will be valid until the end of this century?

[Answer] It is clear that the 1980's will be characterized by many features different from the 1960's and 1970's. The end of this century finds Czechoslovakia as an industrial country in a very contradictory situation. When I speak of "contradictory" I do not have in mind a critical, depressive or pessimistic situation but one that will call for the "shifting of gears" in our planning, management and performance, with the result that many things will be basically changed. For this reason we also emphasize that the Set of Measures is not an everlasting dogma or some kind of catechism, but a living document. It will have to be gradually updated and revised according to our internal problems and the development of the world situation. We expect that the world conditions will have quite an impact on us in the 1980's and 1990's.

[Question] What is the essence of such an impact? Many may object that our cooperation with the Soviet Union and other CEMA member countries has been so developed that a crisis development in the capitalistic countries essentially cannot touch us.

[Answer] A great advantage and a plus for our economy will naturally continue to be the fact that it will be linked even more strongly to the economies of the CEMA member states, and the Soviet Union in particular. This is the basis of assurance, of perspective. This is our chance. We have already done much in this respect, but we must do even more and with greater vigor. One of the aspects is the indisputable fact that we are getting the majority of our raw materials from the Soviet Union at a lower cost--in the Seventh Five-Year Plan tens of percent lower than paying for these materials in the West, for example--than if we were to buy them from the capitalistic countries. But we cannot count on being able to import continuously an ever greater volume from the Soviet Union. On the contrary, we must assume that the prices of raw material, energy, metals and products from the agrofood complex in the world will continue to rise, even within the framework of the CEMA countries, and that this development will place ever greater demands on our manufacturing industry, engineering in particular. Industry will have to better utilize raw materials, energy and materials, and accelerate innovations of its products and their modernization in order to raise their quality and penetrate the world markets. As it stands now, the world prices which we pay for our imports are rising about twice as fast as our export prices. From the viewpoint of the generation of national income this means that we must use about one-third of the increase to cover this difference. It is a simple equation: the more we increase the export prices and reduce this difference, the more we shall be able to keep for ourselves.

[Question] And what is stopping us?

[Answer] Raising export prices presupposes deliveries of outstanding products having high technical parameters, a short period of innovation cycle and perfect service. To achieve this we must make some radical changes in the management system itself. But not topsy-turvy, proclaiming that everything in our present system is bad, while everything new will be good and self-redeeming--kind of a myth. We must sort out what we have done well and what poorly, and provide for continuous integration in the management system of new mechanisms fitting the new conditions. Therefore, we regard everything which we have been experimenting with since 1978 and which we are introducing next year merely as the first step in the whole series of fundamental measures that are still ahead of us. Today we cannot even fully appraise their importance, scope, depth and intensity. What we have come up with so far, what we have arrived at in the Set of Measures, is by no means all that should be operative in the future. Our work in this area is not the work of a narrow group of people isolated from life in the plants and the socialist problems of development. It is aimed at maximum mobilization of every individual working in the sphere of management--be it in the party, in the unions, in youth organizations or in an economic function--to think and to search. In short, we want to see every level of management confronting future conditions as well as possible, so that we may find a mechanism which, through its strong economic pressure, would force us to operate as required by our common interest.

[Question] What do we expect from the Set of Measures? Could you illustrate it for us through some examples?

[Answer] Let us take capital investment, for instance. It is still marked by a chronic illness manifested by the long period of the returns on investment, high costs per output unit, considerable unfinished construction, the discrepancy between new capacities and the work force, and the like. We prescribed many remedies for this illness in the form of many resolutions. However, they have proven rather fruitless. This then raises the question of how to proceed, of what prescription to select to carry it out. The concept of khozraschet pervades the entire Set of Measures. This means that each individual, collective, plant and enterprise must earn its livelihood. Thus one of the principles valid for this area will be that the enterprises must finance the so-called fixed-asset investments up to Kcs2 million from the development fund. They must cover this fund to a minimum of 30 percent from their profits, another 40 percent from depreciations and the rest from their other resources for good export performance, for quality of products and the like. We are thus also creating here a broad sphere of economic necessity of earnings for the economic growth of their own enterprise. We know that everything will not run smoothly in the next year. After all, we were accustomed for years to "draw" investments. But this is an extensive management. We are through with it and we are switching to the intensive investment policy. Another such sore spot is the scientific-technological development. Its relationship to production is still very weak, it is mostly a mere supplement to the plan. Many technological improvements and inventions are shelved, the innovation cycles are very long and the ratio of products meeting the world standards is low. One of the reasons for this situation is the fact that the current management system put little pressure on the enterprises to apply modern advances in science and technology, and even prevented them from doing so in some cases. For example, the linking of wages to gross production or the production of goods has been such a barrier. A director who introduced a technological advance, for example, in the form of a product having half its former weight, on the one hand utilized raw materials better, but on the other hand reduced the gross production and the source of wages, and thus ultimately acted against his work collective. Furthermore, the plan of technological development lacked authority. After each unfulfilled task of technological development, the plan was instead modified, and the fulfillment of this reduced plan was then even rewarded. The Set of Measures demands that scientific-technological development form the basis of production in the five-year plan; in short, that even in the Seventh Five-Year Plan the director not pride himself by what percent he raised the production, but rather by how much his plant increased the ratio of products having world standards, that he did not have third-class products and that he marketed his products better abroad and at home. True, this presupposes a necessary change in the attitude toward science and technology within the plant; the plan for scientific-technological development must not be one of the many components of the plan of the enterprise or the production economic unit, but the true axis of planning. It is not a question of technological development forcing its

way into the plants, but of acting as an inert force, as the heart of the plant. People must simply realize that when they do not favor technological development they act against their factory.

[Question] People also expect changes in remuneration, or better phrased, that the reward for their work will reflect more justly their true merits than at present. Comrade Minister, would you care to comment?

[Answer] The present system based on annual planning from the viewpoint of planned apportionments allows, to a considerable degree, an increase in wages prior to the increase in work productivity. We must simply pay more and more wages per unit of productivity. We can document it specifically: we started the 1970's with the ratio of 0.5 percent wages to 1 percent rise in productivity. The Sixth Five-Year Plan started with a ratio of 0.71 : 1, and last year the ratio was almost one whole percent of wages per 1 percent rise in productivity. When we realize that the difference is the source of funds for increased spending for health services and the social, educational and cultural policy, the question arises where to find the money if we do not wish to resort to a rise in prices. For this reason the Set of Measures stresses the necessity of the merit system of remuneration both for individuals and work collectives and for enterprises and production units. As regards the wage policy, it calls for a long-term policy and not a year-to-year one; in short, the enterprises and production units should indeed be able to manage their wages. We want to divide the wage fund into two components. We intend to correlate the basic wage, which should average 80 percent of the wage fund, with the indicators of the performance proper. And because this will eliminate the carryover of occurrences of manufacturing from costlier rather than cheaper material, and of achieving the turnover through a mutual cooperation, we may assume that this sensitive subject of merit will be solved in principle. Twenty percent of the wage fund--the second component--we wish to "hang" on the fulfillment of the five-year indicators of profitability of the production assets. That is, how does the enterprise or the production unit handle the capital invested in the fixed assets and stocks; how will this be reflected in the profits, expenditures and the life span of the assets. This 20 percent should be a great incentive for the managerial staff of the enterprise or the economic production unit to see to it that the invested capital realizes the planned effect. The structure even allows for the extreme case when nobody in the management of the enterprise receives a single crown in supplementary bonuses and premiums. I assume that such a situation should not arise with a good long-term solution. The worker in the machine shop will get about 2 percent, of course, for his quality and economical work; this represents his share in the economic achievements, as the wage of each worker is tied to the economic performance of the enterprise. But if the achievements deviate as much as 3 percent from the planned indicators, the director of the enterprise, his deputies and the chiefs of professional departments will have their special compensations reduced by 3 percent. And if the percentage is higher, they will be penalized more, and at 15 to 20 percent nonfulfillment they will receive no premiums whatever. As regards the wage funds we are thus switching to the principle that each enterprise must actually earn its wages. According to the five-year parameters this must lead to a greater differentiation. It is a very sensitive and touchy problem, but we must solve it.

[Question] In this connection it is appropriate to ask whether this will not cause a greater fluctuation, if people will not run away from the plant which is earning less to another where the earnings are higher....

[Answer] I shall merely point out that in the enterprise which will save manpower we are actually pledging the "Shchuski"(?) movement nationally for 5 years. This means that if the enterprise has a planned work force of 10,000 and does the work with 9,000, the wage fund will remain at the original level and the funds earmarked for the 1,000 missing workers can be divided among the others according to merit. The enterprise will not be interested, therefore, in hiring additional personnel. And what about those who are dissatisfied? It has been said that we must expect fluctuations, dissatisfaction, the writing of complaints about low earnings, and the like. Conflict situations will certainly arise, but we must not panic at the first sign. When one "troop" in the enterprise writes that it is earning less, we must not start "playing taps" for the improved management system. We must analyze the situation and deal with its substance.

[Question] The Set of Measures can be viewed as certain rules of a game, for example, soccer. They forbid some actions, for instance, an intentional play with the hand. The moment the player violates the rules, the referee intervenes and the whole team is penalized for the infraction of the player. And what about an enterprise where the director would allow some infringements on the rules of the game called the Set of Measures? Who will play the role of the referee here, and what will be the specific penalty?

[Answer] I am also fond of using sport comparisons because of the many similarities. Since my youth I have been a fan of SK Slezka, that is of Banik Ostrava. I am glad that he is our soccer champion and, therefore, I do not believe that two things should have happened: first, the CSSR champion should not play in Hlinsko with the team from the regional competition and second, he should not be eliminated in the first or second round in the Champions' Cup of the European countries. Similarly, we shall always be subject to international criteria and it will not matter what game we play at home and what domestic record we achieve. Our internal rules, for example, the Set of Measures, aim at this goal so that we can acquit ourselves well in the European and world arenas. Let us take as an example a machinist who will be doing the same work for years. He will be meeting the performance norms and receive his wages for it. If the plant properly markets the machine and realizes profit, he will also receive his share from the economic achievements. But should the plant neglect technological development, should it lose its market and not sell the machine or sell it without profit, the worker will receive what he has earned by his work but no share in the economic performance. This means that the worker himself cannot limit his interest to his own performance only. He is after all also the owner of the production assets and a participant in the management. He will have to show progressive interest in what the prospects of the plant are, and in what it plans to market. The worker, the foreman, the director, everybody involved in the management must realize that he is a participant in the game, that his place is in the field and not behind the barrier. Should the technical deputy or the chief of the construction department be responsible for stagnation of the plant, he must bear his responsibility by

not receiving the 20 to 40 percent bonus at the end of the year, or he may even have to be replaced, because the work collectives also suffer on his account. The latter in their own interest will become referees with a strong voice. Other referees are the higher agency, the state bank, people's control and the like.

[Question] The Set of Measures is talked about as if it were something in the future, a thing to come. But the implementation counter planning for the next year is a reality today. Do the people in the enterprises and plants proceed with annual carryovers of the directional tasks for the next year differently than when it was known that higher production requirements stipulated higher requirements for labor force, investment and the like?

[Answer] First, I must point out that the Set of Measures is not conceived for 1 year, but for a much longer period. Therefore, all the mechanisms naturally cannot function without an increase next year. We have already introduced some, however, such as the counter planning, for instance. If you set for yourself a more demanding task than called for in the directive, you shall get more, while if you take a less demanding one, you get less. I must admit that the application of this principle has not yet taken hold. Let us take, for example, the growth of productivity; we have cases where the enterprises want to have a wage increase by 1.25 percent per 1 percent rise in productivity. Furthermore, it appears that at some places apprehensions about many material disproportions are stronger than the motivating aspect of the incentive system, for example. Some directors are saying: We choose a firmer role and then we shall lack material to work with. There is some caution and mistrust. They are saying in the plants: "Oh, if we tighten the plan for 1981, it will become the basis for the whole five-year plan and we shall use our reserves at the very beginning." At first sight the outlook of the counter planning is not too rosy, and it indeed does have its complexities. The enterprises, after all, were drafting the plan proposal in the period from May to July, when they had to submit them. And at that time many were not yet familiar, as we found out, with the principles of the Set of Measures. The counter planning for the first year of the Seventh Five-Year Plan, therefore, reveals a reluctance to accept progressive plans and tasks. The Set of Measures is explicit, however: those who choose a "soft" plan and then exceed it, will be at a disadvantage compared to those who adopt a "hard" plan and then meet it, or even slightly underfulfill it.

[Question] There is still much to be desired in the supplier-consumer relations. In case of a bad product the producer blames the subsupplier, he in turn blames other suppliers and the guilty get lost in anonymity. Will the Set of Measures contribute to the solution of this nuisance?

[Answer] My personal opinion is that inferior material should not pass the acceptance control in the factory and should not be processed. That is, the standards of the acceptance control should be much higher than at present. I believe that this will gradually happen in the enterprises and plants, because we shall not abolish the penalty for inferior work. On the contrary, we shall broaden it. Our present procedure is to deduct the sum of losses

due to inferior work from the basis for wage calculations or profits. We thus have a weapon. In my opinion management must be the key to the solution of this problem. And this is what the Set of Measures tries to accomplish with its principles.

[Question] Many ills in our economy evidently arise from the fact that the managerial positions are not always filled with qualified people. There is often no place for a properly trained young person because the top position is held by an older individual opposing progressive work methods. Do you believe that the Set of Measures will also help to give a much better chance for full participation to young, competent and qualified individuals?

[Answer] The Set of Measures is unquestionably opening room for all competent, qualified and bold people devoted to socialism and interested in the progress in production and in society. One cannot give a prescription, however, as to how to decide whether a 60-year-old designer is young; for instance, or if a 30-year-old worker is old enough for such a position. This is highly individual and it calls for sensitive work with people. I expect that through the medium of the Set of Measures life will simply force us to upgrade progressively the cadre work and fill the key positions with the truly best qualified individuals. I believe that young, qualified, competent and bold people will have great opportunities.

> Will the Set of Measures for Improving the Planned Management System of the National Economy solve all the mentioned problems and shortcomings? Not by itself. It is only a tool, a lever which the people must firmly grasp in their hands.

9562
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EARLY INDOCTRINATION OF WORKERS INTO SET OF MEASURES STRESSED

Prague NOVINY VNITRNIHO OBCHODU in Czech 8 Oct 80 p 3

[Article based on roundtable discussion, prepared for publication by editor E. Semilska: "Implementation of the Set of Measures: The Responsibility of Every Worker"]

> [Text] "Fundamentally, we are dealing here with an instrument for higher quality and more efficient work. In our sector its consequences must be an overall increase in the effectiveness of the socioeconomic function of commerce in accordance with the requirements of the socioeconomic development of society. Concretely, however, it is a matter of the new measures assisting to a greater extent the development of personal market consumption, especially its qualitative aspects, and having the measures stimulate, to a greater degree than previously, the efficiency of commercial performance in relation to the whole production process. The achievement of these fundamental objectives of the Set of Measures in the commercial sector means the utilization not only of all its generally valid principles, but at the same time the elaboration and practical application of several additional measures, approved by the government committee for questions of the planned management of the CSSR specifically for the domestic commercial sector. In addition to the full utilization of such principles as intensification of prospective planning, expansion of the role of five-year plans and the efficiency of the compensation system, more efficient utilization of khozraschot, improvement in management organization, etc., it will also be necessary to apply special measures stemming from the basis of the socioeconomic function of commerce, from the character of work in commerce, and from its material technical basis." Engr A. Jakubik, CSR Minister of Trade.

The Set of Measures for Improving the Planned Management System of the National Economy is a document the content and objectives of which should be well known by all of our workers. It is not simple to change the deeply rooted system of management, and such change requires the accumulation of much experience and the practical verification of a number of new elements before they can be introduced on a nationwide basis. For this reason many experiences of the Soviet Union and other socialist countries were studied in the course of the Sixth Five-Year Plan, and the practical verification of several principles was begun. The Experiment in the Comprehensive Management of Efficiency and Quality, which ran from 1978 to 1980, was especially important.

In the conception of the Set of Measures, account was also taken of external economic conditions. Our country has a relatively poor raw materials base, and our industry has a strictly processing character. For the Czechoslovak economy to be balanced, we must show ourselves capable of covering our high import needs of essential raw materials with the efficient exporting of our own products. This is not easy, because prices of standard finished products on world markets are rising more slowly than the prices of raw materials. From this stems the necessity of exporting many more goods than ever before in order to cover imports. This implies, to be sure, exporting at the expense of supplying the domestic market, which would lead to a weakening of the possibilities for satisfying the needs of our citizens. What then can be the solution? Produce and export outstanding products, the prices of which on world markets are rising just as rapidly as the prices of raw materials. At the present time we produce few such products, and a change in this unfavorable situation presupposes great efforts from every working person in research, development, production, testing, and commerce. For this reason the Set of Measures encompasses not only the areas of management and planning, but also issues of scientific and technological development, the level of quality and efficiency, prices and wages, and thriftiness at individual management levels, and it emphasizes as well the undisputed significance of worker participation in management, and in the development of their initiative. However, the Set of Measures, no matter how comprehensive, can change nothing in and of itself—this can be accomplished only by people through good work, an understanding of the rationale of the changes, through new approaches and attitudes befitting members of a socialist society.

What Is Most Pressing For Us Today

The Set of Measures for Improving the Planned Management System of the National Economy After 1980 is currently the subject of a number of discussions at our workplaces. What is the point of departure of the Set of Measures? How can we participate? Is not the application of the Set of Measures to enterprise and factory conditions actually only a matter for a small circle of expert and management personnel? These are questions the workers are asking. We put their questions to experts at a discussion in which participated Ludmila Burianova, chairwoman of the MVOS [Urban Trade Union Committed], Jiri Zahalka, economic deputy of the general director of Food Commerce and vice chairman of the CVOS [Czech Trade Union Committee] economic commission, Engr Miroslav Moller, economic deputy of the director of Wholesale Industrial Products in Prague, member of the UVOS [Central Trade Union Committee] presidium and chairman of the Union Committee of the Revolutionary Trade Union Movement at OPZ, and Zdenek Marek, economic deputy of the director of the Prague Interhotel and member of the plenum and economic commission of MVOS [Urban Trade Union Committee].

Engr Jiri Zahalka: At the present time the most important task is to prepare a feasible plan for the next five-year plan in accordance with the Set of Measures. At the same time it is not possible to wait for more detailed regulations, which for the most part are issued only in the concluding periods of the year. It is already clear from the unambiguous sense of the Set of Measures for Improving the System of Planned Management that it is necessary to direct efforts at a search for ways in which the plan which has been put together can be qualitatively assured in all its aspects, and at the same time to search and, mainly, find, potential sources of efficiency in its fulfillment.

In our whole branch ever more importance is being placed, and will continue to be placed in the future, on the level of supplier-consumer relations, on the more efficient, closer cooperation of commerce and production, so that not only higher quality goods, but a wider assortment of goods as well, comes from them to us, to our sales outlets, and so that much greater attention will be devoted to the breadth of the product mix and innovations in it. This relates particularly significantly to foodstuffs, and therefore in our enterprise as well. In Food Commerce, we must devote increased attention to these issues in 1981. Planned increases in turnover are not that high, so we must, rather, try to fulfill them in terms of demanded goods, in the demanded mix, and with the highest possible quality.

Another problem which is definitely not easy to resolve is the fact that we must accomplish this increase in turnover with minimal investments and, for practical purposes, with no increase in the work force. At the same time the quality of service cannot be permitted to suffer. On top of this it is our committed political objective to guarantee the supply of foodstuffs in new housing projects. For instance, in Prague alone two such gigantic projects are under way: Southern and Southwestern Town. We must open and staff new supermarkets there. Here as well there are more than enough subjects for reflection, initiative, and creativity. It is often true that various, even though small, operational improvements, a rationalization of the commercial infrastructure, better organization of work, the elimination or merger of several steps, make possible the reassignment of workers, saving them for new facilities.

Of course, further large possibilities for initiative in finding unused potential exist in the area of costs related to the conservation of raw materials, inventories, energy, or the saving of various overhead costs.

It definitely makes sense to speak with people about the new system of planned management right now, immediately, and not to wait until all of the relevant legal standards and more detailed directives are issued. Nor is it possible to agree with the often repeated assertion that the new system is a matter solely for experts and management personnel. It is true that these are the people who will have to involve themselves the most extensively in the elaboration of new guidelines and their application. However, whole worker collectives will have to play a role in the introduction of the new principles into daily practice at the workplace. It is precisely these people with whom we must, today, discuss in detail the basis, purpose, and objective of the improved system.

Engr M. Moller: The improvement of the quality and efficiency of all kinds of work is a pressing requirement of the times. The Set of Measures for Improving the Planned Management of the National Economy After 1980 pursues, in its essence in my view, the winning over of every member of an enterprise collective for the concrete realization of a given objective. It is clear that progress towards the fulfillment of this demanding requirement is dependent on the efficient initiative of people. Nor does it avoid, however, modifications in economic instruments and several other regulations. It is impossible, however, to wait for these. It is desirable, and essential, to point to concrete examples of what it is necessary to resolve and how to go about it. No good idea may be allowed to pass, whether it be presented as a proposed improvement or only in the form of a contribution to the discussion at an operational conference. Each person who proposes an idea must be made aware of its fate. Failure to live up to this principle leads to the indifference of people, of

our workers, and this is an unforgivable error. And although the proper answer will at times mean a little more work or trouble for an immediate superior or one higher up, or for a union functionary, let us pursue each initiative and its examination to the end.

The whole new system challenges all of us to learn to view our own work as well in a broader context and to consider whether some action, decision, or requirement of ours might damage the overall operational process, might result on another occasion in down time, losses, or even unnecessary effort.

It will often be necessary to implement a good idea in cooperation with a nonenterprise collective. I cite an example from transportation, where demands for conservation are especially pressing. Every high capacity factory has at its disposal a transportation fleet with a given capacity. The economic utilization of this fleet presupposes the balanced and full loading of vehicles. In order to eliminate undesirable seasonal fluctuations, overtime work, and the opposite periods of insufficient loading of vehicles, a sensible agreement concerning the appropriately timed dispatch of predelivered goods is at times sufficient. The problem of minimizing deliveries and delivery cycles of several sales outlets, which lowers transportation costs, also requires thought. From this viewpoint it is necessary to reevaluate several distribution plans, and not to forget about vehicle loading on return trips.

One of the painful problems, especially in the center of Prague, is labor productivity and efficiency in small stores. This is, as is, come to think of it, everything in commerce, at the same time also a society-wide problem; the creation of larger shopping aggregates extends, obviously, shopping trips, even the most mundane. The loss of time to the shopper represented by a trip to the larger sales outlets can be more than made up for by the shortened shopping time. This is especially true when an improvement in the organization of work accompanies a growth in the size of a sales outlet, and this must be the objective of employees of commercial organizations.

The shift from small stores to larger capacity ones with greater productivity is not only a matter of construction, but also of convincing shoppers, and for this it is necessary to depend on the understanding and assistance of national committees.

I would also like to mention a matter which can decisively and fundamentally influence for us this required increase in quality and efficiency. This is the wider, more specific, and more efficient use of computer technology. This has not yet provided us with nearly what it is capable of providing, especially in relation to making management more operative. This is true for all commercial sectors with the possible exception of those in foodstuffs, who are farthest along in this regard.

L. Burianova: Great possibilities are opening here for members of comprehensive rationalization brigades, for those who would improve operations. These are, let us not forget, people who not only have an interest in the field of their specialty, but have also delved into it. In many instances they are experts, and most of them are seasoned practitioners. Their thinking about problems can, therefore, contribute a truly fundamental resolution which would, however, require as well far greater popularization and examination right up to implementation itself. Here we see a problem which Engr Moller has already raised: that it is precisely from such

proposed solutions that work and difficulties often result for supervisory and coworkers, as well as for union functionaries. The more so since more than once it has been a question of a very demanding resolution, one requiring relevant measures to be taken in technology, as well as in the organization of labor, management and in administrative activities.

Z. Marek: In our area, as elsewhere, momentarily the most important task is the preparation of a plan, not only for next year, but also for the whole Seventh Five-Year Plan, because it is from this that everything else evolves. Where we work, in the Prague Interhotel, this is the more urgent because the construction of the hotel Panorama in Prague 4 must be worked into the plan, and several matters related to this are still being negotiated. We are devoting extraordinary attention, as in past years to the maintenance and improvement of the material-technological base, where we are creating the conditions for plan fulfillment in future years. We are obtaining the resources above all from the proceeds of surcharges on the residence of foreigners.

We have, however, for a long time been grappling with the assurance of targets in comprehensive travel due to the fact that in this item we must also assign personal supply vehicles, even though they serve exclusively technological purposes--for the delivery of goods, raw materials, and inventories. The situation is becoming acute also because our suppliers force us to take away certain goods.

Regarding the plan proposal, several public eating enterprises managed by national committees are remarking that the influence of the Set of Measures has not yet been sufficiently outlined in the prepared document. Management personnel and union functionaries are having problems maintaining the level of services in view of the approaching lack and, for practical purposes, zero growth in the work force, the high costs of certain, especially smaller, operations, and an insufficiently modernized material technical base.

People understand these goals pursued by the Set of Measures. They are convinced of its usefulness and significance, but are asking for concrete information. And justifiably, since in the future every worker can influence economic results, even the dishwasher by not breaking the dishes, at the same time that they influence the extent to which an enterprise comes to terms with the new realities.

The new measures are so significant, and the workers are promising themselves so much from them that we must take steps to assure that they are respected from the top down. In this way situations can be avoided such as occurred last year in November when conservation ordinances appeared in the press, at the same time that commercial organizations had ordered and signed contracts for a number of propagational projects.

The fundamental task at the present time, in my opinion, is to establish a demanding, but feasible plan and to assure without exception the fulfillment of the final year of the five-year plan. Further, it is necessary to think about enterprise potentials, verify the existence of the necessary resources, clear up several questions of relations so that workers can be properly informed and have their questions answered at the educational sessions and seminars prepared for enterprises, unions, and other agencies.

L. Burianova: The Czech Trade Union Committee of commercial workers also took politico-organizational measures to assure the participation of union organizations and agencies in the elaboration and implementation of the Set of Measures. Its functionaries, activists, and workers are delegated to work groups of the CSR Ministry of Trade to assist commercial-economic units.

At the same time our regional and urban trade union committees have received concrete tasks both in relation to members of their own agencies and in relation to factory and enterprise committees of the Revolutionary Trade Union Movement. Their functionaries must see to it that by the end of October the basis of the Set of Measures has been explained to all workers at operational discussions. In connection with this, it is necessary to speak about the need for worker participation in the discovery of unused potential, about the significance of comprehensive rationalization measures and of the material stimulation of wages which provide the incentive for consistently high quality work. In the second phase of educational work, functionaries will be informed concerning the concrete tasks which stem from intraenterprise and intrafactory khozraschot.

In addition, there will be an ongoing evaluation, at discussions of enterprise and factory committees of the Revolutionary Trade Union Movement, of the effectiveness of measures and the degree of realization of those goals which stemmed from the discussions of the Seventh, Eighth, and Ninth Plenary Sessions of the Central Council of Trade Unions.

At the conclusion of this roundtable it is not necessary to add anything. Only perhaps that it has included only a small fraction of a broad area of problems, and therefore meetings such as this, our encounter with experts and union functionaries concerning the Set of Measures, will be more frequent. We thank the participants in today's roundtable, and wish them success in the implementation of the Set of Measures in their areas of specialization. We hope they are able to implement their excellent ideas in daily practice.

9276
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TRADE UNION CALLS FOR HIGHER WORK DISCIPLINE

Prague HOSPODARSKE NOVINY in Czech 10 Oct 80 p 2

[Commentary by Oldrich Navratil, Central Trade Union Council: "Trade Unions and Work Discipline"]

[Text] Under the conditions preparatory to the execution of the "Set of Measures for Improving the Planned Management System of the National Economy After 1980" we were more conscious than ever of the fact that characteristics of the tasks and position of trade unions in the present stage have an international application as expressed by L.I. Brezhnev at the 16th session of Soviet Trade Unions: "In our society production is not against the workers. The dual task of trade unions is to promote the development of the national economy and increase production and to take care of the rights of workers and their working and living conditions. It is a dual task because the growth and qualitative improvement of the economy are the primary and proper means of improving the working conditions of the workingman, of his family and of all citizens."

The Ninth Plenary Session of the Central Trade Union Council [URO] again underscored with all urgency the need for all trade union bodies and organizations to direct their members toward high quality and responsible work, toward creating an atmosphere of high standards--tolerating no compromise with shortcomings--and toward strengthening working and technological discipline.

In the current situation, when we are not meeting the goals of the last year of the Sixth Five-Year Plan and are preparing the start of the Seventh Five-Year Plan under very complicated external and internal conditions, it is more than ever necessary for every trade unionist to be a good manager at his workplace or in his plant. An integral component of this is the maintenance of socialist work discipline. If this principle applied at the beginning of the building of socialism, it is even more timely now with the new technology and know-how and the growing mutual dependency of branches and operations.

No trade union organization, plant or shop committee, no member of the ROH [Revolutionary Trade Union Movement] should remain indifferent to the fact that at his workplace, in his area of operations, there is a considerable volume of rejects which cause great losses in materials.

Awareness of the immense assets which we are able to produce in a short time period, and which we urgently need to meet our economic and social goals, forces us also to think about some of the indulgent practices whereby certain supervisors, often even

on the recommendation of plant committees, give workers paid time off to take care of their personal business. This practice has increased by 7.15 percent since 1977 and represents an annual loss of 2,191,557 working days just among production workers in industry. The extent of so-called work breaks for personal reasons is prescribed by our legal regulations in a manner that has no analogy in the legislation of other countries. It is the absolute right and duty of trade union bodies to see to it that this free time is given workers wherever it is justified. Likewise, however, they must help stop the increased granting of free time beyond that which is properly justified so that various pointless activities, not to mention celebrations of personal anniversaries, often even accompanied by the use of alcoholic beverages, do not take place during working hours.

Trade union bodies and work teams also are not indifferent to the losses due to shortcomings in the organization and management of work, unnecessary work stoppages or breaks in the regular flow of the work process. Honest workers rightly criticize these and insist on due prosecution of those who fail in their working responsibilities through inadequate management or organizational work.

Work discipline is one of the main principles underlying the development of socialist society and is a basic requirement for meeting the goals of all branches of the national economy. Its intensification and development is, therefore, one of the concrete gauges of the effectiveness of all political-educational activity of every plant and shop committee and of every basic organization.

Our efforts are all the more complicated because, in order to strengthen work discipline, those factors which are most evident in a capitalist society do not apply here--such as fear of losing one's job. It is indisputable that other methods for strengthening work discipline can be used in the most developed countries when the number of unemployed in them alone is approximately 19 million. The number of unemployed and semiemployed in developing countries which have taken the capitalist route has not fallen under 350 million. In the United States alone, according to the International Labor Organization's official statistics, the figure is 8.2 million. Moreover, the prognosticators do not foresee a rosier future. It is expected that in the FRG alone the number of persons out of work will increase from the present three-quarters of a million in June 1980 to 6.6 million by the year 1990. Under such conditions it only suffices to open the door in order to correct any problems of discipline.

For us, however, that is unacceptable. Socialism has formed its own discipline--a worker's discipline founded on an enlightened attitude toward work. The trade unions as well as managing directors in cooperation with union officials, must educate workers to this. Morale boosters should, however, not be limited to honoring the best workers. Something more is required. An atmosphere must be created and public opinion must be shaped so that in every enterprise and on every work team each will be well aware of who is working and how, and each will be esteemed according to his merits. Everyone must be certain that good work and good conduct will be recognized. And they must also know that the idler, the loafer, the frequent absentee and the careless worker will not be dealt with leniently. No one will defend him against the rebuffs and critical attitudes of his respectable comrades.

V.I. Lenin directly associated success in socialist construction with "iron discipline in work." He considered inadmissible any kind of violation of discipline, whether committed by supervisory workers or ordinary laborers.

Our socialist labor code gives supervisory personnel sufficient means to enable them to handle those who, in spite of all efforts at education, violate the rules of socialist work discipline. Supervisors are not only justified but obliged to make use of these means to the fullest extent allowed by law. It is fully within the purview of plant committees to support by all moral-political means the proper decisions of the supervisors in this area.

Labor turnover has a severe negative impact on the discipline of working teams. Of every 1,000 workers in the industry of the CSSR alone, 91 will leave their jobs annually. Since 1975 this developing trend has been rising, particularly because of reduced overall attention being paid to the solution of this problem. Losses caused by labor turnover in industry alone are estimated at 2 to 3 million unworked shifts annually.

The Ninth Plenary Session of the URO emphasized the fact that seeking means to stabilize the work force should also find expression in plans of social development and in collective agreements, especially in areas directed toward social and educational activities. This must be kept in mind especially at the present time when we are on the eve of preparing new collective agreements and plans for cadre and personnel development.

The task clearly, however, falls to economic management. It was clearly implicit in the Seventh Plenary Session of the URO that we will fully support those supervisors who carry out their duties responsibly, consistently and courageously. Consequently, together with them we will also take up the solution of so-called unpopular matters, being fully aware that only by successfully carrying out the tasks of development of the national economy can we assure fulfillment of programs of social policy and the further consolidation and development of the social and working security of every worker.

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SITUATION, TASKS OF ENERGY MANAGEMENT EXAMINED

Budapest KOZGAZDASAGI SZEMLE in Hungarian No 10, Oct 80 pp 1159-1171

[Article by Miklos Szocs, chief counselor at the National Planning Office: "Situation and Tasks of Our Energy Management. Expected Trends in Energy Demand During the Fifth Five-Year Plan Period"]

[Text] The country has had balanced fuel and electrical energy supplies for decades. Our economy does not suffer from an energy shortage. Yet, the importance of energy management has increased enormously and satisfying long range demand is not a problem we can easily solve.

The external and internal conditions of our energy supplies have undergone substantial change since 1973. The three most important changes are:

- since 1974, energy import costs have increased faster than the price of our products sold abroad;

- the costs of domestic energy production (coal, crude oil, natural gas, electrical energy) are increasing faster than the cost of industrial production;

- the unit capital cost of energy-related investment projects has increased substantially as the engineering solutions of the energy system used in the past (e.g., oil-based power plants) are being replaced by large installations with 3 or 4 times greater unit capital cost (e.g., nuclear power plant) under construction at the present time.

Although the power represented by the cooperation among socialist countries in the energy field was able, for a while, to blunt or delay the effects of long term price increases, losses in international trade and the burden of energy investment costs, these changing conditions forced us to substantially modify our previous energy policy goals.

The oil price explosion and its aftereffects opened a new era all over the world. The process of adaptation began in our country, as elsewhere, Following the internationally known new energy policy strategy, we started work during the Fifth Five-Year Plan in the following areas:

- reducing oil imports within all imports;

- changing the energy structure;

- slowing the growth of demand.

In particular, we started a number of new coal mine investment projects, exploration of new oil and gas fields and construction of the nuclear power plant. At the same time, due to our unavoidable need to import, we also completed new development projects aimed at expanding imports (transportation of Orenburg natural gas and increasing imports of Soviet electrical energy at 750 kV).

The efforts aimed at the expansion of energy sources are mostly well-known. Less well-known are the experiences relating to present trends in the country's energy demand. The relationship between Hungarian economic growth and energy demand, in terms of the average annual growth rates of the five-year plan periods, can be characterized as follows:

Table 1
Average Annual Growth Rates (percent)

Category	1970-75	1975-80
National Income	6.3	4.0
Gross National Product	6.2	4.3
Fuel use	3.5	3.5
Electrical energy use	6.6	5.1

During the Fourth Five-Year Plan, every 1 percent increase in production was accompanied by a 0.56 percent increase in fuel demand and a 1.06 percent increase in electrical energy demand. National energy demand increased during the present plan period. According to preliminary data, every 1 percent rise in production is accompanied by a 0.81 percent growth in fuel demand and a 1.19 percent growth in electrical energy demand. The reasons are as follows:

- the branch and product structure of our industry developed in an energy-intensive direction;

- the spreading of hydrocarbons that can be burned more efficiently has slowed down since 1975;

- modernization of railroad transport slowed down; as a result, its favorable effects on transportation-related energy demand declined. The role of road transportation continued to expand.

- Agriculture is becoming increasingly energy intensive to save labor and increase yields.

- energy demand by the general population is growing as a result of the growth in the number of apartments and privately owned automobiles.

The development of the economy is continuing to be characterized by the trend toward growing unit energy demand per unit net national product in terms of electrical energy and declining unit energy demand per unit net national product in terms of fuel use.

Table 2
Unit Energy Demand per Unit Net National Product, 1970-1980

Year	Unit fuel demand (GJ/forint)	Electrical energy demand (kWh/forint)
1970	2.40	0.047
1975	2.11	0.048
1980	2.08	0.051

The following energy units of measurement are used:

1 PJ (petajoule) = 10^{15} joule
1 GJ (gigajoule) = 10^{9} joule
1 kJ (kilojoule) = 10^{3} joule
1 joule = 0.2388 cal
1 Watt hour = 3600 joule

The energy requirements of industrial production during the two five-year plan periods are illustrated by the following data:

Table 3
Average Annual Growth Rates During the Fourth and Fifth Fiwe-Year Plan Periods (percent)

Category	1970-75	1975-80
Annual average growth of gross industrial production	6.5	4.6
Average annual growth of industrial fuel use	4.4	3.6
Average annual growth of industrial electrical energy demand	4.5	4.2

The indicators of the Fourth Five-Year Plan period were better than those of the 1975-80 period. Between 1970 and 1975, every 1 percent growth in industrial production required only a 0.68 percent increase in fuel use and a 0.69 percent increase in electrical energy use. In contrast, during the Fifth Five-Year Plan a 1 percent production increase required a 0.78 percent increase in fuel use and a 0.91 percent growth in electrical energy demand. This is a result of the more rapid growth of the production of more energy-intensive base materials (pig iron, hot-rolled steel, cement, caustic lime, bricks, plate glass, paper, sugar, etc) compared to total industrial production relative to the preceding period. Of particular importance is the doubling of base material use by the petrochemical industry since 1975.

Table 4
Total Industrial Fuel Use and Unit Energy Demand per Unit Industrial Production Calculated at Comparable Prices

Category	1970	1975	1980
Total Industrial Fuel Use (PJ)	515	636	762
Unit Industrial Fuel Use (KJ/forint)	971	879	842

The objective yardstick for evaluating the energy management activities and conservation measures of industrial enterprises (economic units) is their unit energy use (per unit quantity of production or output, expressed in natural units of measurement). There is a welcome, continuing decline in the unit energy demand of energy intensive sectors, industries and factories. This basic trend can be seen equally well in industry and transportation. The decline in unit energy demand represents substantial savings for the national economy. In the five years from 1975 to 1980, there has been a 5 to 10 percent unit improvement in aluminous earth production and the brewing industry. The improvement in paper, ammonia, cement and precast concrete production has been between 11 and 20 percent. The decline in demand per unit production has been over 20 percent in glass, sugar and caustic lime production.

Especially large unit improvements are achieved in economic units where new production methods (more up-to-date plant or larger installations) have come on-line. There are also improvements in efficiency in enterprises where production continued on the basis of existing capacities relying on earlier technology, In these areas, indicators improved as organizational measures led to improved maintenance, elimination of losses and increased efficiency.

Unit indicators rose in only a few of the many energy-intensive activities and products. These cases may be regarded as exceptions to the main trend with acceptible, concrete reasons related to technology or improved quality (e.g., in refineries due to increased crude oil processing or in some up-to-date brick factories due to the production of ceramic shells with better insulation properties). Agricultural energy demand also increased at a rapid rate during this period in line with improvements in agricultural equipment (mechanization, electrification, increasing use of chemicals).

Table 5
Indicators of Energy Intensiveness of Agriculture

Category	1970	1975	1980
Total agricultural fuel use (PJ)	42	59	80
Agricultural fue use per unit output (KJ/forint)	220	236	259

Thus, agricultural energy demand increased, both in absolute terms and relative to output, in the period from 1975 to 1980. Increased energy demand was mainly due to the spreading of modern production systems and the related technological, drying and transportation requirements.

In spite of its increasing energy intensiveness, agriculture still belongs in the category of so-called less energy intensive sectors. Its total fuel use is still only 5 to 6 percent of the total fuel requirements of the national economy. Compared to industry, agricultural energy demand per unit output is one-fourth to one-third, electricity demand is one-fifth to one-fourth of the industrial average. The problem is that expanding agricultural production and increased yields require growing use of the most expensive types of fuel (diesel oil, gasoline) as well as fertilizers and pesticides made from high grade energy sources (natural gas, gasoline).

Energy use per unit output in the transportation sector continued to improve in the Fifth Five-Year Plan period.

On the other hand, the most important energy rationalization activity, i.e., the modernization of rail transport (electrification, diesel locomotives) has slowed down. An increasing percentage of transportation tasks are carried by road transport. During the same period, the fuel needs of air transport are going to double. Transportation also uses light fuels almost exclusively (gasoline, kerosene, diesel oil). Energy use by the communal sector will also increase substantially during the plan period.

Table 6
Total and Unit Energy Demand for Transportation
(without private automobiles)

Category	1970	1975	1980
Total fuel use (PJ)	71	79	88
Fuel use per unit output (kJ/forint)	1163	1000	907

Table 7
Energy Use by Communal Sector

Category	1970	1975	1980
Fuel use (PJ)	198	213	241
Electrical energy consumption (billion kWh)	1.8	3.2	5.3
Gasoline consumption (1000 t)	270	620	830
of this, by the population (1000 t)	170	480	660
Number of dwellings (1000)	3090	3410	3762
Number of automobiles (1000)	220	586	1030
Fuel use per dwelling (GJ)	64	63	64
Electrical energy consumption per dwelling (kWh)	582	938	1409
of this, in Budapest	1386	1846	2280
in provinces	417	741	1220
Gasoline consumption per private automobile (kg)	772	819	640

According to preliminary data, during the Fifth Five-Year Plan,

- the number of dwellings will increase 10.3 percent, the average number of rooms 5 percent, fuel consumption by households 13.1 percent and electrical energy consumption 65.6 percent;

- the number of private automobiles will increase by 76 percent (to 1,030,000) while gasoline consumption will go up 33.8 percent.

Due to the rise in living standards, fuel consumption per household will increase in line with the growing number of apartments and more rooms per apartment. Electrical energy consumption is increasing six times faster than the number of apartments.

The increase in fuel, gasoline and electricity consumption by the population over five years represents about 22 percent of the total increase in demand for the entire national economy. In particular, fuel consumption per household remains essentially unchanged. Electrical energy consumption increased by half. Gasoline consumption per automobile declined by approximately 22 percent from 1976 to 1980.

From the standpoint of total energy use, the period of the Fifth Five-Year Plan may be divided into two district intervals:

- Between 1975-1978, consumption increased rapidly. Fuel use grew at an average annual rate of 5.4 percent while electricity demand increased 7 percent annually. (Demand grew especially rapidly in 1978 as a result of the unfavorable weather.)

- During 1979-1980 the rate of growth slowed down. Fuel demand is increasing by 0.6 percent annually. Electricity consumption is growing by 1.9 percent per year.

Table 8
Total Fuel and Electrical Energy Consumption of the National Economy from 1970 to 1980

Category	1970	1975	1980
Total fuel use (PJ)	909	1076	1277
Total Electricity demand (billion kWh)	17.9	24.6	31.5

The variations in the growth of demand may be noted quite clearly when the fuel and electricity consumption data for the 1970's is subdivided into four great homogeneous consumer groups.

Table 9
Energy Demand from 1970 to 1980 (PJ)

Év (3)	Szükséglet (1) Ebből: (2) Összesen (4)	a villamos-energia hőigénye (5)	a termelő szektor igénye (6)	a kommunális szektor tüzőanyag-fogyasztása (7)	a kommunális szektor motorbenzin-fogyasztása (8)
1970	909	214	488	198	11
1975	1076	276	561	213	26
1978	1260	343	645	228	34
1980	1277	356	645	241	35

KEY:

(1) Requirement
(2) Of which:
(3) Year
(4) Total
(5) Heat demand for electrical energy
(6) Demand by productive sector
(7) Fuel consumption by the communal sector
(8) Gasoline consumption by the communal sector

Average Annual Growth of Energy Demand From 1970 to 1980 (percent)

Időszak (1)	Átlagosan (2)	A villamosenergiaiparban (3)	A termelő szektorban (4)	A kommunális szektor tüzőanyag-fogyasztásában (5)	A kommunális szektor motorbenzin-fogyasztásában (6)
1970—1980	2,5	5,3	2,9	2,0	12,3
1970—1975	3,5	6,3	3,0	1,4	18,7
1975—1978	5,4	7,5	4,8	3,8	9,3
1978—1980	0,6	1,9	0,0	0,6	1,5

KEY:

(1) Period
(2) Average
(3) In electrical energy industry
(4) In the productive sector
(5) In fuel consumption by the communal sector
(6) In gasoline consumption by communal sector

- Heat demand for electrical energy production represented approximately one-quarter (24 to 27 percent) of total heating fuel use by the national economy.

- Fuel (and, in particular, base material) use by productive sectors represented more than half (51 to 53 percent) of the total requirements of the period under consideration.

- Heating fuel consumption by the communal sector (housholds and public institutions) represented 19 to 22 percent of the total demand.

- Gasoline consumption by the communal sector represented only 1.2 to 2.7 percent of the nation's fuel needs during the past 10 years.

Consumption by these four groups grew at different rates during the last 10 years.

- Gasoline consumption in the communal sector grew at an average annual rate of 12.3 percent. In particular, the rate of growth was 18.7 percent per year during the Fourth Five-Year Plan, 9.3 percent per year from 1975 to 1978 (as a result of the first price increases) and 1.5 percent per year in 1979-1980 (as a result of further gasoline price increases).

- Heating demand in the communal sector grew 2 percent per year during the 1970's. Between 1970 and 1975 the annual growth rate was 1.4 percent, from 1975 to 1978, 3.8 percent. In 1979-1980 the annual growth was just 0.6 percent, due to higher prices for household fuels and favorable weather.

- The average annual growth of energy demand by productive sectors in the 1970's was 2.9 percent. In particular, the annual growth rate was 3 percent from 1970 to 1975, 4.8 percent from 1976 to 1978. There was no growth in 1980 due to a reduction in output and the increasing attention paid by enterprises to local tasks of energy conservation.

- Fuel demand for electricity generation grew at an average annual rate of 5.3 percent during the past decade. In particular, the annual growth rate was 5.3 percent from 1970 to 1975, 7 percent from 1975 to 1978 and 1.9 percent in 1979-1980, as a result of savings in electrical energy use.

A number of measures were taken after 1975, in line with the changing world economic situation, with the aim of encouraging conservation, including the modernization and improved efficiency of geological exploration, expansion of domestic coal, oil and natural gas production, reduction of non-ruble oil imports, regulation of the marketing of energy resources, several increases in the producer and consumer prices of energy, preservation of the existing level of coal use, and increasing the number of energy-related investment projects aimed at improving efficiency and reducing losses.

One factor contributing to our increased energy demand is our delay in passing on the world market energy price changes to consumers. As a result of artificially low hydrocarbon and electricity prices, energy conservation in production and consumption did not begin in time. As a result of the price increases, substantial savings in fuel, electrical energy and electricity output were achieved starting from the second half of 1979.

In five years, fuel use has expanded by about 201 PJ and electricity use by 6.9 billion kWh. The growth in fuel use is supported by importing oil and natural gas equivalent to 4.6 million tons of oil and electrical energy equivalent to 0.8 million tons of oil. Approximately 90 percent of the five year increase in demand is supported from imports.

Due to the slowdown of economic growth and the conservation measures, fuel consumption in 1980 will be about 5 percent less than the target of the Fifth Five-Year Plan. Electrical energy demand will be about 10 percent below target.

Table 10
International Comparison of Our Per Capital Energy and Electricity Consumption

Ország (1)	Egy lakosra jutó évi: összes tüzelőanyag-felhasználás (GJ/fő/év) (2)		villamosenergia-felhasználás (kWó/fő/év) (3)	
	1978	1980	1978	1980
NSZK (4)	174		4429	
NDK (5)	199		4148	
Szovjetunió (6)	154		3717	
Ausztria (7)	118		3570	
Csehszlovákia (8)	217		3557	
Bulgária (9)	138		2695	
Lengyelország (10)	154		2372	
Románia (11)	118		2058	
Magyarország (12)	104	119	1974	2700

KEY:

(1) Country
(2) Total per capita annual fuel consumption (GJ/year)
(3) Per capita annual electrical energy use (kWh/year)

(4) FRG
(5) GDR
(6) USSR
(7) Austria
(8) Czechoslovakia
(9) Bulgaria
(10) Poland
(11) Romania
(12) Hungary

Per capital consumption indicators are influenced by technological sophistication, economic development, production structure and the climate in each country. These data show that our per capita consumption levels are relatively low compared to our conditions and production level.

The long range outlook justifies a consistent effort toward strict energy conservation. We cannot aim for any substantial increase in per capital energy consumption. There is nothing wrong with lagging behind European socialist countries or comparable capitalist countries in terms of per capital energy consumption indicators, based on a less energy-intensive production structure. This "lag" is already an advantage for us in terms of our trade balance.

Overfulfillment of coal, oil and natural gas production targets contributed to supplying our requirements in the period from 1975 to 1980. In five years, it replaced about 3 million tons of non-ruble oil imports.

By 1980, the percentage of hydrocarbons in the structure of energy sources will be about 64 percent; of solid fuels, 28 percent; of other sources, 8 percent.

In 1980, 54 percent of our total requirements are covered from imports and 46 percent from domestic production.

Hungarian-USSR cooperation in the energy field expanded greatly during the Fifth Five-Year Plan period:

- In terms of thermal value, Soviet energy deliveries are larger than domestic production.

- Between 1975 and 1980, our imports of Soviet oil and oil products increased by 1.5 million tons.

- The Orenburg gas pipeline has been completed on schedule. This resulted in a 2.8 billion cubic meter increase in our natural gas imports.

- The 750 KV electric power line came on line on schedule, making it possible to expand electrical energy imports by 3.5 billion kWh annually.

Due to the rise in imported energy prices, the total cost of our fuel imports for 1980 will impose a burden of approximately 42 billion forints on the nation, while the cost of our domestic production is about 25 billion forints. (In 1975, the total cost of energy equaled approximately 6 percent of our net national produce; in 1980, it was 12.5 percent).

Energy sectors increased their investments substantially during the plan period concluded this year. Calculated at comparable prices, completed investments total approximately 116 billion forints. 14 percent of this sum is used in coal mining, 37 percent in the oil and gas industry and 48 percent in the electrical energy industry. The remaining 1 percent represents state support for energy conservation investments on the enterprise level. About one-third of all industrial investments is spent on energy development.

Completed investment projects in the energy sector, combined with savings achieved since 1979, create favorable conditions for the start of the new plan period in terms of capacities.

Guidelines of the Sixth Five-Year Energy Management Plan

Work aimed at formulating energy guidelines for the Sixth Five-Year Plan has been in progress for a number of years. Planning was made more difficult as a result of substantial changes in external conditions in the intervening period:

- In 1979, the growth rate of the Hungarian economy slowed down;

- Crude oil prices continued to rise at an accelerated rate since 1979;

- It became apparent that even a moderate quantitative growth of our socialist imports will be possible, sooner or later, only at world market prices.

This means that the tasks of energy management, size, rate and structure had to be formulated for the new plan period not by extrapolating past growth rates but by using a completely new approach.

Formulation of the Sixth Five-Year Energy Management Plan is based on four principles:

- The chief economic policy goal of the plan is to improve economic equilibrium. Our energy policy is subordinated to this goal.

- External and internal changes necessitate the strictest conservation measures in the field of energy and especially oil products.

- Domestic resources must be increasingly utilized.

- Limitations on potential investment apply also to the energy field. Therefore, the only investments envisaged are those absolutely necessary to satisfy needs and to prepare for the Seventh Five-Year Plan.

Slowing the rate of fuel and electrical energy use is necessary to contribute to an improvement in the balance situation. This is possible because:

- Economic growth is slower than in the past;

- Fewer installations with high energy use are built in energy intensive sectors;

- We are consciously giving priority to less energy intensive activities in the development of production.

The percentage of energy costs ranges from 3-5 percent in non-energy-intensive sectors to 20-30 percent in highly energy intensive sectors. The following are energy intensive sectors: all of metallurgy, organic and inorganic chemicals industry, cement, lime, brick, glass, sugar and paper industries as well as rail, road and air transport. These sectors use most of the total fuel and electrical energy consumed. Therefore, their development must be examined very carefully, with a great deal of attention paid to the modernizatio of the technologies they use. Their capacities must be developed only if their products (output) are economically sound when calculated on the basis of the capitalist world market price of the energy sources they utilize.

Energy demand per unit output in energy intensive sectors may be reduced by expanding international cooperation (e.g., agrochemical cooperation), quality development and reprocessing of products.

More rapid development of processing industry (machine industry, pharmaceuticals, food), agriculture and mass transportation is important both from an energy standpoint and for modernization of the production structure.

International experience shows that increasing the competitiveness of the economy and improving production structure are suitable means for continuing progress, reducing energy imports and energy investments and strengthening economic balance.

Energy use may be reduced without large scale investment costs through organization, better maintenance, stricter technological discipline, conservation of energy intensive materials and careful collection and recycling of waste.

It can be taken for granted that we will be able to obtain energy only at prices growing at an above average rate. The only way in which we are able to compensate for this, at least in part, is by slowing the growth of demand through conservation.

The potential, limitations and timetables of energy conservation cannot be precisely measured and planned. International experience since 1973 shows that there exist numerous possibilities for energy conservation, both in an absolute sense and per unit output, even when the innovation process is slowed down and investment activity slackens. Energy conservation measures and the elimination of waste are mainly useful for gaining time to find long range solutions for energy problems. (In the long run, the solution can come only from close international cooperation and sweeping technological development.) We sorely need to gain time through conservation. Frugal management can reduce costs, slow import demand and make our exports more economic. In the final analysis, national income may be increased faster; the same is true for its domestic utilization.

Energy conservation is closely related to product and production development. Of course, the population is unwilling to give up advantages of more convenient forms of energy, especially electricity and household gas. Nevertheless, following the consumer price increases, the general population had some incentives to replace household appliances with more energy efficient brands. Unfortunately, the marketing of such appliances in our country continues to be based exclusively on quantitative considerations. Consumers are happy just to be able to obtain the appliances they desire. Therefore, the sale of inefficient, outdated consumer appliances must be stopped by administrative measures and the selection and scale

of more energy efficient household appliances must be expanded. This can lead to substantial energy savings for the national economy while reducing the expenses born by the population.

In agriculture and forestry, savings could and should be made mainly in the area of crop drying and the utilization of waste for fuel. The aim should be to spread energy efficient, modern fodder processes and methods throughout the country and to use plant by-products when they are suitable as fodder.

Savings may be made in the transportation field through increased use of mass transportation opportunities, better utilization of vehicles and the replacement of obsolete, low mileage vehicles.

In the area of apartment construction, more attention must be paid to heat insulation of newly built housing.

The tenants of our largest housing estates pay a flat rate for space and water heating. This provides no incentives for conservation. It would be sensible to switch to individual billing as soon as possible by creating the financial and technical preconditions necessary.

In the productive sectors, the modernization of energy consuming installations is an important aspect of energy conservation. The Ministry of Heavy Industry and the National Technical Development Committee explored the concrete conservation methods that could lead to energy savings equivalent to 1 million tons annually by 1985. Many types of rationalization investment are possible (modernization of production processes, improved efficiency of heating and heat transformation equipment and utilization of geothermal energy and combustible waste). Utilization of these opportunities is, in general, economically feasible because the cost of such rationalization is usually less than the cost of developing energy production.

Due to the rise in world market crude oil prices, we expect to let domestic energy prices rise to near world market price levels. This means that users will have more incentives to achieve savings and initiate rationalization investments. At current world market prices, most investments pay for themselves in 3 to 4 years. In addition, rationalization is accompanied with technological modernization in the majority of cases.

Savings achieved through rationalization investment can help to reduce the importation of the most expensive form of energy (non-ruble crude oil). This is an important interest of the state. Thus, rationalization investments by enterprises are assisted by main contracts, credits and also state support in cases where it is justified. Rationalization projects of the highest importance (railroad electrification, utilization of natural gas with high inert gas content for power generation, etc) can be accomplished as state lump sum investments using central resources.

Energy conservation is an inescapable necessity, both in the productive sectors and in final consumption. Conservation measures must encompass the production, transportation, transformation, distribution, service and use of energy. An energy management program must be formulated to organize and coordinate the necessary measures.

With slowed economic growth, modernized production structure and the spreading of rational energy use we can accomplish the following:

- The average annual fuel demand growth of 3.5 percent and electricity demand growth of 5.8 percent during the 1970's may be reduced in the period of the Sixth Five-Year Plan to 2.0-2.5 percent in the case of fuels and 4.0-4.5 percent for electricity. With stricter conservation, it is possible to ensure that real growth in demand remains at the lower end of the expected range;

- Industrial energy demand per unit output (kJ/forint) could be reduced by 20 percent in five years; unit demand in transportation may be reduced by about 10 percent;

- The growth in agricultural and household energy demand may be substantially slowed down relative to the past.

Improving our balance situation requires a change in our energy structure toward a smaller role for hydrocarbons and reduced percentage of imports. The latest "oil price explosion" in 1979 requires a reduction in the use of oil products within the structure of energy utilization. To implement this requirement, it is necessary:

- To improve the efficiency of geological exploration of hydrocarbons and provide the conditions necessary to accomplish this;

- As far as technologically possible, to utilize fully the proved domestic reserves of coal, oil and natural gas.

The Sixth Five-Year Plan assumes the construction of a 1 million ton annual capacity cracker plant (to increase the proportion of gasoline and diesel oil). This will help to minimize our oil imports and improve our fuel situation.

The efforts aimed at changing the energy structure began in the period from 1975 to 1980 with the investment projects of the eocene coal mines and the Paks nuclear power plant.

The decline in the capacity of existing coal mines is compensated by the output of new mines (Markushegy, Nagyegyjaza) in the beginning of the Sixth Five-Year Plan period. By 1985 we can plan for an expansion in output.

The Paks nuclear power plant is being built with the greatest possible concentration of resources. Following trial runs, the first unit will operate at full capacity in 1982. Further units may be put into operation by the end of the plan period. Thus, nuclear energy will play a part in shaping our energy structure beginning from 1982.

Due to our unavoidable need to import, we are counting on imports already agreed upon with socialist countries, primarily with the USSR. One of the most important items in increasing our imports will be the imports of electrical energy from the Khmelnitsk nuclear power plant.

Pipeline gas may be delivered to an additional 120,000 households located near existing gas pipelines in order to reduce the growth of household heating oil

consumption in the Sixth Five-Year Plan period. The extra gas is to come out of supplies for gas-fired power plants.

The conditions for further expansion of household propane-butane gas are present.

As a result of measures aimed at a reshaping of the energy structure, the decline of solid fuel as a percentage of consumption will slow down; the share of hydrocarbons will decline 4 to 5 percent; nuclear energy will appear on the scene at 7 percent; the rest (electrical energy import) will continue at 8 percent.

Table 11
Trends in the Structure of Our Energy Use from 1970 to 1985 (percent)

Category	1970	1975	1980	1985
Solid fuels	50	36	28	25
Hydrocarbons	43	58	64	60
Fission materials	-	-	-	7
Other	7	6	8	8

The most important consequence of the structural transformation is that approximately 80 percent of the increase in demand in 6 years will be supplied from domestic sources (for the most part, nuclear energy; to a lesser extent, eocene coal and gas with higher inert content). This represents an about-face compared to the trend of the past, characterized by the fact that 90 percent of the domestic demand growth of the Fifth Five-Year Plan was satisfied from imports.

Table 12
Percentage of Domestic and Imported Energy Sources From 1970 to 1985 (percent)

Category	1970	1975	1980	1985
Domestic sources	64	53	46	49
Imports	36	47	54	51

The imperative need to strengthen economic equilibrium and reduce domestic utilization (in particular, investment opportunities) make it necessary to reexamine the investment targets set for energy-related plants. These investigations are in progress. The present and expected future decline in the growth rate of energy demand make it possible to postpone the start of new energy generating plants targeted earlier. This possibility is important not only for relieving the budget, to some extent, but also because it allows for a better concentration of resources on coal, oil and gas investment projects already in progress, preserving the level of output within the energy production system and completing our most important large scale investment project, the Paks nuclear power plant.

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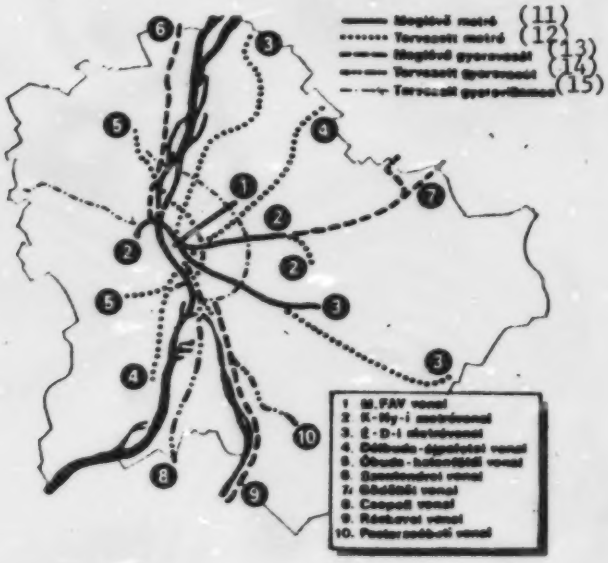
DEVELOPMENT OF BUDAPEST TRANSPORTATION SYSTEM DESCRIBED

Budapest FIGYELO in Hungarian No 42, 15 Oct 80 pp 1, 2

[Text] Figure 1. The Capital City's Rapid Transit Network



Key:

1. The line of the Millenium Subway
2. East-West subway line
3. North-South subway line
4. South Buda-Ujpalota line
5. Obuda-Kelenfold line
6. Szentendre line
7. Godollo line
8. Csepel line
9. Rackeve line
10. Pesterzsebet line
11. Existing subway
12. Planned subway
13. Existing rapid transit
14. Planned rapid transit
15. Planned rapid street car

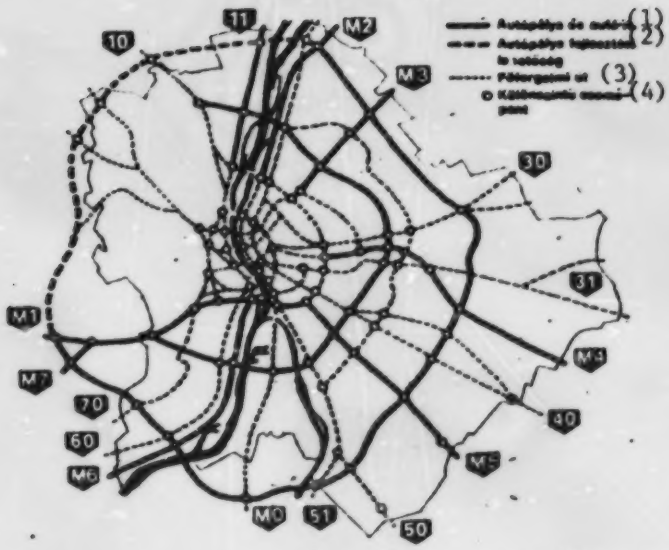


Figure 2. Long-Range Plan of Budapest's Thoroughfare Network

Key:

1. Freeway and highway
2. Possibility for extending freeway
3. Main thoroughfare
4. Bi-level junction

[numbers in black refer to state highways]

What will traffic be like in the coming millenium? Science fiction would probably give breath-taking answers but the third millenium--the next century--is almost at arms length; it is so close that the answer must be very realistic, not fictitious. And it must be found. This was accomplished by the Capital City Council's main directorate of transportation: it developed greater Budapest's long-range transportation plan and submitted it to the council meeting.

The revised plan, accepted by the Ministry of Transportation and Postal Affairs and the Pest Megye Council, is built on numerous prerequisites and preparatory work, and, of course, is closely linked with plans of urban development, public utility development and apartment construction. Of course, these plans consider not only with the distant future but also with the immediate future: it defines the goals and tasks of transportation development in two stages. The first stage goes until the turn of the millenium, the second includes about 20 additional years, giving an outlook up until 2020.

Like most concepts involving the future, this one also starts with the past and present, namely, that the country's main railway and highway network, in essence, centers around Budapest and thus a significant transit traffic goes through the capital city. The capital city also has its own center: a significant part of the trade, services, catering, education and the public institution network are concentrated in the downtown area. Subcenters in

Obuda, Lagymanyos and Ujpest, and suburban centers in the neighboring Szentendre, Erd, Szazhalombatta and Dunakeszi, are being established slowly.

The capital city occupies hardly one-third of the agglomeration's area of 1,670 square kilometers, and the zone of the neighboring 43 settlements constitute more than 1,000 square kilometers.

The Attainable Speed

How many of us and how do we travel in Budapest today? On an average working day, capital city dwellers and people coming from the provinces make 5.3 million fares. In addition to this, the number of trips made on foot or bicycle is estimated to be 1.4 million. The plan does not even mention, how much the capital city's roads and vehicles are being used by foreign tourists, but we know well that during the tourist season several million guests stay in the capital city for longer or shorter periods.

Sixty-six percent of those living in Budapest--and of those who come in to work and to study--use mass transportation, 12 percent use cars and motorcycles, and 22 percent travel on foot and bicycles. Some 310,000 passengers arrive daily in the capital city; 81 percent of them use mass transportation, 19 percent use private means. Compared to 1970 the number of people arriving in the capital city has not changed--like the means of transportation has: the commuters use trains to a lesser extent and more people use the bus, the passenger car and the motorcycle than 10 years ago.

It is apparent from this that the capital city's road network is under an increasing load. Passenger car traffic in 1975 was 3.8 times that of 1963, and truck traffic almost doubled. Two-way traffic across city limits in 1975 was 4 times, and transit traffic was 5.3 times that of 1963.

The presently attainable speed of the traffic gives us important guidelines for the future. A speed of 40 to 50 kilometers per hour can be reached only on roads with less traffic; roads with heavy traffic can handle only an average of 20 to 30 kilometers per hour, while drivers must be content with a "speed" of 5 to 10 kilometers per hour on the busy downtown streets. On the other hand, the passenger on the mass transportation conveyances travels at an average speed of 15 to 20 kilometers per hour even in rush-hour; it is possible to travel, even in the heaviest rush-hour, at a speed of 15 to 18 kilometers per hour on street cars and trolleys, 20 to 22 kilometers per hour on buses and 30 to 33 kilometers per hour on the subways and suburban trains. Of course, the trains, suburban trains and buses can move faster between the suburban residences and the city. True, the lines of the Hungarian State Railways are very crowded during rush-hour: in the most critical areas, there are twice as many passengers than seats.

In Harmony With Urban Development

How will all of this develop in the future? It also depends on how transportation needs will develop. These are, however, influenced by many things, for example, the development of the entire national economy, the increase in

living standards, the life style, the change of proportion between accumulation and consumption and the development of the infrastructure. Other decisive factors are: future settlement policy, development of the metropolitan area, the expected size of the population, the increase of motorization and, last but not least, the distances between residences and work places. The plan does not mention the possibility of considering in the future the distance of the work place when distributing apartments or the fact that staggered shifts would alleviate the problems of passenger transport.

On the other hand, it reckons with the expected pace of apartment construction. According to the 15-year plan, 300,000 new residences will be built in the capital city between 1976 and 1990 which--also considering buildings to be torn down--means that the number of residences will increase by 190,000. About 90 percent of the residences are built in complexes and on mostly new, undeveloped or sparsely low population density areas.

We can reckon with the construction of 55,000-60,000 apartments in the agglomeration zone by the turn of the millenium; almost half of these are going to be built in multi-level complexes. Such complexes are expected to be built mainly in Budaors, Szigetszentmiklos, Szazhalombatta, Dunakeszi, Kerepestarcsa, Gyal, Diosd, Pilisvorosvar, Solymar, Budakalasz, Pomaz, Erd and Dunaharaszti.

Thus the roads and mass transportation lines leading to these districts and towns have a priority in the development. Traffic (the network and the projects) must follow the area's structural changes in a way that meets the requirements of urban development as well. In other words, the new and old sections of the city, the residential areas, the work places and recreational areas as well as the suburban areas must be connected. In addition to this, it is, of course, also important not to increase significantly the time of getting from one place to another, in spite of the development of the fringe areas and the suburban zone, and the increase in distances.

More passengers will ride from the suburban zone to the capital and thus transportation service must be expanded and increased accordingly.

Cars Should Be Used Only for Free Time

What will commuter and transportation needs be in the coming decades? The data of an earlier traffic survey in the capital city can serve as a sound basis for preliminary estimates. At the same time, the traffic of more motorized and more developed large cities have also been studied.

The drafters of the plan came to the conclusion that the increase in traffic needs are caused mainly by the increase in the number of free time related trips. Higher living standards entail a higher level of motorization, and this is followed by a higher level of mobility and increased individual needs for transport. At the same time, relatively fewer people will use their own car to go to work and then home, preferring public transportation. According to the calculations of traffic specialists, people in the capital will continue--even in the more-distant future--to use public transportation:

two-thirds of them will use it on a daily average, three-fourths of them in rush-hour. Public transportation should be improved not only because everyone can afford and use it but also because in the downtown areas it cannot be physically substituted by individual transport.

According to preliminary estimates, there will be 450,000-550,000 passenger cars in the capital at the turn of the millenium; this relates not only to the country's economic situation and energy supply but also on the environmental protection.

The Rapid Transit Network

These calculations and estimates were the basis of the developmental plan, an important element of which is the construction of a rapid transit network. This network will consist of the subway and the HEV [Budapest Suburban Railway System] which will be developed into a rapid transit system. The express lines of the street car system, and the rapid and express bus lines will be connected to this primary network. (Maintaining and expanding the electric power line network is necessary from the standpoint of both environmental protection and energy management.)

With the construction of the rapid transit network, the role of above ground public transportation is going to be changed; mostly it will be limited to take the passengers to the subway and suburban transit stations. According to the plans, only one kind of transport will be available to passengers on a given line; parallel transport will be necessary only on shorter sections where the limitations of the road network make it necessary.

The rapid transit network will not only serve the downtown areas but will also connect the city's peripheral districts and will make it possible to transfer to the larger train and long-distance bus stations. Street cars will be needed primarily in those areas which are not connected to the rapid transit network.

Within the electric street car network, the rapid street cars which will make improved transport possible through their larger capacity, and their lines which aid a uniform frequency and the maintenance of speed, and through traffic control.

The street car lines which run parallel with rapid transit lines, as follows from the above, will gradually be discontinued. Lines with light traffic and outdated lines as well as lines with medium-light traffic which stand in the way of the road network construction, will be substituted with buses and trolleys. The remaining and new street car lines for the most part will be separated from road traffic. The realization of the individual elements of the planned network of rapid transit and street cars depends on the variations of the apartment construction plan.

Trolley bus traffic is best on heavily and moderately used bus lines and on little used and outdated street car lines. The introduction of trolley buses is also justified from the standpoint of environmental protection in the heavily developed areas of Pest, in the hills of Buda and in the green areas which attract large masses. The plan considers the establishment of 3 to 5 trolley bus lines every 5 years as realistic.

The bus is an indispensable and universal means of urban public transportation: it can be used flexibly in every stage of the development. Rapid and express bus lines are needed where there is no rapid transit. Buses are also suitable for accommodating seasonal traffic. In order to improve suburban bus transport, it is necessary to expand and modernize the bus pool and to construct new stations.

The long-range objective of the development of the road network is to continue with the building of a system of express ways and arterial roads; this will make it possible to decrease traveling time, to increase the capacity of the road network and to improve traffic safety. The new roads are being built in a way to free the capital from an increasing part of transit traffic.

At what pace can the development of the traffic network be implemented? As far as the subway is concerned, line 3 (the north-south line) is under construction at present and will reach the Elmunkas Ter [Ace Worker Square] in 1981. It will then proceed to the Arpad Bridge and to the Kaposztasmegyer apartment complex. Line 4 will connect South Buda with Ujpalota by the end of the century, and will make it possible to discontinue several street car lines (Kiskorut, Thokoly Avenue, Csomori Avenue). The construction of line 5 will begin in the mid-1990s between Vienna Avenue and the Baross Square.

Old and New Bridges on the Danube

Transfer centers like the ones at the Chief Ors Square and Batthyany Square will be built for transfers between the subway and the suburban transit. The lines of the latter will gradually be reconstructed, up-dated and extended. The Csepel line, for instance, will go underground all the way to the Calvin Square and, in stage 2, in the opposite direction to Szigetszentmiklos. A new suburban line will be built between the Calvin Square and Pesterzsebet.

The lines of the Hungarian State Railways will also be modernized: additional tracks will be laid, the safety equipment will be automated. The railroad stations will be reconstructed and transfer to the subway will be improved. Similarly, connections between the subway and the long-distance bus lines will be improved: new bus end stations will be built alongside the subway lines.

The capital's bridges over the Danube are very important not only for local traffic but, for the time being, also for national traffic. The renovation of the Margaret Bridge and the Petofi Bridge has been finished; that of the Liberty Bridge is being done at present; the renovation of the Chain Bridge will be due in 1983; and the inpsection of the Elizabeth Bridge will be due in 1985. The Arpad Bridge will be rebuilt by the mid-1980s in a way to accommodate six lanes plus street car tracks. The Gubacs Bridge is being rebuilt at present and the Danube Bridge at Taksony will also be modernized by the end of the century.

There are plans to build the Lagymanyos Bridge south of the Petofi Bridge in order to ease downtown traffic and to make a better connection between the peripheral districts. In the construction of the so-called compound

boulevard and the beltway, two additional bridges over the Danube will be needed, one in the north, one in the south. According to the plans, the central bridges' traffic will be helped by a tunnel for cars under the Danube. In the future, four subway lines will go under the Danube; this will correspond, from the standpoint of mass transportation, to four new bridges.

Part of the plan is the program which determines the construction of freeway connections in the city, and the expansion of the connections of the main national highway network and the inner road network. Freeways will be connected with the Hungaria Circular Boulevard and its continuation in Buda, through bi-level junctions. In the more distant future, the MO circular freeway will connect the freeways and will direct transit traffic outside the city.

The capacity of public roads is mostly determined by the intersections which will have several levels at the convergence of freeways. The railway junctions of the single-level heating network will be rebuilt as bi-level junctions.

In addition to the freeway program, the arterial roads in the agglomeration zone will be improved, and modern intersections will be built. The goals also include the improvement of the local road network of the residential areas.

On Foot and on Bicycle

Pedestrian traffic must also be considered in downtown Budapest. Additional streets and squares will be off limits to vehicles, and passageways will be built in certain buildings and underground passages in other places. Decorative paving, public lighting, green areas, statues, space sculptures, stores and catering businesses are being planned for these places. The improvement of pedestrian traffic is also justified in the heavily populated complexes of the agglomeration zone.

Traffic safety requires the improvement of traffic control and regulation. Traffic lights in the inner city and on thoroughfares will be centrally inspected and controlled, and an automatic system of traffic control based on traffic data will also be established.

In order to improve freight transportation, warehouses must be moved out from the downtown and residential areas. Priority will be given to goods transport traffic that directly serves the population. Special routes should be assigned to large-volume freight transport and heavy vehicles. However, the plans can also be realized, for example, by modern packaging, a modern system of ordering goods, delivery after store hours or selling by samples. An up-to-date method of ordering, an appropriate standard load, and organization that also includes routes of transportation are needed, among other things, for a programmed transportation of goods.

The necessity of improving and regulating parking is shown, in addition to our everyday experience, by the fact that a passenger car is driven only

an average of 2 hours out of 24, and is parked for 22 hours. Short-term parking must have a priority in the centers of Buda and Pest and other cities; people working there will have little possibility to park their cars on the streets during working hours close to their jobs. Parking spaces must be reserved for loading and unloading goods and for official vehicles. The number of parking spaces in downtown can only be increased by more garages. The area's parking needs, arising from its central role, must be met by regulating the parking time through tariffs, namely, tariffs must increase in proportion to the lack of parking space when moving toward the center of the city.

The "P+R" [Park and Ride] parking lots are primarily for more extended parking of vehicles coming from peripheral areas. For this reason, this system is being developed together with the construction of the rapid transit network. With the completion of the entire rapid transit network, there will be 25 "P+R's for about 10,000-12,000 passenger cars. According to the plan, there must be two parking spaces for each three apartments in the new apartment complexes.

As it is apparent from the above, the capacity and quality of public transportation will be developed in the coming decades in such a way that the use of personal passenger cars can be set within sensible limits.

And, returning to the initial question--what will traffic be like in the coming millenium--we can give a concise answer: Essentially, it will be the same as today, only faster, more comfortable and safer. This is at least what the plan, which was accepted at the 10 October meeting of the Capital City Council, is hoping for.

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CSIKOS-NAGY VIEWS EXPERIENCES OF INDUSTRIAL PRICE SYSTEM

Budapest MAGYAR HIRLAP in Hungarian 19 Oct 80 p 7

[Article by Bela Csikos-Nagy, state secretary: "The Lessons of the Industrial Price System"]

[Text] In wake of the 1980 price readjustments, the trend in wage-developments is guided by the new mechanism. In industry, we have reduced the directed price controls to the minimum so as to put rationalized company attitudes under the control of the market places, especially under foreign market places, as reflected in foreign trade prices.

The companies and collectives that have ended the traditional pricing system, based on the cost of production, and those that have introduced competitive pricing generate about two-thirds of our industrial production. The introduction of competitive pricing means that no company will be able to charge more for its products sold on the domestic markets, than for those it is able to sell on the free hard-currency export markets. At the same time, however, it should also have the right to profits calculated under this system. Thus, normative profits will be controlled not by price effectiveness, but by the ability to withstand international competition.

But not all industrial establishments are producing for export. Even so, many are manufacturing products which, on the basis of the value of their use, can be compared to export products. The goal to expand the application of competitive pricing resulted in the introduction of a proportional pricing system. According to this system, when companies that are involved in the exporting of goods produce items that are similar to export goods, they must establish their prices in relationship to export prices.

We have used the principle of proportional pricing in conjunction with consumer prices for several decades. From the very nature of things, commerce looks upon the world of products through the eyeglasses of the consumer; and it weighs the quality of the various selections intended to satisfy identical needs on the basis of price relations. When industry offers a new set of manufactured goods, commerce immediately examines them and their useful characteristics on the basis of how these goods can be fitted into the price system familiar to the consumer. This system based on market value will not also be extended to industrial production prices. We can justify better quality and updated selections in connection with a set of goods only if the resulting prices will also prove acceptable to the consumer.

After the Prize Freeze

After a brief price freeze, the new industrial price mechanism will go into effect on April 5, and then it will go into full force by mid-October, following a period of price readjustments.

The transfer from the old to the new price mechanism will be possible only through a significant restructuring of the production price relations. The price freeze in industrial production for the first quarter of 1980 was needed so that this transistion should not affect the stability of consumer prices. That which in 1979 was still a subject of debate, seems unquestionably justified today. It was correct to carry out decisions concerning consumer prices required by the price readjustments in July 1979, and then to continue them piecemeal in 1980. Notwithstanding the divergent readjustments of production and consumer prices, we were still able to establish the necessary close relationship between them. We are also certain by now that the increase in consumer prices in 1980 will amount to about 9.5 percent. But we can subtract from this percentage the impact of the 1979 price adjustments upon 1980 prices, in which case the inflation for 1980, resulting from the price movements, will remain within the planned 3.6 percent.

This is the first time since the introduction of socialist pricing system that we have had a price readjustment which does not end with the introduction of new prices. On this occasion we have made it an important point--on the basis of experiences of earlier price readjustments--to take into consideration problems stemming from errors in price prognoses, miscalculations, and occasional purposeful cost misrepresentations. This was needed in order to keep normative prices, as well as to permit prices to fulfill their orienting functions in rational economic decisions.

We have worked out proposals for starting prices and for correcting financial bridges connected with these, on the basis of the semi-annual balance sheets. These were accepted by the Council of Ministers with only a few modifications. At this stage of price readjustments, it was much more problematic to keep up with the more than expected rise of the prices of raw materials and of energy sources on the world market, than to correct errors in calculations. We must also add immediately, however, that the tendency to make calculations lightly was also evident in this price readjustment. And the only reason this did not create wider problems was that, on the basis of controlling calculations, the Council of Ministers has decreed the lowering of the new production price level by 3 percent already in 1979.

Even under these circumstances, there were attempts to achieve results beyond those earned, and beyond those determined by the capibilities of our national economy. Several industrial plants will have to decrease the level of their producers' prices in order to ensure a parity of income between their domestic and export sales. Some of the profit rates in trade will be decreased, and some of the domestic trade companies will have to terminate their price policy geared to too high a profit.

It is in the nature of things that when there is a fundamental change in the system of pricing, then temporarily the problems connected with the transition receive the most attention. It is easier to recognize the price system that is best suited to control the problems of economic growth, than to foresee all of the possible problems that might arise during the application of the system.

We are closing a learning phase. In cooperation with the ministries and the companies, the Price Office has conducted a series of consultations in the course of the past few months. In wake of these consultations a number of questions were found in need of elucidation, especially in connection with interpreting international competitiveness, describing more precisely desirable export pricing, and methods of achieving, this. The orders, directives, and proposals that were issued in the meanwhile have presumably brushed aside most of the obstacles in front of the smooth functioning of the industrial price mechanism.

The task of decreasing price bureaucracy is still ahead of us to a large degree. The introduction of the new price mechanism had hardly changed the methods of calculations, stock assessments and other technical methods. This must be changed, for otherwise the need to administer the more frequently changing prices will introduce new bureaucratic elements into the economy. One of the important tasks of the next period is for the price authorities, the financial organs and the companies to find a system of controls which will not require such a large administrative need for the control of changing prices as in the past.

We are also keeping on the agenda the new problems stemming from the need to inform the population. Public sentiment must be improved, i.e. the feeling of helplessness created by the uncertainties of prices in the relationship between the seller and the customer must be terminated. This is a significant problem. Research in this connection must also include the study whether we should establish a certain order in the otherwise justifiable changes in prices in connection with certain products.

Problems of Adjustment

We have to extend knowledge about the functioning of world economy both in the administrative and in the company sphere. This must be done so that we will be in a position to form value judgments with greater certainty both about individual, as well as about trend-like price changes; and in order to make it possible for us to develop the price system and the economy in general on the basis of lasting trends in the foreign markets. The solution of the problems is made more difficult by the fact that the thinking of companies is often based on a mixture of subjective and objective considerations. The transfer from an easier price system to a tighter price system is naturally accompanied by many difficulties. The companies are often unable to deal with these more rigorous goals. For this reason, they are often trying to cover up their own weaknesses by references to the shortcomings of the system.

The most difficult problem of this adjustment is the transferral from the earlier industrial profit rate of 12-13 percent to the new rate of 6-9 percent. This limits developmental funds, and also makes it difficult to repay debts that were assumed

earlier. For this reason it should be reemphasized that the decrease in the profit rate is not the result of the new industrial price mechanism. Because of the more difficult international conditions of economic growth, this decrease had to be introduced even into areas which still continue to function under the manufacturing cost price system.

That which can be interpreted as the result of the changes in the industrial price system manifests itself in the possibility of passing on costs. But the processing industry can pass on the rising prices of raw materials and of energy in the form of the products' sale prices only then and insofar as it can do this in its export trade. This must be regarded as the foundation stone of our economic calculations in this national economy, which is so sensitive to foreign trade. We can develop production forces only by systematically increasing our imports in energy and raw materials. This is the reason behind our expectations that economic growth should be realized only in conjunction with a production system, a manufacturing technology, and a marketing policy that, through the export of finished products, compensates us also for the cost of the imported materials and energy sources. But this rational principle seems to be incomprehensible to the industrial concerns. On the basis of past traditions, the automatic passing of costs is the system that appears natural to them. The most important lesson learned from the balance sheet of the first quarters of 1980 is probably that, with the exception of ten companies, the industry is capable of functioning within the new price mechanism. Moreover, with a few exceptions, these ten companies will also be able to adjust themselves in the course of the next year.

Following the publication of the basic principles of price adjustments, the decline of domestic demands, the consequent need to export, and our increasingly agile export policies have all pointed to the validity of the expected positive changes already in the course of 1979. The decline in demands was produced, among others, by the announced decrease in normative profits. This made the companies more careful in making decisions concerning investments. The re-examination of the export policies was placed on the agenda by the introduction of the competetive pricing system. We experience favorable changes in the relationship between industry and foreign trade and these have further improved since the publication of the detailed rules.

We Are Expanding Further

The companies have become more sensitive to changes in the world market. In their purchases they are more careful to order through foreign trade only those raw and base materials and parts that are realistically needed for production. The building of good relationships between industrial and trading companies have increased. The harmony between foreign trade and industry contract labor has improved, and so has the exchange of information between them. Company initiatives for undertaking exports in the most economical way, and for achieving savings in the use of raw materials have become more forceful. Sensitivity to costs is growing, while bargaining for prices has increased.

One of the central questions of price development in the course of the next few years will be: How can we extend the application of the pricing system geared to foreign trade, i.e. how can we introduce and make function a price system or price

mechanism with a beneficial effect upon energy savings, material economizations, and structural improvements also in areas--such as the food industry and the building industry--that today still function under a pricing system based on production costs. Hopefully, our efforts will be crowned with success.

But in order for the positive influences to be universally felt, and to permit the freeing of those reserves which are needed for the fulfillment of the national economic goals of the next few years, our price and financial policy must remain constant. From the point of view of the development of the pricing system, it is extraordinarily important for us to increase continuously the pressure to export through the establishment of our equilibrium between purchasing power and the availability of goods. It is equally important to create favorable economic conditions for the improvement of the competitive conditions so as to aid the functioning of the price and the financial systems.

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SOURCE OF FOREIGN TRADE INDEBTEDNESS REANALYZED

Warsaw POLITYKA in Polish No 42, 18 Oct 80 p 17

[Article by Zygmunt Szeliga]

[Text] Poland's indebtedness is currently a very popular subject. The enormity of the debt, which was recently announced officially by Minister Marian Krzak, shocked many people. In all honesty, the uproar over this secret was an anachronistic absurdity which demonstrated a complete lack of imagination. In the first place, this information was systematically published by the Western press, which is easily accessible in Poland; secondly, anyone with a knowledge of elementary arithmetic could make the calculations himself and arrive at a more or less precise picture of our indebtedness on the basis of the data published in Poland. Several times in POLITYKA I myself published the basic data and indexes necessary for such computation. Below I will present a simplification of this methodology--it may be useful for the future.

But first an observation of another kind. It is that we must "get used to" debt, even becoming reconciled to the fact that temporarily it will continue to grow. The pessimistic prognoses of Western experts indicate that Poland's indebtedness may increase from its present rate of $20 billion to as much as $35 billion. I hope that the changes in economic policy which have recently been initiated will allow us to avoid such a high rate of indebtedness. Nonetheless, it is almost certain to reach $30 billion. This is demonstrated by elementary arithmetic. The interest alone on a debt of over $20 billion for this year is more than $2 billion. Or, to put it another way, in order to maintain our indebtedness at the same level, we should have a surplus of more than $2 billion in our balance of payments for the current year. It is pointless to dream about such a surplus; it is much more likely that we will end the year with a deficit of nearly $2 billion. Consequently, our total debt for the current year may increase by nearly $4 billion. We cannot count on a surplus in the balance of payments in 1981 either, which means that our debt will continue to increase. In my opinion, it will be 1983 before we achieve a significant surplus in the balance of payments and the stabilization of our indebtedness, and 1984-1985 before the debt once again drops to the present level.

This computation shows what a great burden is now placed on the economy by our indebtedness. On an annual basis, we must designate about one-third of all our revenues for export to nonsocialist countries for interest alone, in other words: the equivalent of our yearly revenues from the sale of coal, other fuels and energy and foodstuffs to the West.

For this reason the following question is very basic: how and why did it happen that we exceeded all of the limits of reason and accounting in our indebtedness?

But first another digression. In POLITYKA, in other media sources and in conversations with readers I have often come out as an adherent of foreign credits, a view I have not changed in the least. The evil does not lie in the fact that we have debts--this is absolutely normal under contemporary economic conditions--but that we have too many debts with reference to our objective economic potential. This is indicated by the fact that our debts have in part been contracted thoughtlessly and unnecessarily, and that some of them have not brought about the intended results.

Stanislaw Gruzewski discloses the machinery of this recklessness and inefficiency and presents striking examples. I would like to approach this matter from another angle--by precisely describing the growth of our indebtedness and "categorizing" our debts according to individual divisions and branches of the national economy.

Let us begin by answering the question: How did it happen, over the course of the decade? This will also be a short lesson in computing the state of indebtedness of the country, if officials do not make it known publicly.

To begin with we will make several simplifying assumptions. First, that credit purchases are in principle the only source of incurring our indebtedness; second, that the only way to finance imports is through revenues from exports and eventual credits. In actuality the whole operation is more complex than this, but this is not important for the purposes of accounting. One more simplifying assumption: let us assume that from 1971 to 1975 the interest on our credits average 8 percent annually, and that from 1976 to 1979, 10 percent. In reality, at the beginning of the decade our credits were cheaper, while in recent years they were significantly more expensive (I wrote about this mechanism several months ago in POLITYKA).

Having established these assumptions, let us use an electronic calculator or paper and a pencil and statistical yearbooks to set up the following table:

POLISH FOREIGN TRADE WITH NONSOCIALIST COUNTRIES

Year	Imports	Exports	Annual balance	Combined balance since 1971	Interest on annual balances
	(in millions of dollars)				
1970	1.134	1.282	+ 148	X	X
1971	1.317	1.430	+ 113	+ 113	+ 9
1972	2.068	1.796	- 272	- 150	- 12
1973	3.800	2.529	-1.271	- 1.433	- 115
1974	5.830	3.683	-2.147	- 3.695	- 296
1975	6.796	4.123	-2.673	- 6.664	- 533
1976	7.374	4.442	-2.932	-10.129	-1.013
1977	7.034	4.848	-2.156	-13.298	-1.330
1978	7.378	5.488	-1,890	-16.518	-1.652
1979	8.038	6.350	-1.688	-19.858	-1.986
1971-1979	49.635	34.719	-14.916	-19.858	-6.928

Since I have systematically constructed such a table for several years, Minister Krzak's television announcement did not surprise me in the least. As you can see, our reports are identical...

Now a few remarks before we proceed with further analyses. In the first place, the table clearly shows when we exceeded the so-called safe limits of indebtedness, beyond which the necessity of designating 25 to 30 percent of our annual revenues from exports for the payment of our yearly installments and interest is generally accepted. In 1975 we were still within this limit, but by 1976 we were well below the mark.

Secondly: the so-called economic maneuver initiated at the end of 1976 is evident in the table. In 1977 it brought about a reduction in imports and a significant improvement in the annual balance. If this maneuver had been enacted 2 years earlier (and this was suggested) and if it had been more consistent, the catastrophe would not have resulted.

Thirdly, I would like to note (only parenthetically) the power of interest. If the data in the table are more or less accurate, then they demonstrate that only two-thirds of our present indebtedness corresponds to real economic values, or purchased goods, and one-third is sheer interest. On the other hand, inflationary processes on the world economic market are also a significant factor. To put it another way, if this surplus of import over export in the years 1971 to 1979 were converted to present prices, the difference would amount to more than only $14.9 billion--it would possibly be over $20 billion. The increase in prices, as it were, "returns" a significant portion of our interest to us.

Fourthly: let us remember that we have noted a rate of turnover of less than one-half of our foreign trade for the 10-year period. For your information: turnovers with socialist countries from 1971 to 1979 closed both for imports and exports at the quotas of $52.8 billion.

Fifthly, If we combine our imports from nonsocialist and socialist countries, the total for the decade amounted to $102.4 billion; exports to these two groups of countries amounted to $87.5 billion. Lest these figures shock or delight, the following should be taken into account: what we have imported over 9 years, the United States and the FRG exported in 7 months of last year, Japan exported as much for the year, and France exported the same amount in a year and a few weeks. Such is the level of our trade...

As we take into consideration these proportions we must point out that nearly $50 billion of our imports come from nonsocialist countries; this is over seven-fold the amount of such imports during the decade of the 1960's, which represents a very substantial change in the face of the Policy economy.

Enough for the general picture. It is time for a more precise calculation of our import-export interests with the nonsocialist world. I do not wish to bore you with an excess of details, therefore I have constructed a very simplifed composite table. It presents the combined balance for the years 1971 to 1979 divided into large groups of products:

Trade Turnovers with Nonsocialist Countries during the Years 1971 to 1979 in Millions of Dollars

	Import	Export	Balance
In general	49,635	34.719	-14.916
Machinery and equipment	16.096	8.441	- 7.655
Chemicals	7.714	3.095	- 4.619
Metallurgical products (with ores)	7.599	3.221	- 4.378
Agricultural-foodstuffs goods	10.171	6.847	- 3.324
Fuels and energy	2.804	7.946	+ 5.142
Lumber-paper products	1.007	1.441	+ 434
Products of light industry	2.537	2.617	+ 80
Remaining products	1.707	1.111	- 596

It is evident that of $50 billion of purchases from the West, investment supplies (machinery and equipment) represents less than one-third (32.4 percent). In reality "pure" investment imports were still significantly less--the total of $16.1 billion include private cars, electronical equipment, and, above all, various types of products for Polish industry manufactured under cooperation agreements. More than one-fifth of our entire imports were tied up in the foodstuffs economy. The enormous scale of imports of chemicals and metallurgical products in proportion to the total is also noteworthy.

Now let us look at the balance, pointing out the contractual "creditors" and "debtors" of foreign trade. Why they are contractual will immediately become clear. At first glance it appears that the only large "creditor" with a great surplus of foreign exchange revenues over outlays is the fuels and energy industry. Data concerning an appreciable surplus in the lumber-paper industry of exports over imports is rather shocking. It appears that as we give expression to the desire for an increase in paper imports to serve the needs of publishers and the press, we are not exactly in the position of a poor relative who must be supported in part. Light industry also shows a small surplus. The rest of the entire economy represents "debtors" who received incomparably more than they earned.

Following this line of reasoning, I would like to point out the relatively much smaller scale deficit than is generally believed in turnovers of agricultural-foodstuffs goods, and the enormous negative balance in chemicals and metallurgical products. In all honesty, it is these two groups above all which cause our indebtedness...

As I stipulated, however, this whole line of reasoning is imprecise in many ways and in essence does not present the real creditors and debtors. This is especially clear in the example of the apparently greatest "debtor," the electromachine industry. The fact is, what was exported--goods valued at $8.4 billion over the period 1971 to 1979--issued from the factories of the electromachine industry: shipyards, automobile plants, electronics factories, agricultural equipment factories, ball bearings plants, bicycle factories and the like. On the other hand, the imports of the products of the electromachine industry ($16.1 billion worth) went to all divisions and branches of the economy. Of the total sum of imports, only about $6 billion worth is machinery and equipment and cooperations elements for the electromachine industry.

In this way, the electromachine industry becomes a creditor, who exports much more than it imports and "makes money" on others. But I doubt whether even this concept is accurate. What about chemistry, which imports not only for itself, but also for agriculture (fertilizers, materials for plant protection), light industry (dyes), and much for the electromachine industry as well (rubber, plastics, paints and lacquers and the like)? The metallurgical industry in turn immediately delivers a good deal of its imports to the electromachine industry and the construction industry.

Thus, we can treat all of these categories of the balance only as a curiosity. On the other hand, what is important is the matter of the huge overall "hole" in the trade and payments balance of the country--and the general concern over filling this hole...

8536
CSO: 2600

WASILKOWSKI COMMENTS ON IMPORT-EXPORT SITUATION

Warsaw TRYBUNA LUDU in Polish 12 Aug 80 p 3

[Article by Andrzej Wasilkowski: "International Trade and Cooperation: In Order To Import, We Must Export."]

[Text] Among the important decisions made by the government and approved at the June session of the Polish Sejm is that an improvement in the balance of foreign trade turnover must be accomplished by means of increased export as well as reduced import. Under present conditions such a decision was urgently necessary, but it is obvious that in the long run our chances for development depend on intensifying our export offensive and not on limiting imports, which from many points of view is a painful remedy.

This idea is actually obvious, but only in a general way. In going from the general to the specific, the problem clearly becomes more complicated. First of all, in practice a favorable export climate does not exist everywhere. Furthermore, in rather wide circles of social opinion it appears that information about Polish exports is repeated with something like shock and in some extreme instances, even with a kind of atavistic sensitivity.

It turns out that even a simple thesis (of the 2+2=4 type) such as that if we want to import we must export encounters certain difficulties in practical acceptance. Besides, not everyone is willing to evaluate the foreign trade policy as a whole which may then be rationally analyzed on the basis of certain broader proportions.

For example, despite enormous difficulties in supplying the domestic market with various articles, foreign trade cannot, in advance and according to plan, as it were, stop exporting even those articles of which we are short, if possible transactions are to be highly profitable, if it involves keeping our place in the already-attained market, etc. Rational assessment should be of a more comprehensive character in this instance as well. For example, when it comes to the actual exports of food items, which are not so high, it is difficult not to take into account the fact that Poland is, unfortunately, a large importer of grain and feed. However, as I have said, not everyone is inclined to look at matters in just this way.

Another impediment to expansion of exports is the still-imperfect systems implementation in the economy, especially in the area of concrete and consistent support of export production. The government has recently become very energetically involved with this problem. Nevertheless, we must recognize that this is a fairly complicated matter, not only for reasons of its conceptual nature, but also because of a lack of reserves and limited investment capabilities.

In the meanwhile, one of the basic requirements for the actual export offensive is the practical capability for rapid large-scale expansion in the production of those goods which have gained acceptance on world markets and whose sale has proven to be profitable. Otherwise, potential clients will begin to buy else where, and we will be left with only the satisfaction that we were able to interest a client in some small series or, as sometimes happens, several pieces of some machine tool.

This is also part of a larger problem, specifically, the well-known necessity of developing our export production as a specialized production to a much greater degree than we have done to date. What is necessary is to make products and services to an ever-greater extent export objects, specifically created and intended for export.

Of course, we have a variety of positive examples, headed by the shipbuilding and automative industries, but that is still definitely not enough. Particularly due to the modernization efforts of the last decade, quite a few trades have the capability of taking the opportunity to fill out the list of our specializations.

It is one thing to sell on an occasional basis, so to speak, and something else again to enter the market as a steady partner who with time develops status and renown. Without underestimating the usefulness of such occasional transactions, especially under conditions of a strained balance of payments, we must look to the future in terms of the latter solution. Only then will foreign trade really become an agent of economic development, provide a basis for rational investment decisions, and at the same time create conditions for meeting import needs.

Cooperation within CEMA creates particularly favorable conditions, especially through access to the large Soviet market, for developing profitable areas of specialization. It is in precisely these conditions that the foundations for our development as an industrial nation were created, both from the point of view of a long-range, stable market perspective and from the point of view of supplying the economy with fuel, raw materials and goods.

Further expansion of this integrated relationship is doubtless an important factor favoring exports and specialization. However, the problem is to create a good export name in selected categories in other markets as well, in spite of the already significantly more difficult conditions.

Where capitalist countries are concerned, our hard-earned position as an industrial nation is not yet properly reflected in the structure of economic ties. Of course, this does not depend entirely on us. Nevertheless, much does depend on us, especially where the quality and up-to-date characteristics of our goods and our trade ingenuity and cooperation are concerned.

Our aspiration toward a pro-export economic position should also lead to another look at the problem of relations with developing nations. Very many of them are also constantly growing in the economic area of modern international life and we must consider that as a permanent trend. These are potentially enormous markets (and in the case of some nations, no longer only potentially). Furthermore, access to energy and raw materials is also involved in these relationships.

Aspiration in this direction requires a good establishment, that is, one offering quality, newness and reliability. It is easier to sell occasionally whatever is at hand than to create such specialization. But a more active entry onto this road is a national imperative.

A nation such as Poland cannot grow without constant expansion of international economic ties. Ba ically, the most important thing is not the selection, but rather the assurance of our exports' greatest possible social profit. A good establishment gives us this opportunity when the price is earned not only through the value of the materials and goods, but also through reliability and confidence, when trade takes on the characteristics of a large business, and when the buyer seeks out the salesmen and the manufacturer because he has already heard about them and knows that it is worth doing business with such a partner.

9461
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NATIONAL HEALTH FUND ALLOCATES MONEY FOR HEALTH FACILITIES

Warsaw TRYBUNA LUDU in Polish 4 Aug 80 p 4

[Article by Bozena Jastrzebska]

> [Text] The National Fund for Protection of Health (NFOZ), called into being by the All-Polish Committee of the Front of National Unity (FJN) began its activity on 1 January 1973. Even in the first year of its existence the social remittances amounted to 2,334,000 zlotys. By the end of 1979 21.7 billion zlotys were paid to the account of the NFOZ. How and for what had they been spent? To what extent were they instrumental in improving the situation in health protection?

Taking into account the situation in the health service, the accumulated funds were used in the first place to expand the material base, in particular for the building of hospitals. The development of a network of units for basic health care: health centers in the country and polyclinics in the cities, as well as building homes for social care and creches, were also treated as urgent and important tasks. The necessity to modernize and expand many existing facilities and the need to supplement their outfitting with diagnostic and therapeutic equipment was also taken into consideration.

Matters of Primary Importance

It is not possible to satisfy all the needs of health protection in a short time. It has been necessary, therefore, to select from a long list those matters that would make it possible to improve the situation in the sorest points of the health care system! In the first place, investments, permitting the construction within the pale of the provinces (in accordance with a program worked out by the Ministry of Health) a possibly coherent general health care system, that is, to eliminate "blanks," to reinforce the network of basic health service and to base it solidly on specialized institutions and properly functioning hospitals.

Did these schemes work? Let us examine the results obtained.

So far, 10.5 billion zlotys have been spent from the funds of the NFOZ, including about 2.5 billion zlotys for the purchase of medical equipment and means of transport necessary for health service. Building activity of the health service financed by the NFOZ, which began in 1973, was as follows (as of the end of 1979):

there were built 310 new rural health centers, often provided with pharmacies and housing accommodations for the personnel, 64 polyclinics in the cities with 597 specialized rooms, and 41 creches for 2,895 children. There was an increase of 1,697 accommodations in social care homes and 4,772 hospital beds, the notion of "bed" including the overall outfit, apparatus and instrumentation. This includes two entirely newly built hospitals: the 30th Anniversary Hospital with 810 beds in Bydgoszcz, inaugurated on 28 June 1980, and the hospital in Gorlice with 353 beds. The other beds were installed in numerous new hospital annexes and wards.

The funds of the NFOZ were also used to purchase 400 x-ray apparatuses, which in the first place enriched regional institutions, and the necessary apparatus for the treatment of neoplastic diseases, for example, so-called accelerators for telegammatherapy, installations for intensive therapy, and diagnostic apparatus.

Facing the Needs

Why then does this considerable contribution to the development of the basic health service not bring about a perceptible improvement?

The needs in the field of the protection of health are always increasing. The coverage by universal and free health care of practically the entire population of the country, including farmers and their families and artisans, has sharpened and deepened the problems with which the health service is struggling. Let us add that it has enormous outstanding work from previous years, especially in the development of material substance, which, despite the acceleration of investments in the last decade, it has not been possible to eliminate completely.

Objectively speaking, however, the possibilities of the health service have improved, we have more beds in the hospitals, the network of basic health service units is denser, it is easier to see your doctor, and the share of the NFOZ in this is considerable.

Building and Modernization

In 1979, the NFOZ had financed, in entirety or in part, the building and expansion of 581 successive facilities of the health service and social care (with an estimated value of 23.4 billion zlotys) comprised in the investment plan of the Ministry of Health and approved by the National Socioeconomic Plan (NSPG). These are the so-called current investments. They include 30 new hospitals built anew (15,500 beds), 27 new hospital annexes with over 2,300 beds, and 28 modernized and overhauled annexes. Most of the facilities being built should be put into service by the end of the current year, according to Resolution No 89 of the Council of Ministers. Will it be? It is difficult to answer this question. Investments of the health service are difficult and complicated to build and as a rule they are being implemented with great delays.

Apart from the hospital construction which clearly predominates, there are also being built 260 rural health centers, 73 city polyclinics, 39 social care homes, 67 creches, and several dozen other facilities. The greatest investment being implemented from the funds of the NFOZ is the Center of Oncology in Warsaw and the Regional Center of Oncology in Gliwice, both coming into being within the framework of the governmental program of the fight against neoplasms.

Two and one half billion zlotys are being allocated from the NFOZ funds to subsidize so-called nonlimited investments. These are smaller facilities of an estimated value not exceeding 10 million zlotys, implemented by an economic system based in many cases on social work. At present about 500 such facilities (creches, social care homes, small health centers) are being built in the country. It is regrettable, however, that they are being built most often in old provinces and rarely in new ones which, after all, have fewer facilities of social and health care.

The National Committee of the NFOZ is spending each zloty most sparingly, for each zloty is of value. Social funds accumulated by the NFOZ will make it possible to accelerate the all-round development of the health care in the form that corresponds to our expectations.

1015
CSO: 2600

POSSIBILITIES OF SILICON USE IN POLISH INDUSTRY EXPLORED

Warsaw TRYBUNA LUDU in Polish 12 Aug 80 p 4

[Article by Krzysztof Bien: "Commonplace Material Made Valuable, Silicon Is All-Purpose Material"]

[Text] Silicones were used for the first time at the end of the war. During the past 30 years traditional plastics and rubbers have been eliminated in many existing applications. Silicones are now in the forefront because of their mechanical strength, heat resistance, nonflammability, resistance to oils and resistance to wear.

Using silicones in machine parts, to seal panels and windows in buildings, in the automobile industry and the shipbuilding industry, and as a coating insulating electrical cables is a step forward on the technological level that is comparable to the switch to transistors from vacuum tubes in receivers. Simply stated it is an entirely new standard.

Valuable Applications

The valuable properties of silicones are not the only things that affect their rapid use in the world. About a dozen or so years ago, the value of the physical characteristics to a great extent balanced the cost of silicones, which was at least 10 times higher than the cost of common organic plastics and synthetic rubbers.

The general increase in the cost of obtaining the latter, however, emboldened the striving for silicon plastics. Their manufacturing base is not increasingly expensive oil, but silicon, one of the most common elements of the earth's crust.

Silico-organic polymers are a group of diverse materials, liquid and solid, whose advantageous applications are increasing year after year. Let us point out some of them. Silicones in a fluid state, called oils, are excellent lubricants for machine parts. Their characteristics do not change during use, they do not become acidic and they are useable at elevated temperatures. They are used in automobile brakes (among others, in the United States), and they do not "boil over." In addition, they are nontoxic.

Liquid silico-organic polymers also serve as good hydraulic media. As so-called liquid springs, they are used more and more as motor vehicle bumpers and railroad car buffers. They are being used in automobile chasis and in space vehicles.

Silico-organic elastomers are no less practical. Durable and unusually strong gaskets are manufactured from them. The use of silicon seals contributes to the low heat losses in multistory residential buildings in the Western countries.

The automobile is the domain of the newest applications of silicon elastomers. The most durable gaskets, fittings and ducts are made of silico-organic elastomers. Also, cover plates for automobile bumpers deaden collisions with obstacles at speeds up to 40 km/h.

At one time, the application of silicones in technology was something of an exception, used only when specifically required by the product. The revaluation of ideas concerning product functions, their durability and reliability, showed that silico-organic polymers also are essential for electronic systems, and their extensive applications bringing about significant economic benefits.

Economic Considerations

Without silicones, products are obsolete, worse and much less esteemed in the world then would appear from a simple comparison of the value of the silicones and the materials which the silicones replace.

Thus, it is not surprising that silicones are making such great advances. Two years ago, in 1978, world production of silico-organic plastics was about 280,000 tons. But during the next 5 years, production will reach 1 million tons.

This large increase in the use of silico-organic plastics is not only occurring abroad but also in our country. This is understandable because the application of silicones is and will be an essential condition for increasing the durability and reliability of many of our machine industry products, enabling them to compete better in foreign markets.

Right now, more extensive applications of silicones in Poland's machinery, construction, shipbuilding and electrical engineering industries is not possible because Poland does not produce these materials. This is a paradox because we are a country which has all the substances to be one of the world's largest producers of silico-organic compounds. We have almost all that is needed for their manufacture: silicon (quartz sand), coal (specifically coke), rock-salt (converted to chlorine) and methanol.

Since we do not have our own silicones, we import them from abroad (the second payments area) in the form of finished products and an intermediate product called chlorosilicane. Imports are significant, but the picture of their scale and the needs of the country include the fact that only fraction of them is recorded, in association with which the incurred foreign exchange outlays are minimized as marginal.

Increase of Imports

A significant portion of the silicones come into Poland as spare parts and components of imported equipment. In the same way, all statistics overlook deliveries to our foreign cooperating firms. For example, there is the heavy construction equipment industry and the shipbuilding (fittings) industry.

This is why there is so much divergence in determining the extent of domestic needs. "Ciech" calculates usage at 2,200 tons annually: specialists of the Institute of the Chemical Industry calculate usage at 3,800 tons, and about 7,000 tons for this year.

The value of imported silicones is not small. In 1978, a ton of the intermediate product methylchlorosilicate cost about $700. At that time, the price of oils [no amount indicated] exceeded $4,000, a ton of plastics and rubber--$20,000, including even special products--$30,000. All in all this costs us at least $15 million annually.

Inasmuch as we have the primary raw materials, it is all the more unjustified that we have to pay out money. Instead, we could earn a few good dollars. Whatever problems there are could probably be overcome. From the viewpoint of technology, the only problem we would have would be to combine chlorine with methanol and silicon. This must occur in special ovens that are not available in Poland. But they can be purchased from the USSR as well as in the West in exchange for future deliveries of silicones. In any case, a large and expensive installation is not necessary because production would be 20,000 to 40,000 tons annually.

Converting the intermediate product into various silicon forms should not present any problems because the technology is known to Polish chemists, and what is more important, these technologies are used on a semitechnical scale. In light of all these considerations, it seems that the problem of producing silicones in Poland is ripe for a solution, at least our needs and capability needs to be reviewed again. I say "again" because this is not a new problem for us. Twenty years ago the Economic Committee of the Council of Ministers even passed a resolution on this matter. Its only result to date has been experimental production by the Silicon Experimental Plant and by the Sarzyna Chemical Works, which today, in view of the rapid expansion in the world of this new area of the chemical industry, it is difficult to acknowledge as sufficient.

11899
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WEST GERMAN COMMENT ON KOSOVO USE OF WORLD BANK CREDITS

Frankfurt/Main FRANKFURTER ALLGEMEINE in German 10 Nov 80 p 14

[Article datelined Belgrade, November, by Viktor Meier: "The Two Sides of East Credits -- World Bank Projects in Yugoslavia"]

[Text] In the backward Yugoslav province of Kosovo inhabited by Albanians, there are several agricultural projects involving soil improvement and drainage that were financed with foreign exchange credits from the World Bank in Washington. These projects are readily shown off to foreign guests; it is then demonstrated how well "cooperation" with the state agricultural combines works and how well these combines organize the marketing of their products. Two kilometers away, private farmers are having to dump their milk, throw away their fruit and eat up the meat from their own slaughter animals because there is no purchasing system for agricultural products. The Kosovo political leaders responsible for these circumstances are acting consistently -- from their point of view -- when they forbid any contact with uninvited foreign journalists who come to Kosovo and have them shadowed by the police, and when they have large signs posted on the highways which prohibit "foreign nationals" from stopping outside "inhabited localities."

World Bank credits -- Yugoslavia has thus far availed itself of $2.5 billion in such credits -- are convenient in more ways than one. International experts work up the projects, a task most probably beyond the ken of the local administration. The so-called domestic share, which is a condition and which may be paid in a country's own currency, is also incorporated right into the planning. The result is a "neat package," with the political leadership having to do very little. Since the World Bank is frequently on the lookout for projects, it is relatively easy for the leaders of a region like Kosovo to attract the Bank's interest. Once they have gained its approval, they can then persuade Yugoslav banks, the fund for underdeveloped regions or other Yugoslav republics not to let themselves be outstripped by the "capitalists" and to [illegible] money either for the domestic share or for other projects. The project' [illegible] then be used to demonstrate the "superiority of the socialist form of produc[illegible]." Nor is it even necessary to complete the project once the foreign exchange share has been paid out and cleared. The newspaper POLITIKA reports that the electrification and irrigation system for Kosovo in the upper Ibar valley, a project funded largely by the World Bank, is unable to operate as planned because the necessary waterways were not constructed or not constructed properly.

The reverse side of the financing of such projects by the World Bank is revealed later. The credit is granted in foreign exchange, but as a rule it does not bring

Kosovo or Yugoslavia any greater export capacity — especially with respect to hard currency countries — that would in turn bring in foreign exchange revenues. Apart from the financing of toll autobahns, this applies chiefly to the projects that serve to improve the infrastructure. The Kosovo leaders can afford to be indifferent because the foreign exchange credit has to be paid back by the Yugoslav federation, not by them. The federation, however, has now accrued foreign debts amounting to more than $15 billion, while the country's export capacity has declined rather than increased.

But even if export possibilities do result from international credits such as these — for wine, for example, in Kosovo — one can still ask whether the same thing might not also have been possible if the already existing production capacities and their agents had been used to better advantage — in other words, if the local private farmers had not been forced intentionally or through negligence to throw away their wares.

It is for this reason that even Yugoslav officials are asking more and more frequently whether with some effort and willingness this or that project could perhaps have been financed exclusively with domestic funds, or whether other possibilities might have existed. To be sure, such questioning appears not to be very extensive so far, since an additional $320-$350 billion in World Bank credits is planned for the near future; added to this will be similar credits from other institutions. The credits for these projects are earmarked for very specific purposes.

Use of the World Bank weaves a halo of soundness and solid credit standing around a country to the extent that it repays the credits promptly, which Yugoslavia has done thus far. It permits constant reference to the opinion of sympathetic experts. The Yugoslavs are using this to good advantage right now in their applications for credit from German banks. Yugoslavia is also always ready to cite OECD data to support its loan applications. These reports by experts are indeed correct, but they tend to look at things from a purely technical standpoint, disregarding political influences. It is absurd, for instance, to demand and expect — as the OECD does — that Yugoslavia curb inflation. Inflation is part and parcel of the political and economic system in Yugoslavia, as regards both the requirements of the national budget and the necessity of constantly glossing over the lack of productivity and taking the edge off any possible political discontent.

7458
CSO: 2300

WORKERS' COMPLAINTS TO TRADE UNIONS SURVEYED

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 1-3 Nov 80 p 11

[Article by D. Brdar: "A Reaction Usually Justified"]

[Text] The number of grievances and petitions which workers send to the Council of the Federation of Yugoslav Trade Unions seeking assistance with their own financial and social problems or merely giving indication of deviations of self-management relations is not decreasing. This observation was recently made by the presidium of the council of this sociopolitical organization which has the most direct ties to worker interest. Though to some extent it is surprising that the number of worker grievances and petitions is so great, since the self-management rights of the workers are protected most directly by courts of associated labor and public defenders of self-management law, the people in the trade unions nevertheless say: the grievances and petitions are an expression of the readiness of the workers to react to usurpation, but also of confidence in the trade unions and in its readiness to help the working people when there is good reason.

What do the workers seeking help from the Council of the Federation of Trade Unions usually complain of?

More Effective Reaction

According to a report of the Presidium of the SSJ [Federation of Yugoslav Trade Unions] Council the workers usually complain of and refer to problems which profoundly affect their financial and social security. This pertains above all to problems of hiring and exercising the right to work, personal incomes, the distribution of housing units, obtaining medical care, and also medical, old-age and disability insurance. While complaining of violations of personal rights, the workers at the same time point to irregularities and the disrupted self-management relations which bring them about. In that context the workers often call upon the SSJ Council to stand in the way of cases of group-ownership behavior and to protect public property. They also call for more effective response and for correction of the causes of such cases.

Most of the petitions and grievances fall in the domain of employment relations, hiring particularly. The report finds it constructive that the workers are expressing a very high awareness of the objective difficulties with hiring, but they are also aware of the unacceptability of arbitrary action, evasion of competition, various forms of privatization and string-pulling and other irregularities that occur in this area.

The petitions and grievances express very vividly the problems related to distribution of funds for personal incomes. Usually the workers are rightly upset that proper criteria have not been established to govern distribution. They point to the well-known fact that the results of work are not measured on all tasks and jobs. They also say that almost no standards are established for jobs outside of production. They also rightly point to the modest influence and surveillance they exercise over work done on commission and supplemental work by employees. They often say that in a large number of cases private, group, family and individual interests are involved in this kind of work.

Though the number of grievances related to stoppage of personal incomes is growing all the time, a followup has established that usually they are unjustified and have been sent in by workers more interested in their rights than in their obligations. At the same time the grievances related to the exercise of rights to health care and insurance, whose number is decreasing all the time, indicate very important problems involved in exercising those rights. By and large the workers complain of two sets of prices for health care services, rejection of applications for treatment in spas and health resorts, the assigned degree of disability, disagreement with the findings of specialists and medical commissions, and the adjudicated amount of damages following work accidents. And in this connection they also complain of lengthy court cases.

More Prevention--Fewer Grievances

A sensitivity to injustice and a readiness to defend authentic principles of self-management are also expressed in the grievances and petitions concerning housing affairs. The grievances indicate that every deformation or injustice is deeply resented by the workers, which is altogether understandable, especially when we think of all the limitations that are involved in the satisfaction of housing needs. In the first 9 months of this year the number of workers appealing to the council to correct various irregularities in the distribution of housing was twice what it was last year. By checking the allegations of the workers the trade unions discovered that in the cases where problems have occurred regulations on distribution of housing have usually not been brought into conformity with social compacts, and some have not even been brought into conformity with the Law on Associated Labor. Frequently there has also been a departure from the waiting list, and there are cases when worker caucuses and workers' councils adopt individual decisions which violate the criteria which have been established and the obligations they have assumed.

An examination of these and other petitions and grievances of workers sent in to the SSJ Council makes it clear, the report states, that direct self-management rights are usually violated in basic organizations of associated labor or work communities. The feature which all the grievances and petitions have in common relates to the fact that they come from places with underdeveloped self-management, places where there is a wide gap between principles and practice, as a rule compounded by a passive attitude on the part of the basic trade union organization and other sociopolitical organizations in resolving the problems that arise.

However, even though the worker grievances and petitions are obviously justified, those who act contrary to self-management are usually not made accountable. Not even when they are obviously acting spitefully toward the worker and are not carrying out court decisions which have become final. They therefore say in the trade unions that a more vigorous effort is needed on the part of basic trade union organizations in establishing that kind of responsibility, but also in finding the right way to reduce the number of errors and abuses of self-management rights. And the right way is, of course, prevention.

[Upper box] Commission

In response to the importance and complexity of the problems raised by the worker grievances, the Presidium of the Council of the Federation of Yugoslav Trade Unions recently formed the Commission of the Council for Petitions and Grievances as its own working body.

This commission's principal task will be to examine the petitions and grievances which come into the council and to monitor and analyze the issues raised in the grievances and petitions as well as the reasons that led to them.

It is also the commission's duty to analyze to what extent the issues raised in the grievances and petitions are affecting the development of self-management relations and exercise of the self-management rights of the workers in organizations of associated labor and in the same connection the activity of trade union organizations and organs, the bodies of worker management, self-management workers' control commissions, disciplinary commissions, professional management and other bodies concerning the issues raised in the grievances.

[Lower box] Mostly From Skilled Workers

During the first 9 months of this year the Council of the Federation of Yugoslav Trade Unions received a total of 1,397 grievances and petitions from workers. The largest number came from Serbia--643, while Bosnia-Hercegovina accounted for 236, Croatia 153, Vojvodina 137, Kosovo 84, Macedonia 75, Slovenia 36 and Montenegro 33.

Among the 748 grievances for which the petitioners' qualifications are known, the largest group (359) was that of skilled workers and workers with specialized secondary training. Second place was taken by semiskilled workers and workers with elementary training (183), the next group was highly skilled workers and workers with junior postsecondary training (100), then unskilled workers (89), and finally only 17 workers with senior postsecondary specialized training.

It is interesting that there are a large number of grievances from women--377, and also that 43 group grievances were filed.

7045
CSO: 2800

EMPLOYMENT PLANS IN SLOVENIA

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 6 Nov 80 p 8

[Article by Ljubomir Krasojevic: "Slower Growth in the Coming Period"]

[Text] The new job rate in the coming medium-term plan in Slovenia is being placed in very close relation to the tighter economic conditions and stabilization trends, which necessitate efficient employment of manpower and thereby a faster growth of income per employee as well. Taking these requirements as its points of departure, along with the fact that sources of new manpower are fairly limited in this republic, the draft of the social plan for Slovenia's development up to the year 1985 calls for employment in the economy and public services to increase considerably more slowly than up to now.

That is, as set forth in this document, economic possibilities allow for employment in associated labor to increase at an annual average of 2 percent over the next 5 years. In the economy employment would grow at a rate of 1.8 percent, while in the public services it would grow at a rate of about 2.2 percent, and in public organizations and communities it would increase at a maximum annual average of 1.9 percent. Employment in the underdeveloped regions would increase at a somewhat higher rate, while in the more advanced regions the rate would be below the established average for the republic as a whole.

On the basis of these projections it is estimated that in the coming period it will be possible to open up 80,000 new jobs in the republic, one-fifth of which would be in noneconomic activities, above all in the public services. There are also real prospects for another 7,000 new jobs in the private sector of self-employment. By the end of the next medium-term period, according to the plan, there would be a total of 880,000 employees in the socialized and private sectors in Slovenia. Thus the share of the labor force in the total population would be held at its present level of about 45 percent.

Obligations of Associated Labor

The conceptions of development provide that young trained personnel will be given preference in coming years. However, it is known even now that difficulties will arise because of discrepancies between the training of the new personnel graduating from school and the particular occupations needed by associated labor. In the first years of the medium-term plan the rate of employment in the republic, it is now estimated, will range between 2.5 and 3 percent.

Though the republic's medium-term development plan calls for a considerably slower growth of employment than has been the case up to now, it is felt that the low rates which have been anticipated put considerable obligations on associated labor. That is, self-mangement accords which have been signed by all the opstinas in the republic oblige organizations of associated labor to cover the total social costs of each new job so as to provide the so-called minimum standard of living and working conditions.

Also the restructuring of the economy, which is one of the strategic lines of the republic's development, necessitates a higher level of knowledge and professional competence on the part of workers, and that also means a higher share of the respective skills in the total labor force. The changes envisaged in the pattern of operation, the introduction of automation into production processes, and then improved organization of work and reduction of the share of nonproduction personnel will necessitate effective resolution of problems of surplus manpower in a number of organizations of associated labor. Such work organizations, and it is believed that their number is not small, will even now have to be prepared for timely adoption of programs to provide personnel with job training and schooling to acquire new skills, which they would carry out in collaboration with opstina employment security communities.

Increasing optimality in hiring is becoming one of the essential prerequisites for stabilization, for more efficient economic activity and thereby for the rise of labor productivity in Slovenia. In the current medium-term period the new job rate has been considerably higher than the projection. That is, the most recent surveys show that employment in Slovenia stayed within the limits of the projection only in 1976, the first year of the current medium-term plan, when the growth was 2.9 percent. The very next year the growth of employment was 3.1 percent, in 1978 it was 4.1 percent, and then last year this percentage dropped to 3.3 percent. On that basis it has been computed that employment has grown at an average annual rate of 3.5 percent so far in the current medium-term period.

Productivity Below the Projection

It is true, and current analyses show it, that under the impact of the stabilization measures which have been adopted, hiring since the end of last year has kept to a considerably more moderate rate. Though the slower

growth of employment is characteristic of all organizations of associated labor in the economy, so that the growth this year will be about 0.5 percent by all appearances, it is still particularly pronounced in organizations of associated labor in the sector of physical production, where 57.3 percent of the economy's labor force is employed. That is, since last December there has been hardly any change in the size of the labor force in this domain of associated labor.

Though the stabilization measures will undoubtedly have the effect that the results expected in 1980 will bring the markedly dynamic trend of employment in the first 4 years into the somewhat more realistic limits of the original projections, this is one of a number of other reasons for the slower growth of productivity in this republic.

The level of growth of productivity we are talking about is best illustrated by the following comparative figures. The most recent analyses of fulfillment of the current medium-term plan show that the share of the rise of productivity in augmenting the total output of associated labor has been 42 percent over the last 4 years, which is 15 percent less than was planned. In the industrial sector, however, the contribution of higher productivity to the total growth of output was 63 percent, or 3 percent less than was envisaged. If these estimates are borne out for this year, in the context of a quite appreciable slowdown in the growth of output, productivity could rise as much as 2 percent. Its share in the growth of the social product would then be 50 percent, which is nevertheless 7 percent less than was planned.

7045
CSO: 2800

NEED TO OVERCOME TECHNOLOGICAL LAG DISCUSSED

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 6 Oct 80 pp 18-19

[Text] The fact that during the eight and a half months of this year we imported equipment in the amount of 300 to 400 million dollars more than originally planned, when considered with all the rest, points also to the high degree of technological dependence of our country. Regardless of the fact that during this year goods were imported which were contracted for in the past years, there is evidence of fear that a rigorous policy of stabilization could bring future production based largely on domestic equipment into an inferior position. The realization that our industry is falling behind technologically is not new.

A complex, but consistent development policy must be built into the ever stricter efforts toward stabilization. Such a policy would make it possible, although not overnight, to bridge the technological gap that exists vis-a-vis the industrially developed economies which confront our industry in the indivisible arena of the international market.

The total social productivity of a particular product can be reliably measured in relation to the competition on the market, as the weaknesses and omissions of development policy in the past are shown more clearly in relation to the outside world than in relation to domestic standards. The most important thing now is not to reduce stabilization to merely restrictive and inhibitory measures. Stabilization at the zero growth level, that is to say, at the stagnation level, certainly would not be the kind of stabilization we need.

Lagging in production of equipment is a sign of technological lay in total production, as the production of equipment is one of the few production sectors which has a distinct multiplying influence on all social productivity.

The technological gap cannot be bridged just by creating an enviable scientific research potential expressed in terms of personnel, numerous institutions, and important results in the field of basic and theoretical research. The ultimate purpose of basic and applied academic or strictly laboratory research is developmental research and the development of new products and technologies, which is indeed very expensive. Investments in the development of new products and technologies as well as in various research efforts needed to place the new products on the market involve expenditures for complicated experiments which require detailed simulation of conditions of real production, the development of pilot

installations and testing, market research and the launching of the new product. In industrially developed countries with market economies such expenditures amount to several hundreds of millions, as much as the cost of a new model car. Sometimes these exceed even a billion dollars, as in the case of a new generation of computers.

The cost of product development and creation of new technologies are incomparably greater than the costs required for the so-called pure sciences, that is, for basic and applied research. That was also certainly one of the reasons that in our country pure science developed first and produced certain knowledge, but it was not possible to find ways in which this knowledge could be applied to improve production. Science and economy developed on two separate tracks. The institutes received the echo of advanced science from abroad, while the "ready to use" technical know-how was fed into the production apparatus in the form of protected industrial property of the developed countries, and in the form of contracts, filled with restrictive clauses, which fettered the already limited possibilities of domestic producers in their efforts to enter the market.

Vegetating Under The Patronage Of The State

It is understood that the bridges between scientific research and an economy oriented toward business production cannot be built quickly. The success of creating such ties depends, above all, on the existing capability of economic organizations, which, to a considerable degree, are the product of our orientation now. On the other hand, the consequences of a former dispersion of scientific research efforts cannot be reversed with a single move. The failure to concentrate resources on certain major technological break-throughs has left its mark on the scientific research organizations. Equipment and research work in institutes have for some time been out-dated. It has become very clear that generally the institute is not, or at least is not any more, a place that attracts young persons. In this respect the institute significantly lags behind the faculty of an university, which is more attractive mainly because of the opportunities for earnings from several sources. Production organizations are not successful in attracting young and ambitious experts mainly because they are not successful in offering them sufficiently challenging programs, which would provide the young with a long-term perspective for professional growth. As for the equipment, the limited opportunities at scientific or advanced institutes is now complicated even more by the fact that sometimes it is more difficult to obtain the right to import than it is the means to import, even though it is fully clear that it is better to import the equipment for a research laboratory now, than to import forever production equipment.

What OECD Experts Had To Say

While preparing to put together a study about a scientific policy for our country, exactly seven years ago, OECD experts came up with a series of observations which are still very much up-to-date. We quote:

"There is a tendency in Yugoslavia for every research organization to go under the name of an institute, which in other countries indicates a certain degree of independence or at least separateness. For example, in many countries institutes at universitites would not be listed separately and their work would be regarded as an organic element of the work of every section or faculty of a university.

"The basic problem is not in conducting its own research instead of purchasing results, but in finding the most practical and most suitable solution to the problem which is being investigated. In this respect the licensing requirements should be carefully examined. The licenses should be the starting point for development toward greater independence, not a means for hindering or slowing down the development on one's own technological level."

"Economic planning and formulation of research needs represent two sides of the same medal for an individual enterprise. A clear formulation of needs represents the best challenge to research institutes, and the assigned tasks should not be either too easy or too difficult....

"Integration and cooperation cannot be established through laws or moralizing, but through creating situations in which all partners benefit from this cooperation."

The Door Of Technological Cooperation

According to the authors of the study "Science in Yugoslavia (Znanost u Jugoslaviji)," which was prepared by the Center for Social Research of the University of Zagreb, on request of the Yugoslav Commission for Cooperation with UNESCO, the following contracts were concluded to the end of last year:

- long-term production cooperation	296
- procurement of material rights to technology	790
- investment in joint operation	195
Total	1,429

75-78 percent of the contracts was carried out.

It has been steadily maintained up to now that science can somehow exist without the support of economy. A stable public (that is to say state) support made it possible for science to survive, regardless of the fact that the financial base of this patronage was getting to be thin. Understandably, the shift to the concept of exchange of labor did not automatically create mechanisms for the real linking of the existing science-research potential and economic organizations. The free exchange of labor means the transfer of available resources through compulsory contributions, without making any differentiation as to the type or purpose of scientific research, the direct exchange of labor, however, means retail buying and selling of scientific products. In neither case is the exchange based on the real interest of business organizations and independent institutes, so there is inevitably an outside guarantor of this linking of interests. Such an outside guarantor appears either in the form of the "hard" state (socio-political community), or in the form of the "soft" state (an institutionalized SIZ [self-management interest community], based on a para-fiscal concentration of financial means.

Conclusion

The documents of the Eleventh Congress of the League of Communists of Yugoslavia (SKJ) discuss the developmental goals of research and state the following:

"By combining labor and means available to organizations of associated labor engaged in actual production, and the research organizations, we should create conditions for more successful planning of technological development and realization of significant research projects in order to improve existing technology and develop new technology.

"The import of technology should be constantly tied to our own research work. Selection of technology to be imported should be done rationally to enable us to accept and use it in the best possible way, and to further develop and advance it ourselves. At the same time we should make efforts toward greater export of our own technological accomplishments. There should also be greater determination toward creating more favorable conditions which would stimulate engagement of organizations of associated labor in the field of research and technology."

Results

How far the developed countries have moved ahead of us can be seen from the table, which shows the co-efficient of per-capita social production and investments in scientific research, per capita, and per researcher (Yugoslavia-1) in 1975 (from the study, "Science in Yugoslavia," published in 1980).

Country	Public Production	Investments in per capita	Investments per researcher
USA	3.8	11.4	4.0
Sweden	3.2	6.7	3.1
Switzerland	3.1	8.1	2.8
France	2.7	6.0	4.1
FR Germany	2.6	7.8	4.1
DR Germany	1.9	8.0	4.1
Austria	1.9	2.8	4.7
Czechoslovakia	1.7	6.4	1.8
Italy	1.5	1.8	-
USSR	1.5	6.7	1.2
Hungary	1.3	2.8	1.1
Yugoslavia	1.0	1.0	1.0

Investments In Science

It is not possible to give a precise answer to the question of how much is being invested in science research because a suitable methodology has not been developed. An estimate can be obtained by relating the revenue of the scientific-research and development organizations to national income (percent).

Year	Revenue (%) Gross National Income
1965	1.0
1970	1.4
1974	1.2
1975	1.3

1976	1.3
1977	1.5
1978	1.5

(The table is from the study, "Science in Yugoslavia.")

Scientific Output

The number of reported inventions indicates inventiveness but also the use of knowledge and research. The table shows the number of reported inventions where application for patent rights (only domestic applicants) was made during the past ten years.

Year	Individuals	OUR	Applicants Institutes	Total
1970	708	140	35	883
1973	767	124	37	928
1975	1,063	132	56	1,251
1976	1,132	162	45	1,339
1977	987	175	31	1,193
1978	1,003	129	34	1,166
1979	958	191	40	1,189

In the last few years the number of patents issued dropped compared with the beginning of the past decade. For example, in 1971, out of 922 reported inventions, 147 (16%) were registered, and in 1978, out of 1,166 reported, only 50 inventions (4%) obtained patent rights.

Huge funds are needed for the development of new products or new technological processes, along with the very high risk that the immediate return may not nearly match the investment. If we accept the fact that neither risk nor investment can be avoided, because production without technological progress cannot achieve long-term competitiveness on the market, a question arises concerning the selection of correct ways to concentrate resources and consolidate efforts. The model which is developing among self-management interest communities in the scientific field is based on a fairly complex and long-term process of collective selection of projects in which the resources allocated according to law are to be invested. The selection starts from a wide variety of proposals, which in the beginning reflect mainly the needs of the existing institutional potential. By condensing and uniting related projects, on one hand, and by eliminating, on the other, the selection process flows toward a desirable concensus of all on both sides (the providers and the users of services) with regard to a "decent" number of relatively large research projects.

There is no doubt that the annual and medium-term programming of research, to be financed through the SIZ, is the best way to use the resources collected through contributions. Similarly, one should not question the usefulness of collecting and targeting these resources, especially having in mind their initial effect and ability to attract investment of other resources by interested users of scientific work.

Technological Breakthrough Can Be Made Only By the Economy Under Market Forces

Another question is whether all this together is sufficient to secure more serious technological-developmental break-throughs in specific directions. It is clear today that technological progress through scientific research is a matter for economic organizations, not for science-research organizations. When we talk about the need for science to show its effect in income, it is easy to get confused about whose income is in question. It is understandable that in this respect the science institute's income according to its account books is incomparably less important than the increase in the economy's production and market results. Income from science is by its nature joint income.

Of crucial importance are the interest and ability of economic units to expand and in the long term adapt themselves to the development of new products and technologies, using at the same time the results of scientific research. [The reason this does not happen is that] our economy is not composed of very large organizations; but if there were sufficient interest, economic units could develop ties among themselves. The question is, therefore, why are they not jointly participating in strategic efforts in the developmental-technical field. If we ignore the fact that they have not been forced to do so, the focus is then on the fact that the market is not sufficiently developed, and economic units are not motivated to adjust their long-term development policy toward the market, and having in mind above all an increase of their own absolute competitiveness.

The question that follows is how to create conditions and real interest in economic organizations to move more rapidly toward increasing their own technical and technological competitiveness. This can be partially achieved in a restrictive way, by reducing the intensity and frequency of administrative intervening in economic life. According to the nature of things, the economy, as well as economic organizations, exist to enlarge their own activities with the help of their own capital accumulation. A slow down and stagnation of accumulation necessarily leads to stagnation of technological development. Freer action of economic laws, together with a well-thought-out policy which respects these laws and the market, and does not try to suspend them, makes it possible for economically healthy economic organizations to progress along the technological path on the basis of their innovativeness. There is a noticeable tendency among the large corporations in the West to invest money in short-term business ventures which offer more modest but safe profits. The newly established, smaller companies, on the other hand, show greater developmental agressiveness and readiness to enter into longer-term ventures with a promise of greater profit but with greater risk.

The second set of conditions for technological development requires a reasoned and conscious decision with regard to the directions in which progress is desired. The prerequisite is to avoid having too many such directions and unrealistically ambitious ones. The better the agreed upon priorities are adapted to the actual possibilities, the more effective will be the policy of economic or other incentives for development in selected fields. Only such a policy can establish a strong bridge across the technological abyss, not a wobbly span of illusions and deceptions.

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11 December 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2071

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ECONOMIC AND INDUSTRIAL AFFAIRS

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CONTENTS

BULGARIA

Economic Weaknesses Outlined
(NOVO VREME, No 10, 1980) 1

GERMAN DEMOCRATIC REPUBLIC

Dresden Bezirk Railway President Cites Manpower Shortages
(Hermann Demmler Interview; SACHSISCHE ZEITUNG, Sep 80) 10

Cultivation of Important Crops Discussed
(BAUERN-ECHO, 11 Sep 80; FELDWIRTSCHAFT, Jul 80) 24

New Winter Barley Varieties, by R. Schoenleiter, et al.
Winter Wheat Planting Time
Potato Production, by G. Ulrich

Development, Function of Agrochemical Centers Surveyed
(R. Wabersich, H. Warzecha; INTERNATIONALE ZEITSCHRIFT DER LANDWIRTSCHAFT, Jul-Aug 80) 30

Application of Socialist Law in Combine Management
(Rudolf Winter, et.al.; WIRTSCHAFTSRECHT, Jul 80) 36

Crop, Weather Report Published for September 1980
(D. Krumbiegel; FELDWIRTSCHAFT, Nov 80) 44

HUNGARY

Decrees on Operation of Small Retail Shops Published
(MAGYAR KOZLONY, 30 Sep 80) 47

ROMANIA

Need for Efficiency in Socioeconomic Development
(Liviu Melinte; ERA SOCIALISTA, 20 Oct 80) 56

Role of Energy in National Economic Development
(Ion Chirculescu, et al.; ERA SOCIALISTA, 20 Oct 80) 64

YUGOSLAVIA

Status of Yugoslav Firm in West Germany
(DER SPIEGEL, 10 Nov 80) 76

BULGARIA

ECONOMIC WEAKNESSES OUTLINED

Sofia NOVO VREME in Bulgarian No 10, 1980 pp 13-22

[Article: "Greater Creative Skill, Knowledge and Daring in Completing the Seventh Five-Year Plan"]

[Text] The Bulgarian party members and working people are stressing their efforts to implement the decisions of the Eleventh Party Congress on the Seventh Five-Year Plan. An ever stronger basis is being laid for the solution of the even more complex problems of the next Eighth Five-Year Plan, and for the fuller satisfaction of the steadily rising needs of our people.

After assessing the significance of the successful implementation of the plan for the final year of the five-year plan, the BCP Central Committee Politburo submitted for discussion at the 29th of July 1980 Party Central Committee Plenum. Some basic results of the implementation of the Seventh Five-Year Plan so far and the immediate tasks which will determine its successful completion. This was entirely necessary in the light of the report submitted by Comrade Todor Zhivkov delivered at the Plenum on convening the Twelfth Party Congress.

Each party congress is an event of tremendous historical significance. Unquestionably, the Twelfth Congress will be equally significant. Its main purpose is to define the basic directions of the country's economic and social development for 1981-1985. The Plenum's decision on the basic results of the implementation of the Seventh Five-Year Plan and on the urgent tasks is a new appeal for even more effective party-political and organizational work and full mobilization of the forces and the creative energies of our people for the overall implementation of the decisions of the Eleventh Party Congress.

In the past four years of the Seventh Five-Year Plan our people achieved considerable successes in the country's socioeconomic development. The summarizing indicator of this fact is the produced national income which outstrips the national income generated in the entire Sixth Five-Year Plan by five billion leva. The higher and stable base on which the national economy is developing insured a relatively high growth rate of the national income representing a far higher absolute growth of the net income produced. In the first four years of the implementation of the Seventh Five-Year Plan, one percent of growth has equalled 132.4 billion leva, compared with 91 billion leva in the Sixth Five-Year Plan. In the past four years 2.2 billion leva more were invested in the national economy compared

with the entire Sixth Five-Year Plan. Overall capital investments totalled 24 billion leva. Capital assets worth about 21.5 billion leva were commissioned. As a result of this considerable quantitative and qualitative changes occurred in the available material and technical base of material production sectors and in activities in the non production area. By the end of 1979 the country's capital assets totalled 71.3 billion leva, or 18 billion leva more than at the end of 1975. A considerable percentage of capital investments went into the reconstruction and modernization of the available material and technical base which resulted in its substantial qualitative changes. Another contributing factor was the particular attention paid to the development of exceptionally important directions of the contemporary scientific and technical revolution such as electronics, microelectronics, robotics and chemization. Consequently, a decisive material prerequisite is being created for the successful implementation of the strategic tasks of the five-year plan and for upgrading the effectiveness and quality of all activities.

The stable growth rates of the national income lead to the fast absolute growth of another of its important components—the consumption fund. From 1,186 leva in 1975 real per capita income rose to 1,601 leva in 1979. A total of 247,000 housing units were built, i.e., 27,000 more than were built in the entire Sixth Five-Year Plan. Within the same period per capita retail trade rose about 24 percent while public consumption funds rose 21.4 percent.

The study of these and other data on the country's socioeconomic development in the first four years of the Seventh Five-Year Plan indicated that the achievements are exceeding the results achieved in the entire Sixth Five-Year Plan. The significance of these achievements becomes even greater when we bear in mind the complex circumstances in which they were achieved. This applies to the more complex international economic situation and the adverse natural and weather conditions which prevailed in agriculture.

Those were the assets with which the country entered the final year of the Seventh Five-Year Plan. The results of the first half of this year indicate that the positive trends are continuing. The counterplans are continuing to be fulfilled in terms of their basic indicators. Naturally, this does not mean that we can be fully satisfied with the results achieved in the first half of 1980. A number of data indicate that not all labor collectives, economic organizations and ministries have eliminated existing weaknesses for the sake of reaching the desired and possible indicators stipulated by the National Party Conference. They failed to draw the necessary conclusions for a change in the work mentioned by Comrade Todor Zhivkov at the January 1980 conference with the economic aktiv.

Undiscovered reserves and unused opportunities remain in the national economy. Major weaknesses and shortcomings exist in the implementation of economic tasks. Violations are committed of labor, financial and technological disciplines. The main contradition between the possibilities of the material and technical base, tremendous in terms of our scale, and its inadequately efficient use by the subjective factor, exposed at the Eleventh Congress and analyzed at the July 1976 Plenum, has not been surmounted.

The problems to be resolved before the end of the year and before the congress are

big and important. Their solution depends on all of us, on our work, on the ability of everyone to work more adroitly and more creatively, and to display a greater feeling of beauty and responsibility for assignments. The stipulation that no labor collective or individual worker remain owing something to the party and the people, thus worthily welcoming the forthcoming party congress, calls for insuring the full mobilization of our forces and resources. Every party member and working person must deeply realize, creatively interpret and actively implement in his daily behavior the imperative that the struggle for the fulfillment and overfulfillment of the unified plan for the socioeconomic development of the country in 1980, and therefore, of the entire Seventh Five-Year Plan, is the most important economic, social and ideological and, in a certain sense, political assignment.

Bearing in mind the importance of 1980 as the final and decisive year for the implementation of the Seventh Five-Year Plan, the BCP Central Committee Plenum defined the main and urgent tasks to be implemented. This made it incumbent upon the party, state, economic and public organs and organizations to focus their main attention on their successful implementation.

The first of these assignments, indicated in the decision of the Central Committee Plenum, is "to mobilize the creativity, forces and skills of the working class, the agricultural working people, the specialists and the intelligentsia for the determination and total utilization of existing reserves for the implementation of the 1980 counterplans, for developing a nationwide socialist competition, and for properly welcoming the Twelfth BCP Congress." This requires specific and effective political and organization work with all working people.

In most general terms existing reserves could be characterized as unused but usable technical, organizational and socioeconomic opportunities for increasing output in one of another national economic sector or upgrading the effectiveness of the activities of one or another labor collective. The incomplete use of potential economic opportunities is a manifestation of the slowness in resolving arising contradictions and disproportions in the development of individual aspects and elements of the labor process. Such contradictions could be most general, such as the contradiction between the level of development of the elements of production forces, i.e., of production resources, and existing production relations.

The incomplete utilization of objective opportunities may also be due to the rising disparities and disproportions in the development of individual elements of production forces on a national scale or in individual sectors or smaller units. We know that in a number of cases virtually no proportionality is maintained in the development of individual elements and units of the production process and of overall economic activities. It is a question of consistency in the development of productive capital and manpower, of basic and working capital, of different levels of improvement of the individual elements of the production process, of weaknesses in the organization of production, labor and management, of imperfect technology, and so on. Naturally, the greater the disparity between the individual units and elements of the production process becomes the greater will be the disparity between objective possibilities and their utilization.

The very process of the growth and improvement of the material and technical base of the production process is conflicting. The quantitative and qualitative changes

occurring in productive capital eliminate some disproportions, improve certain production relations, and so on. This creates conditions for the use of corresponding reserves. However, considering the factually high rates of growth of the sectors and the inadequate experience of engineering-technical and performing cadres it is not always possible to establish optimum ratios and production relations among the individual production units and elements of the labor process. For this reason, some ratios and production relations improve while, simultaneously, new disproportions and more complex relations develop in the economic activities of sectors and individual production units. This means that some reserves are used while, simultaneously, others appear. Production reserves rise to the extent to which existing possibilities are not being fully and promptly used.

The nonutilization of this potential may also be due to the noncomprehensive growth and improvement of productive capital in a given unit as a result of which, for a while, a certain disproportionality may result. This may also be due to the fact that no similar quantitative and qualitative changes, corresponding to changes in productive capital, occur in some elements of the labor process within the same unit or in other interrelated units. Furthermore, the nonutilization of potential possibilities may also be due to the fact that the conditions necessary for improving the organization of production, labor and management have not been provided. Shortcomings in labor planning, norming and wages and in other similar national economic conditions and factors may equally be reasons for such partial and delayed utilization of potential opportunities for upgrading greater productivity and production effectiveness.

These are all factually existing reasons affecting our current practical work. Combined, to one or another extent they affect the development of production reserves. Such reserves exist also in the utilization of the three elements of the labor process. Despite the considerable achievements which followed the National Party Conference the existing production resources have not been fully used. For example, manpower resources are still being used inefficiently. Great working time losses occur as a result of full-day idling and violations of contractual and technological disciplines. The percentage of intra-shift idling, caused by weaknesses in the socialist organization of labor and low work skills in a number of sectors and production lines remains high. In a number of places the work is based on experimental-statistical norms which are easily overfulfilled without raising labor productivity to the necessary level. Existing possibilities for reducing the share of manual labor remain unused.

Results in terms of lowering the material-intensiveness of output remain unsatisfactory. A number of economic organizations continue to work on the basis of old outlay norms for raw materials, materials, fuel and energy. New technologies are being applied very slowly and the results of technological improvements in produced items remain unsatisfactory. This results in substantial processing waste. Defects are not always reduced to admissible levels. Bearing in mind the limited possibilities for the additional production of raw materials and materials or for their import, their inefficient use leads to the nonfulfillment of the planned volume of output, to lowering the possibility for a reduction in production costs, and to worsened quality. Efforts to collect and utilize secondary raw materials remain unsatisfactory. Not all possibilities are used for the substitution of expensive and scarce raw materials and materials, and so on. All this hinders the economizing

of material expenditures by about 700 million leva over and above the state planned figure, as stipulated in the counterplans.

No substantial improvements have been made in the utilization of the third production element: production capital. Full-day and intra-shift idling, whose share remains high, affects not only the level of labor intensiveness but the rational utilization of available materials and technical facilities. The shift coefficient of machines and equipment is not being improved. The task of insuring two-shift work with construction equipment is not being fulfilled satisfactorily. New production capacities are not mastered promptly and planned capacities are not always reached. No decisive improvement has taken place in the condition of capital construction and the timely commissioning of productive capital. This is mainly due to the nonfulfillment of the task of narrowing the construction area and the inadequate concentration of forces and facilities on main target projects.

All these reasons for the inefficient utilization of available production resources in one or another sector or economic organization or lesser production unit could be eliminated. Sometimes, the errors may be corrected rapidly and easily. In some cases this may be more difficult and slow. In all cases, however, they are removable. Naturally, their elimination may be accomplished not automatically but on an organized and systematic basis. The current possibilities for a better utilization of the three production elements are an exceptionally important, perhaps even decisive, factor for a faster increase of labor productivity and production effectiveness and for the overall implementation of the Seventh Five-Year Plan. The utilization of most of them is both possible and necessary. It offers the possibility of achieving greater production results per unit of production resources and per unit of time: greater and higher quality output at lower production costs and lower price. In practical terms this represents the utilization of one of the main factors for intensive expanded reproduction in the national economy. This would increase the scale and growth rates of the social product and the national income. Unquestionably, this would be of great national economic importance.

At the present time the use of existing reserves is of great advantage to society, for it could be accomplished relatively quickly and without considerable investments. Considering the present relatively high degree of saturation of the production process with expensive technical facilities, each additional percentage of increased labor productivity, achieved through the installation of new equipment and improved technology, becomes ever more expensive even though this is considered the main line of progress. That is why, at this stage, the utilization of this possibility which requires minimum additional capital investments is of great advantage to us, to society at large. The task is for each production unit to engage in a profound critical study of existing shortcomings and unresolved problems and earmark a system of comprehensive measures for the utilization of all available possibilities. Under specific circumstances, such possibilities display certain different specific characteristics. Consequently, the adopted measures must be consistent with the specific conditions under which a given production activity takes place. This approach would, unquestionably, open considerable opportunities for the solution of the problems set by the National Party Conference for the more effective utilization of materials, raw materials, energy, fuels, manpower and technology. Only thus, could we achieve the saving stipulated in the 1980 counterplans. As the decision of the BCP Central Committee Plenum indicates, each labor collective must struggle for

reaching the outlay norms for raw material and energy resources and for labor and materials achieved by the leading plants, agro-industrial complexes and construction and other organizations.

The decisive means through which existing reserves could be quickly utilized are the following: comprehensive and systematic application of the new economic approach and the mechanism for its implementation, on the one hand, and the improvement of all the elements of the socialist organization of labor, on the other.

Undertaking the solution of a number of important problems needed for the implementation of the decisions of the Eleventh Party Congress and the National Party Conference, the BCP Central Committee and the government of the Bulgarian People's Republic took a number of measures aimed at the more radical improvement of the national economic management system. This was manifested in the application of the new economic approach and the new economic mechanism in all material production sectors and in preparations for its application in all sectors and activities of the nonmaterial area. Displaying a great deal of energy and persistence, the party and the government are resolving and will resolve a number of problems whose solution depends on them. The new tasks call for the development of an atmosphere of overall and systematic application of the economic approach, the total manifestation of democracy in economic management, and the total development of the initiative and activity of production collectives and of those who manage, organize and implement various stages of the overall reproduction process in the country. The legal acts passed and drafted for implementation by the respective state organs lead to steady improvements of the specific mechanisms of the new economic approach, eliminating its weak aspects as they have become apparent in the process of its application so far.

The problem now is to penetrate and study in depth the essense of this new approach and to realize the objective need for its application in order to insure the successful solution of the new problems which arise in the country in all fields of social development. The more the new economic mechanism is improved and creatively applied, and the better the conditions for its overall functioning become, the greater will become the possibilities for economic influence and for intensifying the material interest in upgrading production effectiveness and profitability. Currently such opportunities must be practically utilized and implemented. It is precisely in this area that the role of management and performing economic cadres is of decisive significance. The more skillfully we develop the necessary coordination of the interest of individual producers, production collectives and society, the quicker will the solution of the problems become. The determination and utilization of the intensive factors in the various national economic sectors demand the more skillful use of the potential possibilities presented by the new organization of the wage system. Without this, as practical experience has indicated so far, no major result could be expected. This means that today we must focus our main attention on the improvement and systematic application of the mechanism leading to the implementation of the new economic approach. In turn, this requires that its creative application be undertaken by the entire party and the production collectives. Based on this position in the management of the party, the state and the production process, everyone must make maximum efforts to insure the proper organization and development of the production process, and for upgrading its technical and, particularly, organizational level and effectiveness.

As Comrade Todor Zhivkov emphasized at the January conference with the economic aktiv, the new economic approach must be conceived, practically interpreted and applied as an integral system of economic ways and means and as forms of organization and a mechanism for influence and control covering management, planning, production and distribution. Any attempt to narrow or reduce it to its individual elements or aspects distorts the approach and, essentially leads to its negation. In practice, however, in many areas this important principled concept is forgotten and priority is given to individual elements. This leads to internal contradictions and disproportions.

The advantages of the new economic approach and the new economic mechanism do not appear automatically. We must create all the necessary conditions for their comprehensive funtioning. This applies to the government, to the central planning organs, all other management units, and the managements of economic organizations. As the Central Committee plenum decision indicates, we must intensify even further our efforts to ensure the comprehensive and systematic application of the new economic mechanism at all management levels with a view to the successful implementation to the tasks.

Another decisive means for the successful implementation of planned assignments and for properly welcoming the Twelfth Party Congress is the further improvement of the socialist organization of labor. Great possibilities exist for organizing the work of the labor collectives and for upgrading the creative activity of the working people. Improvements in the organization of labor lead to a more efficient division and cooperation of labor within each labor collective, improvements in the organization and servicing of work places, enchancement of the labor discipline, improvements of working conditions, perfecting of norming as the decisive means for material and moral incentive, upgrading the meaning and attractiveness of the work, and so on. This will create not only more favorable conditions for the development, advancement and better utilization of manpower but of the material elements of the production process as well.

Improvements in the organization of labor do not influence the quality characteristics of the labor tools and objects which determine their potential for obtaining specific results. However, the realization of the potential depends on how it will be used by the subjective factor. This depends to a decisive extent on the improvement and organization of the work. Though its contribution to the improvement of ties and interaction among the various elements of production forces and the influence of manpower on the labor object, the socialist organization of labor plays the role of a relatively independent additional production force regardless of the fact that it performs this role by upgrading the effective functioning of the other elements of the production process.

The brigade organization of labor offers particularly great opportunities under present conditions. For this reason, in the course of the further application of the economic approach, we must complete the improvement of the brigade organization of labor based on brigade cost accounting. The task is to develop a new type of brigade as earmarked in the report submitted by Comrade Todor Zhivkov at the 3 April 1980 National Conference and in the Politburo theses on this matter. It is a question of organizing brigades for a complete technological cycle or

technological phase. They will be assigned the production of a finished item of group of items or complete project. This is necessary, for the more complete a phase or result of the work of a brigade is, the more realistic are the possibilities for intensifying the collective material interest in the final results of the brigade s work. It has been frequently pointed out that the development of a new type of brigade organization is inseparably linked to the problem of brigade cost accounting, the responsibility and interest of the brigade collective, its self support and the achievement of total correlation between the results of the brigade's labor and the wage funds. Economically, brigade cost accounting concretizes the inner cost accounting of even the smallest labor collective. It is an economic method for influencing the working people, for steadily developing and improving the production process, for determining and utilizing reserves, for the efficient utilization of labor facilities and objects and of labor itself, and for achieving high production effectiveness and work quality under specific conditions. The decision of the BCP Central Committee Plenum makes it incumbent upon party and economic organs and organizations to pay particular attention to the comprehensive introduction of the new type of brigade organization based on cost accounting, self support, extensive use of leading experience and a closer connection between science and production. The task is for each brigade to reach a level of utilization of equipment, materials and labor already reached by the leading brigades. This requires the full utilization of the stimulating role of the new organization of wages.

A decisive strengthening of socialist discipline becomes particularly mandatory for the comprehensive improvement of all the elements of the socialist organization of labor in order to resolve the existing problems before the end of the year and successfully begin the Eighth Five-Year Plan next year.

Aware of the great importance of socialist discipline in resolving the problems facing the labor collectives, the BCP Central Committee Plenum faced the respective organs responsible to our society for tis improvement with particularly important requirements. It made it incumbent on all party organs and organizations to insensify reciprocal strictness and responsibility and to reformulate the question of strengthening all forms of management—state, planning, technological, labor and financial. The task is to raise strictness to such an extent as to reach an open clash with anyone who violates it, regardless of his rank, position and job. Only thus, could we properly implement the demand of uprooting all manifestations of bureaucratic implementation of state tasks.

Both economic and administrative methods of influence may be used in the efforts to decisively improve socialist discipline. This does not conflict with the economic approach, particularly when there is a proper combination of both. Wherever the economic approach has not been fully realized and wherever all its elements are not fully applied, administrative methods of influence may be used to a greater extent temporarily. This does not mean that they should become dominant or that possibilities for applying an economic influence should not be used.

When the socialist organization of labor has been improved, another major socioeconomic problem must be resolved; we must reach the socially necessary normal labor intensiveness, at the same time, eliminate inefficient intensiveness in individual production units and economic organizations which work with a great deal

of stress without, however, achieving corresponding economic results. We must bear in mind that raising labor intensiveness to the socially necessary level which, under our socialist conditions, does not exceed the normal limits from the physiological and economic viewpoints, labor intensiveness is a factor for upgrading labor quality and productivity. That is why the establishment of a corralation between the socially necessary intensiveness and socially necessary quality of labor should be one of the main tasks in the efforts to improve the socialist organization of labor. The reaching of a normal, of the the socially necessary labor intensiveness, will provide one of the major prerequisites for the development of the socially necessary working time for the production of a given consumer value. Our society is not interested in letting labor intensiveness drop below the normal, the socially necessary level. It is equally uninterested in the use of more than the socially necessary working time for the production of a given item. Consequently, further improvements in the socialist organization of labor must be used in resolving this problem.

Little time remains until the 12th BCP Congress. However, with a full mobilization of forces and means it would be adequate for reaching the necessary and desired successes. This is entirely possible if the party organizations, the trade unions, the Komsomol, the Fatherland Front and the Bulgarian Agrarian National Union promptly develop an atmosphere of high-level organization, initiative and creativity in the work at each work place and within each labor collective. Initiative, creativity, daring and high-level responsibility displayed by everyone everywhere are decisive prerequisites for the maximum utilization of existing opportunities for the implementation of the planned indicators in 1980 and in the entire Seventh Five-Year Plan. This will be the base for even greater successes before the congress and in the next five-year plan. Unquestionably, this time again the party members and the working people will display the necessary understanding of the stricter requirements which are dictated by the need to ensure the further prosperity of our people.

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DRESDEN BEZIRK RAILWAY PRESIDENT CITES MANPOWER SHORTAGES

Dresden SAECHSISCHE ZEITUNG in German 19 Sep 80 supplement p 3

[Interview with Hermann Demmler, Reichsbahn (Railway System) chief director, president, Dresden Bezirk Reichsbahn Directorate; Meritorious Railway Worker of the GDR; by Joerg Marschner and Ralph Teichmann: "The Railroad and Its New Future"]

[Text] [Question] One frequently hears now the demand that more freight volume be shifted from motor transport to rail transport. Exactly what is behind this?

[Answer] Behind this demand, there are current efforts aimed at effecting—by the most energy-efficient division of labor among the various carriers—a rational utilization of the possibilities offered by the socialist production relations. This year, the Deutsche Reichsbahn [German Railroad System] has already taken over an additional 4 million tons of freight—primarily long-distance transport—in order to reduce motor transport. At the end of August, the volume of freight hauled by the railroad system exceeded by approximately 10 million tons, i.e. a 5.8-percent increase—the volume transported during the corresponding period of 1979. This is a considerable improvement.

During this year's summer holidays, we carried 230,000 children more than in 1979—children who last year had traveled by bus—and we transported them safely to and from their holiday places.

And finally, we have been making arrangements with the travel bureau and the enterprises concerning special trips within the framework of the regular train service offered by us.

[Question] The Deutsche Reichsbahn has always been our largest carrier. But some people have felt that the more flexible and comprehensive motor transport system would be the carrier of the future.

[Answer] At present, the railroad workers of our country are handling almost 50 percent of the total passenger transport and approximately 75

percent of the total domestic freight transport. These shares are being systematically increased. By 1985, the railroad system will have taken over another 10 million tons from the motor transport sector.

[Question] Is this in keeping with the international development?

[Answer] Definitely. The pronounced energy-efficiency of the railroad system is the decisive factor that allows us to speak of a renaissance of the railroad system as it were. In order to transport 1 ton of freight over 1 kilometer, the motor transport sector expends three times as much energy as is consumed by a diesel engine and eight times the amount of energy needed by an electric locomotive. And in comparison to a train pulled by an electric locomotive, the energy expended by a bus is 6 times as high and in a passenger car, even 18 times as high.

[Question] These data alone clearly demonstrate the electric engine's superiority in regard to energy economy. Does this mean we were mistaken in the 1960's, when we opted for an expansion of diesel traction in the GDR?

[Answer] You must view this decision within the framework of its time. There were important aspects that spoke for diesel traction. For one thing, in view of the limitations of the electric energy base at that time, comprehensive electrification of the railroad system was impractical. One should also mention the fact that at that time the enormous investments required for electrification--power lines, pylons, foundations, underground engineering and bridgework, power stations, transformer- and sub-stations--exceeded the capacities of the national economy. Thanks to the republic's increased economic capacity, in a large number of these fields the situation has decidedly improved. And then there is the decisive factor--the oil price rise that began in 1973 and that has been continuing ever since. After all, diesel fuel is obtained exclusively from petroleum. You are probably aware of the fact that on the capitalist markets the oil price has now increased more than 15-fold. Thus electric traction has become extremely attractive; and in this regard, the crucial factor for us was that the electric locomotives operate on energy derived from domestic raw materials, namely from brown coal.

[Question] So we may expect further steps toward electrification?

[Answer] We intend to intensify the high-volume railroad lines so that someday over 20 percent of the republic's railroad network will be operated electrically. Naturally, at this moment I am not yet in a position to present definitive figures for the coming five-year plan, but we are presently discussing electrification of more than 500 kilometers of track. This includes the Dresden-Berlin and Halle-Berlin projects that have already been started and also the electrification of the Berlin-Rostock and Magdeburg-Rostock lines.

[Question] What is the picture in regard to the electrification of the Dresden Railroad Directorate Bezirk [bezirk: GDR administrative unit]?

[Answer] Twenty-one percent of our principal network have already been electrified; by any standard, this is a very high level. Electric locomotives account for 20 percent of our train engines (diesel engines account for 75 percent, and steam engines, for 5 percent) and they produce 50 percent of the transport volume. Surely these are telling figures. We have done a great deal to increase the transport volume and to improve passenger transport: In the Dresden Railroad Bezirk, we not only electrified the Dresden-Schoena and Dresden-Elsterwerda lines in the last few years; since 1970, we have added 222 kilometers of second track, and 93 kilometers of automated lines, thus increasing the transport flow by 20 percent.

[Question] The letters on plan fulfillment that we receive from railroad workers are often concerned with diesel fuel and energy economy. This is hard to imagine: increase the transport volume and reduce input.

[Answer] This year, our plan contingent of diesel fuel is far below that of the previous year. We had planned to reduce consumption by another 5 percent, the equivalent of 2,600 tons. This target has already been exceeded and we have once again raised our sights. I admit that this is really a surprising development. Ultimately, however, this development shows what is possible when our collectives begin to understand complex economic interrelationships and when in our efforts to meet the new requirements we ally ourselves to science.

[Question] Regarding this subject, could you be somewhat more specific?

[Answer] Scientists of the Dresden Transportation College and our own specialists have been developing the so-called energy-optimal operation for the urban and suburban train service. The engine driver accelerates and brakes in accordance with optimal criteria. For this purpose, we developed on-board computers that were first used on the Berlin S-Bahn [city train]. Alternatively, the drivers rely on route diagrams, until they reach the Dresden and Karl-Marx-Stadt areas, where the on-board computers come into play. But even now the motive power input has been reduced by 20 percent. Through thorough coordination with the Councils and through analysis of the actual transport requirements, we have been able to effect a lightening of 145 passenger train, i.e. to shorten these trains by one or two cars, without impairing the quality of travel. We have thus reduced the energy input by 10 percent. Our technologists and engine drivers have been looking for possibilities of improving the utilization of the extensive electrified track network. By means of electric locomotives, we have been able to effect an above-average increase (14 percent) in the train transport volume, which naturally is a considerable savings of diesel fuel.

[Question] Increasing performance while decreasing energy input is only half the picture. How much manpower will be needed to increase the transport volume--this is the other half. Surely this is a complex question, especially since the railroad passenger often has the impression--e.g. at the ticket office or in regard to the cleanliness of the cars--that manpower is in short supply anyway.

[Answer] The Dresden Railroad Directorate Bezirk presently employs approximately 30,000 railroad workers. In regard to the technological requirements, there is a considerable gap. The problems you mention are of great concern to us, too. And yet, this is the situation we are confronted with: We are not likely to obtain more manpower. Where could we obtain these workers? Rather, what will hold true for us, too, is the following: Fewer workers accomplish more.

[Question] So this means that some problems are going to grow more acute?

[Answer] We intend to solve them by stages. In this connection, I will tell you quite frankly that we are also concerned about problems that outsiders are not aware of. For example, there is the safeguarding of operations at the three large classification yards of Dresden-Friedrichsstadt, Karl-Marx-Stadt-Hilbersdorf and Zwickau Central Station. This still involves heavy physical labor that has to be done around the clock and under any weather conditions. It is only through the support of the classification crew of the FDJ [Free German Youth]--that constantly keeps 500 young railroad workers at standby--that we are able to insure continuation of these operations. I am emphasizing this because the classification yards are the heart of the railroad system as it were, determining its pulse rate. For this reason, we are energetically trying to promote rationalization. In the last few years, the Dresden Railroad Directorate Bezirk installed 5,000 switch heaters, 63 modern track security systems and 1,000 track brakes so as to reduce the input of living labor. This year, the plan target stipulates the release of 290 workers and we want to exceed this target and release 370. In 1981, we will put in operation at the Dresden-Friedrichsstadt freight yard a fully automated switching incline for train classification.

[Question] The majority of the people are naturally interested in passenger transport...

[Answer] We are increasingly using ticket printing machines--introducing over 15 units per year--so as to expedite the ticket office service. At the end of October, 100 Hungarian ticket dispensers will be introduced in the intra-city and suburban transport system of the Dresden area, and beginning in 1981, we will be installing the most advanced technology: the Automatic Dialog Ticket Dispensing Machine which was jointly developed by Robotron and the Transportation College and which has already proved a success in Berlin. At the same time, we are trying further to extend time-saving transport-organizational solutions. I am thinking here of travel on

company identification cards (all enterprises with more than 50 railroad users have already been registered), advanced ticket sales, and the so-called kilometer contingent that has been introduced in January 1980. Under the kilometer contingent system, we may give an enterprise a batch of tickets for 5,000 kilometers of travel and the firm then settles accounts once a month. All these measures will improve the situation and enable us to maintain and improve the quality of travel.

[Question] In conclusion, let us ask you a question in regard to freight transport. What do you expect of the railroad system's transportation clients?

[Answer] If the railroad system is to be utilized to a greater extent, we must open up reserves. The problem cannot be solved by putting in operation more freight cars; this would exceed the capacity of the existing network. The only possibility is a more intensive utilization and a quicker turnaround of the freight cars presently available. The crucial contribution--namely the safeguarding of steady operation--must come from us, the railroad workers themselves. But the shortening of the loading and unloading times is a trouble spot as well. Every enterprise must be fully aware of its responsibilities in this regard. We know that it is not always easy to meet or stay well within the deadlines set. With 16 transport clients that are concentrated in large complexes, we are practicing the Soviet Odessa-Il'ichevsk method, which is characterized by close, comradely cooperation between the railroad system and its clients. And even former "problem children" such as the cellulose plants of our bezirk have now become good, reliable partners. They have proved that even difficult problems can be solved. This is what we must expect of all of our transportation clients.

[Question] We thank you for this interview and we are extending our best wishes and bon voyage to the railroad workers and their passengers and transportation clients.

Interesting Facts About the Railroad Track

With 19.4 kilometers of railroad tracks per 100 square kilometers, the Dresden Railroad Directorate Bezirk is one of the most comprehensive networks not only in the GDR, but also in comparison with international standards. The Dresden Bezirk includes: one hundred percent of Karl-Marx-Stadt Bezirk, 50 percent of Dresden Bezirk, 22 percent of Leipzig Bezirk, and smaller percentages in the Gera and Halle bezirks. Length of track: 1,800 kilometers; if the station track network is included, even 4,100 kilometers; a total of 10,500 switches.

Traffic volume: Daily over 900 freight trains and 1,300 passenger trains carrying 350,000 travelers. The Dresden Bezirk contains Bad Schandau Station, the busiest border-crossing point of the DR system.

Special characteristics: The Dresden Railroad Directorate Bezirk contains approximately 30 percent of all tunnels and bridges of the DR track network. The track network includes 108 kilometers of narrow-gauge track and 3 pioneer railroads (Dresden, Karl-Marx-Stadt, and Plauen).

Junctions: Upper Elbe Valley with Dresden as its center; Karl-Marx-Stadt, and the Zwickau area. Large classification yards: Dresden-Friedrichsstadt (the largest in the republic), Karl-Marx-Stadt-Hilbersdorf (the yard located at the highest altitude and thus especially exposed to the weather), Zwickau and Riesa.

Labor force: The 235 administrative departments of the Dresden Railroad Directorate Bezirk employ approximately 30,000 railroad workers. Almost every fourth of these workers is a member of the Communist Party.

Construction has begun on the Niederwartha Elbe Bridge near Dresden; the objective is to install a second track and to return the bridge to full service. With the second schedule change in 1981, the first track will be fully operative. In 1983, upon its final completion, the Dresden-Radebeul line will be closed to freight trains--a measure insuring improved suburban transport. With the aid of the Dresden city fathers, we are continuing the reconstruction work at Dresden Central Station. In return, the DR's Central Track Construction Works will build the trolley line in the Dresden-Gorbitz housing construction complex.

With the second schedule change in 1981, the second track of the Coswig-Meissen line will be put in operation. The bridge construction work in preparation for the construction of a third track between Dresden and Radebeul is likewise intended to improve suburban transport.

During the next five-year plan period, we will begin the four-track expansion of the Dresden Central Station-Pirna line; the bridge construction work has already been started.

In 1981, a transformer station will be put in operation in Bad Schandau--a measure insuring electrification of the international passenger trains traveling through the Upper Elbe Valley. Aside from considerable diesel fuel savings, this project will serve significantly to reduce environmental pollution by noise and exhaust fumes.

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CULTIVATION OF IMPORTANT CROPS DISCUSSED

New Winter Barley Varieties

East Berlin BAUERN-ECHO in German 11 Sep 80 p 7

[Article by R. Schoenleiter, A. Haensel, and Dr G. Kratzsch, Grain Research Institute, Bernburg-Hadmersleben; and Dr G. Szigat, Plant Breeding Institute, Guelzow-Guestrow: "New Winter Barley Varieties To Be Effectively Utilized; Recommendations on Planting Time, Cultivation Suitability, and Necessary Cultivation Technique"]

> [Text] A broader foundation was created for an increase in and stabilization of winter barley yields following the licensing of the winter barley varieties called "Erfa," "Dilana," and "Leuta." In order thoroughly to utilize the yield potential of these varieties, it is necessary, in addition to standard-based cultivation, to observe the cultivation hints specifically worked out for each variety in all of the KAP [cooperative crop production department], LPG [agricultural producer cooperative], and VEG [state farms]-crop production. Cultivation standards for each specific variety constitute cultivation recommendations relating to the special requirements of the individual varieties.

The variety called "Erfa," which was authorized for use in 1979, has already proved its worth during cultivation and already takes up a significant portion of the winter barley cultivation surface. Another two varieties were cleared for cultivation during that year. The "Dilana" and "Leuta" varieties effectively supplement the winter barley assortment. It is possible by growing several varieties to increase the growing security because it has turned out, under differing weather conditions in various years, that special varieties always stood out in the various cultivation areas. The planting of several varieties is urgently recommended in case of a higher cultivation concentration.

Ear Type—Stand Type

Regarding cultivation suitability and cultivation technique, the following hints are given for the new varieties.

The "Erfa" variety is suitable for cultivation on the better D [double seed-drop?] sites as well as the loess and V [prepared mixture?] sites. Here the yields were higher than in the comparison variety according to the results of the Central Variety Management Station. It reveals better resistance which emerged especially in 1980. "Erfa" is an ear type. It achieves its high yields primarily through the individual ear yield. Its tillering capacity is somewhat less than in the case of "Vogelsanger Gold." We must advise against increasing the seed volume to achieve higher stand densities because individual ear development suffers as a result of that. Staying within optimum planting deadlines is very important in achieving high and steady grain yields. The following time intervals are considered to be the best:

D_4-D_6 sites = 10-20 September;

Good soils, such as $loess_{1-2}$, V_1-V_3 sites = 15-25 September;

Less good loess and V sites and foothill locations = 5-20 September.

The "Dilana" variety stood out during the testing years primarily by virtue of its good yield on loess and V sites. For the average of all testing years and places (the experiments conducted by the Central Variety Management Station) were about 10 percent above those of the comparison variety in terms of their yields on the loess and V sites. They thus produced somewhat even better yields than "Erfa." The new variety offers good winter resistance. In terms of this characteristic, it points up a definite improvement compared to all authorized varieties. "Dilana" is an ear type somewhat like "Erfa" and the tillering capacity can be estimated to be the same as that of the other variety. What we said for the "Erfa" variety also applies to the planting time here. The resistance is between medium and good, roughly as in the case of "Vogelsanger Gold" and somewhat less than in the case of "Erfa." To guarantee high and steady yields, it is recommended that the we use Camposan.

The "Leuta" variety proved to be particularly fruitful on the D sites. For the average of all testing years and locations, it yielded 10 percent more grain as compared to the standard and 7 percent more when compared to "Valya." The yields were not as stable on the loess and V sites because their resistance in only average. Their cultivation therefore is recommended especially on D sites. Winter resistance is average and therefore adequate for GDR weather conditions. "Leuta" is a stand type and offers good yields through high stand density. With only average stand resistance, the use of between 3.0 and 3.5 liters per hectare of Camposan in this variety is particularly effective during the sprouting stage for yield stabilization.

The best tilling dates are between 10 and 20 September for "Leuta" on good D locations and between 5 and 15 September on the less good D sites.

All varieties respond to delayed planting with reduced yields (Table 1); the differences between the varieties here are given only in terms of degrees. The belated grain harvest this year calls for a major effort to meet the planting deadlines. Objectively speaking, there will be problems here and there. In order somewhat to reduce the yield losses after optimum planting which can amount to 20-30 kilograms per hectare and day—or considerably more if planting is further delayed than that—it is advisable to increase the seed planting volume by 3-4 grains per day after the optimum deadline (as a rule of thumb).

The seed volume standards, depending upon natural production conditions, are as follows, if the planting deadlines are met:

Favorable conditions:

280-300 germination-capable grains per square meter;

Average conditions:

300-340 germination-capable grains per square meter;

Unfavorable conditions:

340-360 germination-capable grains per square meter.

These recommendations apply to all varieties mentioned; the differences in the tillering in the case of these varieties do not require any differentiated seed volume recommendations.

Table 1. Effect of Planting Time on Grain Yield, Relative Output, Early Planting Deadline = 100; Average 1979-1980, 3 Locations

Planting deadline	Variety				
	Vogelsanger Gold	Erfa	Dilana	Leuta	x
10-15 September	100	100	100	100	100
20-25 September	90	95	92	97	94
5-10 October	84	89	83	90	86

Seedbed Quality

Good-quality seedbed preparation is very important for good winter barley stand development. Delayed planting and deficiencies in seedbed preparation have a particularly disadvantageous effect. The quality of field preparation must not be neglected especially when the planting is objectively delayed.

Weed control is necessary in autumn to utilize the yield capacity of the varieties in the case of winter barley. The selection of herbicides here depends on the rate of weed growth at the particular site or field and is not specifically variety-related.

In summary we can say that three new winter barley varieties are available for cultivation in practice in the form of the "Erfa," "Dilana," and "Leuta" varieties which offer steady yields if the specific cultivation-technique references are complied with.

Winter Wheat Planting Time

East Berlin FELDWIRTSCHAFT in German Vol 21 No 9, Sep 80 pp 425-427

[Article by H. Witt and G. Beese, agricultural specialists, Central Office for Plant Varieties, Nossen; Dr G. Kratzsch and Prof Dr Sc D. Ebert, Grain Research Institute, Bernburg-Hadmersleben; Prof Dr Sc N. Makowski, Plant Breeding Institute, Guelzow, GDR Academy of Agricultural Sciences: "Planting Time for Winter Wheat"]

[Text] Wheat planting at the time that is best in agricultural engineering terms--as in the case of other cereal varieties--essentially determines the yield volume and the yield stability. If we stay within the deadlines that are best in terms of agricultural engineering, the assets used (planting time, fertilizer, stalk stabilizers, etc.) will be utilized most effectively. Late planting will as a rule lead to yield losses even if we use more production resources.

Wheat planting necessarily extends over a longer interval of time due to utilization of a broader range of previous crops with differing and often later field clearance, as well as because of reasons having to do with labor management and farm management. In our assortment here however we must pay attention to the interrelationships between the previous crop, the planting time, and the variety and we thus have an opportunity, through variety selection, to consider the specific conditions and to tap our potential additional yields.

Varieties Respond Differently to Planting Time

It was repeatedly confirmed in experiments lasting several years and in the course of practical experience, that planting time delays caused yield losses. After extensive investigations at the Central Variety Management Station at Nossen and the Bernburg-Hadmersleben Cereal Research Institute, it turned out however on the other hand that there are definite variety differences here. As an essential finding of these investigations which extended over several years and covered a larger number of sites (tables 1 and 2), we must emphasize that the "Alcedo" variety responds to early planting (early to middle October) with a definite additional yield. Considering the planting time experiments conducted in the past with the older varieties, "Alcedo" is the first variety which has

this positive property connected with the utilization of early planting conditions. On the other hand of course the yield losses following planting time delays are greater than in the other varieties, especially compared to the varieties from Mironovka. There is thus no truth to the frequently heard statement to the effect that the "Alcedo" variety tolerates late planting. This is also a misinterpretation of the statement given in the variety certificate. It is noted there that the yields decline after delayed planting also in the case of "Alcedo," but that, because of its high capacity, the variety nevertheless in absolute terms will produce the highest yields.

In the case of the Soviet varieties, the advantages of early planting are not as clear and on good wheat soils they are partly not present at all (see Table 1), especially in the case of "Mironovskaya 808." The reason for this among other things is due to the fact that, after early planting, there is considerably increased danger of crop stand flattening with the attendant negative effects on the yield (Table 2). There is also increased danger of greater infection pressure from base diseases especially after grain [cereals] as previous crops. The varieties from Mironovka are less tolerant regarding this disease; the stepped-up autumn growth of wheat following earlier planting promotes the spread of stem break so that the utilization of the yield potential is restricted. Even after good previous crops, a too early and above all too dense planting proved to have unfavorable effects. In this case the wheat grew too much, the stand density exceeded the optimum for the specific variety and in spite of the use of CCC, one could no longer be sure that major crop stand flattening could be avoided.

The differing reactions of the varieties to the planting time, reported here on a long-term average, were present during all testing years in the same direction although they were somewhat graduated. The results therefore are quite good.

Recommendations and Hints Regarding the Tapping of Yield Reserves

The following recommendations and hints can be derived from the results and experiences gathered.

1. The Soviet varieties must not be planted after summer barley and winter rye as frequently used crops planted before wheat. The earlier planting, which is possible after these previous crops and which is advantageous for yield development, cannot be recommended in these varieties because the danger of plant base disease likewise increases greatly. Under these conditions one must plant "Alcedo"; if this variety is planted at the right time, we can reduce the unfavorable value of cereal crops as previous crops (Table 2). In the case of this variety, which is relatively tolerant toward stem break, it is possible most extensively to avoid damage resulting from the use of CCC and possible fungicide treatment (pest watch) or yield losses resulting from plant base diseases.

Table 1. Planting Time Responses of Winter Wheat Varieties by Site Groups, Grain Yields dt/ha [decitons per hectare] (at 86% Dry Matter)--Average 1975-1979 (Data from Central Variety Management Station)

1 Sorten	2 D-Standorte (n = 12) 6 Aussaat I	II	III	3 Lö-Standorte (n = 24) 6 Aussaat I	II	III	4 V-Standorte (n = 10) 6 Aussaat I	II	III	5 Mittel aller Orte 6 Aussaat I	II	III
Mironowskaja 808	55,3	-2,5	-4,0	54,6	+0,7	+0,5	46,8	+2,0	-0,8	52,4	+0,2	-0,6
Miron. Jubilejnaja	54,7	-2,2	-4,0	54,8	-1,0	-1,2	52,2	-1,2	-3,2	54,3	-1,4	-2,9
Ilistachowka	53,2	-1,6	-3,1	56,4	-1,3	-1,0	51,1	± 0	-2,9	54,4	-1,2	-2,3
Alcedo	57,9	-4,9	-9,1	68,4	-6,0	-7,0	59,8	-4,2	-9,5	63,7	-4,4	-8,4
Almus	55,9	-3,6	-6,6	63,6	-1,4	-4,4	57,2	+0,6	-5,5	59,9	-1,5	-5,3

Key: I--Planting time: early to middle October; II and III Planting time difference with respect to II Planting time; II--Planting time: end October; III--Planting time: mid-November; 1--Varieties; 2--D-sites (n = 12); 3--Loess sites (n = 24); 4--V-sites (n = 10); 5--Average of all locations; 6--Planting.

Table 2. Effect of Planting on Yield from Two Wheat Varieties after Differing Previous Crop (Long-Term Average; Data from Cereal Research Institute)

1 Aussaat	Ilistachowka 2 Ertrag dt/ha	3 Standf. (9—1)	Alcedo 2 Ertrag dt/ha	3 Standf. (9—1)
	4 Vorfrucht Erbsen			
Sept./Okt.-Wende 6	66,2	4,2	71,2	7,0
Mitte Oktober 7	62,0	5,5	70,9	7,7
Anfang November 8	58,3	6,0	65,2	7,4
	5 Vorfrucht Getreide			
Sept./Okt.-Wende 6	54,5	4,5	67,8	6,8
Mitte Oktober 7	55,8	5,2	62,1	7,2
Anfang November 8	53,9	6,2	58,6	7,3

Key: 1--Planting; 2--Yield; 3--Resistance; 4--Peas as previous crop; 5--Grain as previous crop; 6--End September-start October; 7--Mid-October; 8--Early November. Both varieties were treated with 4 liters per hectare of bercema CCC.

Table 3. Average Yellow Ripeness Date of Wheat Varieties as a Function of the Planting Time (1975-1979), Excluding 1976; Data from Central Seed Management Station)

1 Saatzeit	2 Sorten Mironowskaja 808	Mironowskaja jubilejnaja	Iljitschjowka	Alcedo
I	29.7.	28.7.	29.7.	31.7.
II	31.7.	30.7.	31.7.	2.8.
III	1.8.	31.7.	1.8.	3.8.

Key: 1--Planting time; 2--Varieties.

2. Even after the better previous crops, the favorable reaction of the "Alcedo" variety to early planting should be used much more to tap the yield reserves. At this time, the progress of "Alcedo" tilling has fallen considerably behind progress in the varieties from Mironovka, as is demonstrated by a random example taken for the year 1979 (Figure 1). Considering the heavier emphasis on earlier planting of "Alcedo," one must however consider one specific problem. Early planting is also connected with earlier ripening (Table 3). We can then have an overlap of full ripening with the other varieties planted. In the extreme case (early planting--"Alcedo," later planting of Soviet varieties) all wheat stands would ripen at the same time--naturally considering the spread resulting more or less from the location of the fields, the quality of the soil, the previous crop, and the yield level. The heavier emphasis on the early planting of "Alcedo"--on account of higher yields--also in place of the Soviet varieties must thus be implemented while considering the specific farm conditions with a view to guaranteeing a complete harvest during the optimum threshing time span. Here, the overall cereal variety ratio also plays a role in addition to the variety shares in wheat.

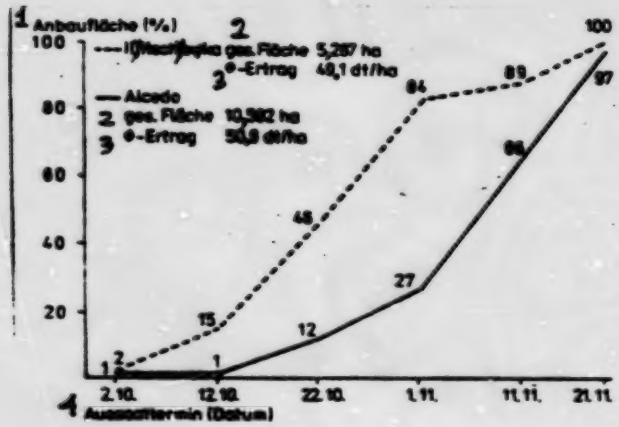

Figure 1. Planting time distribution for winter wheat varieties in Leipzig Bezirk (1979 card file, sites: $loess_{1-4}$). Key: 1--Cultivation area; 2--Total area; 3--Average yield; 4--Planting deadline (date).

3. The fundamental target must be to complete the wheat planting by the end of October. If objectively conditioned planting is still necessary in November, then "Alcedo" should be used in spite of the increased yield decline (except in the northern bezirks). "Alcedo" has the property of tillering relatively rather well even in the late winter. The varieties from Mironovka, in case of an early onset of winter, with a few open time intervals, no longer attain the tillering necessary for at least average yield formation. The relatively minor yield declines shown in tables 1 and 2 for the Soviet varieties in case of late planting must not cause us to draw the wrong conclusions--in the light of practical conditions. During experiments, late planting as a rule is done in a well-outlined seedbed; from that viewpoint, the conditions are favorable. But under practical conditions, late planting is often connected with difficulties in the preparation of a good seedbed.

4. In terms of sites, we have the following planting time recommendations regarding the specific varieties.

The cultivation of Soviet varieties prevails in the norther bezirks. Here they reveal a high output capacity and, after late-cleared previous crops, especially after sugar beets, they attain the highest yields. "Mironovskaya 808" is particularly significant for transition locations (boundary locations) and under late-planting conditions. "Alcedo" in this case has little significance. Cultivation on better soils and planting early in October are recommended here.

In the central bezirks, on good wheat soils, "Alcedo" shoud be given priority in cultivation during the first half of October after cereals and also after leaf crops as previous crops. The Soviet varieties of "Mironovskaya Yubileynaya" and "Ilyichyovka" [Ilyichevka?], when planted during the

second and third 10-day periods in October, offer high and rather stable yields. This planting time interval also applies to the "Almus" variety which is planted on a smaller area. "Alcedo" should be used in case of November planting.

On medium soils, the relationships are similar; the only thing is that in this case the planting time intervals should be started about 5 days earlier. Instead of "Almus" we should plant the "Remus" variety on the D sites.

Timely planting (25 September until 10 October) and good previous crops are prerequisites for successful wheat production on so-called transition soils. That applies to the "Mironovskaya 808" and "Alcedo" varieties which are equally suitable under these conditions.

In the southern bezirks, the Soviet varieties are planted on smaller areas, especially in the foothills. Heavier precipitation here increases the danger of crop stand flattening so that excessively early planting of Soviet varieties entails many risks. Planting between 15 and 25 October after good previous crops will bring the most reliable yields. This time interval also applies to "Almus." Major yield reserves exist here particularly in the utilization of the favorable response of the "Alcedo" variety to early planting during the first half of October.

Summary

On the basis of experimental results and practical experiences, the article spells out planting recommendations for the winter wheat varieties cultivated in terms of site differentiation.

Potato Production

East Berlin FELDWIRTSCHAFT in German Vol 21 No 7, Jul 80 pp 305-308

[Article by Prof Dr Sc G. Ulrich, Potato Research Institute, Gross Luesewitz, GDR Academy of Agricultural Sciences: "Potato Production in 1980—Basis for Development of Potato Industry from 1981 to 1985"]

[Text] The 1980 harvest marks the final accounting for the five-year plan also in potato production. The workers, cooperative farms, and scientists in socialist agriculture have established themselves the goal--by way of preparation for the Tenth Congress of the SED--to confirm progress over the past 3 years through a high yield combined with good qualities and by attaining higher competition targets at the same time to achieve a good starting position for the tasks during the period until 1985.

During the period of time ahead of us, we must in particular try to achieve higher yields in connection with the following tasks:

Keeping our planting potato stands healthy and achieving the planned multiplication of all varieties and maturity groups,

Harvesting strong-skinned tubers coupled with full utilization of weather conditions favorable for field clearing,

Preservation and promotion of quality during harvesting, drying, storage, and processing,

Using waste from edible and planting potato processing and portions for animal feeding with low nutrient losses and low energy expenditure in livestock production.

We must guarantee a supply of higher-quality potatoes through the even more consistent use of scientific-technological progress and lessons learned and we must make an important contribution to the further economic output increase in the GDR.

The planting material used this year on around 500,000 hectares revealed a further improvement in the health index. The measures instituted in recent years, ranging from breeding via preliminary phase production all the way to edible potato fields, for the purpose of stepping up planting material production are now producing initial results. We ought to continue these efforts, but with additional expenditures in the preparatory stage area because the entire country's production will always be decisively influenced from this point.

Good results which were achieved by planting material produced in recent years for some edible potato varieties with a shorter vegetation time must now also be transposed to varieties with a higher dry-substance content and to varieties in the medium-late ripening group. In multiplying the more vulnerable dry-substance-rich varieties we must undoubtedly expend more to reduce tuber damage and to prevent potato black-leg and rot. The advantages to the national economy deriving from the processing of varieties rich in starch however are so great that these extra efforts are fully justified and for example should also be accordingly considered in categorizing the planting material in certain price groups.

The new varieties which were authorized during this five-year plan, such as "Auralia N," "Karpina," "Karella N," and "Karmona N," which are to be followed by additional and better ones, will help us increase the number of varieties worth cultivating, including also those with nematode resistance and edible quality and to close the presently still existing gaps in the assortment. The assortment restrictions which developed particularly over the past 2 years in some enterprises to the use of just two varieties endangers the stability of yields. It is better if each enterprise cultivates between three and five varieties with differing ripening time.

Planting and Care

Planting and care measures were aimed at achieving full and compact stand growth. Now the important thing is to achieve undisturbed assimilation until the ripening of the particular variety. This includes constant stand watching with the required plant protection measures.

The continuation of selection is an absolute critical main point on all planting material areas. It will decide not only the success of all prior efforts to achieve higher multiplication rates but it also influences the immediate yield and the quality of the following growths.

The most important thing here is to reduce viroses and black-leg as well as resulting damage. But we also have every reason to devote more attention to foreign substance growth probably as a consequence of increased full-term growth in recent years. This assignment among other things means that the stands must be inspected during the blossoming time for any deviations in the blossom color or blossom structure and if necessary the stands must be cleaned very carefully.

In coordination with the seed and planting material VEB, it will be possible this year to place the selected perennials according to regulation in the stands if disease carrier control was performed this year during the steps from V3 on down. On these surfaces, we can thus increase the output of the selection forces and that is supposed to have a generally higher health index in the multiplication areas as the final result.

In connection with phytophthora control, we achieved five times the treatment volume in 1979 for the average of the GDR. Nevertheless many enterprises still reveal serious shortcomings which could cause unexpectedly heavy damage in GDR potato production. Every degree of disease coverage contains the danger of massive tuber infections (brown rot) and total coverage. The application of fungicides may be restricted only if the macro-weather situation reveals dryness throughout with a relative air humidity of less than 75 percent (typical in 1976).

Cool summer temperature likewise should not cause any neglectful attitude because they do not rule out an increase in fungi. The important thing is to continue fungicide treatments until 10 days prior to weed-killing or until natural ripening. Otherwise, there will almost always be late infestation which of course would hardly reduce the yield but which does lead to tuber infections. Even small proportions of brown-rot have a serious effect because they facilitate entry into the tubers for the rot virus which is almost always adequately present. The damage situation in case of open-field storage then often no longer reveals the shortcomings in phytophthora control as the real cause.

Depending upon how the weather situation develops, the important thing is to make maximum use of the available sprinkler systems for potatoes from the bud--stage on, based on EDP sprinkler guidance reports. The water

volume per administration should be between 20 and 30 millimeters depending upon the soil type. For phytophthora control, we must, in case of sprinkling, use relatively stable preparations such as bc Maneb 80 or bc Mancozeb 80.

Weed-Killing

Weed removal should restrict virus migration into the tubers, it should deprive weed rot of its development area, it should facilitate fully-mechanized harvesting, and it should guarantee the harvesting of strong-skin tuber portions. These are sufficient reasons for devoting much attention to these measures and further increasing the effectiveness of their implementation. Experiences in recent years showed however that--except for planting potatoes and phytophthora infestation--it makes no sense to eliminate the weeds prior to natural yellowing if the field can be harvested only later than 3 weeks after this measure. In such cases, we are simply giving away any yield increase, the area becomes overgrown with weeds, the screen-action capacity of the soils becomes poorer, and the tubers are infested with Rhizoctonia and again become more vulnerable to rot because of the lenticells. The large proportion of early-ripening varieties greatly increased this discrepancy in some enterprises which we should counteract also through the proper proportion of medium-late varieties. The full utilization of vegetation time naturally is particularly desirable in connection with the production of starch and fodder potatoes.

Earlier we called attention to the possible disadvantages deriving from weed killing which in terms of specific details would be too early; nevertheless, the requirement for an early start of land clearance and for a high clearing tempo in September is very important.

Timely Fully-Mechanized Harvest

Edible potatoes and planting potatoes with excellent quality characteristics can be supplied with the required reliability only if their fully-mechanized harvest is accomplished in combination with higher air and soil temperatures as well as only moderately moist soils. Because such conditions on a long-term average no longer prevail in October, we must continue to aim for the full utilization of the favorable weather intervals starting at the end of August. As the soil temperature goes down, internal and external tuber damage is caused and the danger of rot-causing infections increases. Besides, along with a deterioration in natural conditions, the surface-area yield declines and the land clearing losses go up.

The discovery made by the specialists in Cobbelsdorf-"better to clear the land dry and warm during the night in September than in October, during rain and cold, in daytime"--clearly outlines the problem complex encountered here. A corresponding share of varieties, which can be harvested starting

in the end of August with strong skins, is therefore correct particularly on medium and better soils. The important thing is to make even better use of this advantage also through the brisk organization of the straw harvest and other field work to be done during that span of time so as to achieve a rising quality in planting and edible potatoes for the future.

In this article it is impossible to go into all of the possibilities for the further improvement of the fully-mechanized potato harvest. It seems to me to be particularly important to reduce the severe drop which takes place when the harvest material is placed on transport vehicles. The habbit of not using the regulating possibilities on the elevator and running the whole thing primarily at maximum height adjustment is something that must be counteracted. Another thing that proved to be a good idea was to cushion the bottom of the transport vehicles in one place in order to reduce the severe impact losses at the start of the filling process.

The width of tractor tires during week removal and in front of the harvester combine should not exceed 12 inches and the gauge [wheel base] of the vehicles must absolutely agree with the row interval during the start of clearing operations. We must prevent a portion of the tubers from being damaged even before the actual clearing phase. These obviously natural things do not yet prevail everywhere.

Follow-Up Harvest Treatment

The results of loss and quality tests must therefore immediately be analyzed with the particular work shift and they can considerably help discover and eliminate the causes of losses and damage which may vary greatly in each specific case. But even in case of very precise and conscientious work by all involved, we must at this time still assume that harvest material cleared in a fully-mechanized manner will, as a function of the particular conditions, contain damaged tubers and will be infested with disease viruses. To prevent or reduce any follow-up damage, immediate harvest follow-up treatment is therefore always necessary. This calls for establishing agreement between the daily harvesting volume and the storage quantity and also fundamentally maintaining only temporary storage in field locations that cannot be aired.

It is particularly advantageous if drying and injury healing are accompanied by the most extensive possible avoidance of additional mechanical stresses immediately after harvesting.

Clearing with little damage and good harvest follow-up treatment are very important measures to guarantee a supply with high-grade edible potatoes and supply of efficient planting potatoes. Good drying conditions over the past 2 years--where failures of omission did not always lead to serious consequences--must not lead to the neglect of this important phase in the entire operation. Wherever processing phases must be carried out as a function of the site and the technology prior to storage, particularly

careful handling of tubers is very important. The requirements for maintaining health out in the field and for the weather at harvest time likewise are high in connection with this kind of technology. Where these prerequisites cannot be fully implemented, complete processing of planting potatoes should be combined with a chemical rot control agent or we should at least accomplish harvest material storage in case of varieties which are more difficult to multiply (those rich in starch and the medium-late ones).

To reduce the mechanical stress on the potatoes in combination with the required separation and conveyor processes, good rationalization solutions have been developed in recent times in addition to simple measures for the reduction of the drop height and the necessary cushioning. Here we might include the use of the cable receiver conveyor K-202, for example, at the ALV [Arable Land Experimental] facilities in Kroepelin, Bad Doberan, Bastorf, and Woepkendor. Here we might also mention the separation elements for cutting off excessive admixtures in the ALV facilities at Luessow, Muencheberg, Hinsdorf, and others, as well as simple installations for the preliminary selection and elimination of rotted tubers at the start of processing and conveyor lines, for example in Broderstorf.

Storage and Feeding

Good storage results over the past 2 years show that, thanks to the responsible work done by the warehouse managers and field storage supervisors, we also have an increasingly better control of air conditioning during the main storage phase. The increase in the share of two-channel field storage facilities over the next several years will make ventilation and air conditioning even safer. In achieving more effective ventilation the important thing is also to analyze and broadly apply the positive lessons learned in a series of ALV systems for the utilization of natural air movements in drying and air conditioning. Here we have possibilities for considerable energy savings.

As a result of a further stabilization of yields, larger volumes of potatoes will be available for use in feeding. Direct feeding of fresh-steamed potatoes to hogs and raw potatoes to beef cattle has absolute priority. In this way we can considerably reduce the nutrient losses as compared to conservation and we can save energy and costs. We should above all increase the use of raw potatoes in beef cattle fodder because we can replace about 1 kilogram of grain with 5 kilograms of potatoes. The implementation of such undertakings presupposes that, first of all, all harvested sections will be stored in big field storage units and will be subjected to proper harvest follow-up treatment. Silo storage is a good idea only is we have rot-endangered portions which can no longer be stored out in the field. Overall we can say that, if we use the sorting waste from edible and planting potato production and if we use the portions available for animal feeding, we will be able over the next several years to achieve an effectiveness increase which will be very significant in the national economy and that should persuade us to devote more attention also to the development and supply of the material-technical requirements for potato use in livestock production.

5058
CSO: 2300

DEVELOPMENT, FUNCTION OF AGROCHEMICAL CENTERS SURVEYED

Moscow/Berlin INTERNATIONALE ZEITSCHRIFT DER LANDWIRTSCHAFT in German No 4, Jul-Aug 80 pp 330-332

[Article by Prof Dr R. Wabersich and Dr H. Warzecha, Agriculture and Food Industry College, Bernburg: "Agrochemical Centers—Productive Joint Facilities of the Agricultural Producer Cooperatives (LPG) and State Farms (VEG)"]

[Text] Agrochemical centers (ACZ) were established in the last 10 years to serve agricultural producer cooperatives and state farms of the GDR socialist agriculture as joint facilities providing agrochemical and transportation services. The ACZ's, an element of the SED Marx-Leninist agricultural policy, were established in accord with principles governing Lenin's cooperative plan as a guarantee that each step taken will fit the existing developmental level and have the consent of cooperative farmers and workers. By their nature the ACZ's continue to be joint facilities providing services on instructions of LPG's and VEG's. These remain fully responsible for the entire production process.

Today 256 ACZ's provide highly efficient services to their cooperative partners fulfilling their tasks in the reproduction process by division of labor. Depending on natural and economic conditions the proportion of their contribution to production can amount to a full 15 percent of the work time needed to operate a 5,000-hectare LPG. In individual cases the proportion is even higher. This led to further strengthening of fraternal cooperation between the ACZ's, the LPG,s and the VEG's.

The Concentration and Output Reached

The ACZ's developed from agrochemical brigades and departments of farmers' trade cooperatives. In accord with a resolution of the Eight SED Congress (1971) their establishment was completed in the main by 1975.

[Table on following page]

Table 1. Development of GDR agrochemical centers

	1970	1973	1975	1976	1978	1979
Agrochemical brigades of BHG's[1]	250	82				
ACZ as BHG department	122	64	32	1	-	-
ACZ[2]		186	259	267	257	256

1. Farmers' trade cooperatives

2. ACZ as autonomous joint facility serving the LPG and VEG

The degree of concentration reached by the establishment of 256 ACZ's serving an average land area of 22,700 hectares is sufficient to permit rational organization and efficient discharge of the required services (Table 2). Also here the postulate of the Eighth SED Central Committee Plenum calling for "consolidating accomplishments and raising the output of agricultural enterprises by intensification and mobilization of all inner resources"* has been met.

Table 2. Grouping according to ACZ land areas served in 1979

Land area served in 1000 hectare units	Number of enterprises	Percentage	Land area served Percentage
In excess of 50	3	1.2	2.9
40-50	10	3.9	8.6
30-40	34	13.3	19.2
20-30	101	39.5	41.6
10-20	103	40.2	27.0
Less than 10	5	1.9	0.7
Average 22.7	256	100.0	100.0

* Eighth SED Central Committee Plenum, Dietz Verlag, Berlin, 1978 p 35

In 1978 agrochemical centers provided the following services:

Liming	1.0 million hectares
PK-fertilizing	3.9 million hectares
N-fertilizing	8.2 million hectares

The ACZ's have been providing complete services including liming and the application of phosphate on land areas specified by computerized fertilization guidelines for years. The application of nitrogen fertilizers by ACZ's has reached 84 percent of the existing need.

The second application of nitrogen fertilizer on winter cereals is of crucial importance and is being accomplished by aerial spraying to the extent of 60 percent.

Crop protection services have also increased. In 1978 these services were provided for a land area 8 million hectares in size.

Increasingly, the ACZ's are also providing additional services on order of their partner enterprises such as the removal of solid and liquid manure and composting. Here the LPG's and VEG's proceed on the principle of assigning additional tasks to the ACZ's only if these have the personnel, material, technical and organizational prerequisites for the tasks.

The transportation services provided by the ACZ's, which have developed promisingly since their start in 1972, have continued also in the years 1977 and 1978 (Table 3). These services amount to almost half of all transportation services needed by agriculture and the foodstuffs industry. About 13 tons were transported per hectare of land area served.

Table 3. Development of volume of transportation services provided by ACZ's in percent

	1973	1977	1978
Transportation services rendered to agriculture and the foodstuffs industry	65.0	81.0	82.8
Transportation services rendered to other sectors of the national economy	35.0	19.0	17.2

Economic Results

In every case good cooperative relations between partners have proven to be a crucial prerequisite for economic success. This includes mutual agreement on plans, contracts and prices which are in line with expenditures incurred as well as compensation of the ACZ's according to the quality of the service rendered.

Table 4. Development of selected ACZ economic indicators from 1975 to 1978 in percent

	1975	1976	1977	1978
Per ACZ worker	100	113	124	131
Gross product in million marks	100	116	126	138
Fixed assets in million marks	100		157	172
Fixed assets per worker in 1000 marks	100		127	130
Gross product per worker in 1000 marks	100	102	102	105

In recent years socialist agricultural enterprises have achieved further economies by decreasing expenditures in ACZ's and by limits imposed by state organs on negotiated prices. Table 4 reflects the economic development. The results achieved in recent years, such as the 8 to 9 percent increase in the gross product between 1976/77 and 1977/78, offer clear evidence of increased efficiency in ACZ's. With that no marked increase has occurred in the fixed assets per worker and per 100 marks of gross product in the last 2 years. At the same time the 1978 costs were further reduced compared to those incurred in 1977. The increased efficiency of agrochemical and transportation services rendered is also reflected in the cost effectiveness trend of agricultural production. The following measures contributed to the steady increase in efficiency and especially to cost reduction:

--Preparing rationalization schemes on the basis of experiences gained in advanced enterprises. The introduction of modern means and methods in crop protection such as the establishment of stationary and mobile mixing and filling stations in chemical fertilizer depots and transfer points and the shortening of idling time in transportation by improved coordination of loading and unloading;

--Organizing comparisons between individual enterprises and exchanging experiences aimed at acquainting workers with efficiency standards achieved in advanced enterprises;

--Ensuring the productive use of working time and means of production by shift work, comprehensive mechanization combined with good coordination with the LPG's and VEG's;

--Improving the care for and maintenance of machinery and tools especially by improved protection against corrosion and preventive maintenance of machinery;

--Rewarding managerial personnel and mechanics according to output and quality of work. To that end the Ministry of Agriculture, Forestry and Foodstuffs Industry published guidelines for ACZ's aimed at ensuring high-quality work in the performance of fertilizing and crop protection services.

Intensifying Cooperation Between ACZ's and the LPG's and VEG's

As joint facilities serving LPG's and VEG's the ACZ's have reached a high standard in the use of agricultural chemicals and their application. To that end various forms of cooperation involving the democratic organs of the ACZ, the meeting of representatives and the ACZ board as well as other successful management, planning and organizational methods were developed between ACZ's and the LPG's and VEG's.

The following measures have proven successful:

--Joint coordinated annual planning of the volume of required services;

--Coordination of harvest plans with the planned implementation of services at specified times together with the prearranged use of machinery in shifts and the reciprocal allocation of work brigades, especially of transportation brigades to harvesting teams;

--Operative coordination of implementation of fertilization and crop protection services in joint meetings of ACZ department heads and brigade leaders with LPG and VEG production managers and specialists for fertilization and crop protection with managers of the production enterprises assuming responsibility for the execution of these services;

--Reciprocal coordination of and assistance in the implementation of measures designed to improve the working and living conditions of cooperative farmers and workers.

Analyses of results achieved by advanced ACZ's reveal that cooperation between the ACZ's on one hand and the LPG's and VEG's on the other can be improved in these aspects: Crucial for further improvement of the application of chemical fertilizers is compliance with computerized fertilizing recommendations as the basis for decision-making on the quantity to be applied and form and time of application. The computerized data base has been broadened extending the calculation of optimum quantities of fertilizers to be applied from 53 to 207 crops and plantings. (In the GDR the enlarged computerized project is known as Fertilizing System 79 abbreviated to DS 79). Optimum amounts of fertilizers to be applied are given comprehensively including macro elements, trace elements and manure or separately. This enlarged fertilization project places stricter demands on the reliability of primary input data and requires strict compliance with printout data and their control.

The farming enterprises must introduce a card index for computer use and the ACZ's must keep records of the agrochemical services rendered. In this ACZ work planning groups answering directly to the ACZ manager have proven useful. They consist of 2 or 3 staff members cooperating closely with the LPG and VEG specialists for fertilization and with the crop protection agronomist. These work groups discharge additional preparatory duties bearing on annual planning, concluding of contracts, harvest planning, labor resource planning and other tasks.

In addition to organizing work groups charged with preparing for production other steps can be taken to foster cooperation. The firm allocation of ACZ labor brigades to LPG's and VEG's, compliance with applicable quality standards and

remuneration according to quality of service performed are of great importance for the timely and high quality application of agricultural chemicals. These measures offer a guarantee for cooperation of always the same collectives in a given territory and for joint responsibility of these collectives for stable yields and the simultaneous maintenance of soil fertility and a high standard in tilling soil. Beyond that, improvements in work preparation and organization and the rational commitment of machinery are being achieved by close cooperation of labor brigade leaders.

In this way the ACZ workers become ever deeper involved in the production process of the LPG's and VEG's and discharge crop production chemization duties with increasing efficiency.

8664
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APPLICATION OF SOCIALIST LAW IN COMBINE MANAGEMENT

East Berlin WIRTSCHAFTSRECHT in German Vol 11 No 3, Jul 80 signed to press 2 Jun 80 pp 121-124

[Article by Rudolf Winter, general director, VEB Fritz Heckert Machine Tool Combine, Karl-Marx-Stadt: "Socialist Law as a Management Tool in the Combine." Translations of the official texts of the decrees published in the East Berlin GESETZBLATT issues cited in footnotes 1 and 2 below are available (including West German commentaries) in the following JPRS issues of this series: 1) 75361, 24 Mar 80, No 1774, pp 44-75; and 2) 71092, 10 May 78, No 1748, pp 38-50]

[Text] Demands upon the productive capacity of the GDR for the 1980's were formulated at the 11th and 12th plenary sessions of the SED Central Committee. Because of the foreign economic burdens and other obligations incurred by our republic as the result of the international situation, any social progress requires a substantially higher rate of growth of labor productivity and effectiveness than was the case at the start of the 1970's. It is therefore necessary to be more consistent in pursuing the path of intensively expanded reproduction and to take full advantage of qualitative economic growth factors. It is mainly a question of making use of the fundamentally new opportunities which the results of scientific-technical progress and the much larger material-technical base are opening up in new dimensions in the area of production growth.

As a result of the SED Central Committee's exchange of experiences with combine general directors and Central Committee party organizers, held in Gera from 19 to 21 March 1980, the workers at the VEB Fritz Heckert Machine Tool Combine in Karl-Marx-Stadt have pledged to manufacture an additional 2 days' worth of usable end products this year and to raise labor productivity to 109 percent compared to last year, effectiveness to 120 percent and industrial goods production to more than 110 percent.

Organization of Cooperation Relations Within the Combine

The Decree on the State Combines, Combine Enterprises and State Enterprises,[1] dated 8 November 1979, provides the combines with great opportunities to make more complete use of the qualitative factors of economic growth and to increase output. This decree constitutes the basis for regulations designed to implement practical, specific management and planning decisions in the combine and to organize economic

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1 GESETZBLATT, Part I, No 38, p 355.

relations within the combine, including the establishment of more effective chains of cooperation while minimizing administrative costs.

Thus, management decisions by the combine general director regarding setting up chains of cooperation to rapidly increase the production of export-intensive machines and installations are supported by commercial contracts based on the combine ordinance governing the regulation of cooperation relations within combines.

The high degree of interdependence among combine enterprises made it necessary to draw up and issue internal combine regulations that are to be taken into consideration when establishing contractual relations. They take into account the combine's specific situation and contain special regulations covering general commercial law as well as detailed regulations relating to specific branches.

The division-of-labor process that has been developing gradually since formation of the combine has been a major contributing factor in increased combine production and in the stable fulfillment and overfulfillment of the tasks assigned by the state. This process resulted in experiences that were taken into consideration in the continued work on commercial law and also, to a certain extent, in the drafting of the combine decree.

Our ordinance on cooperation within the combine regulates the planning and organization of delivery relations among combine enterprises in terms of scheduling and sets some supplementary regulations to the Contract Law which apply within the combine. For instance, introduced into the complex of legal consequences for deliveries that do not meet quality standards have been different stipulations regarding the right of repair by the recipient as well as the short-notice assessment and elimination of deficiencies.

Also new is the stipulation that obligates the supplier in the case of reported total rejects to assess the faulty product within 20 working days. If this is not done, the claim is considered acknowledged and the purchaser has the right to scrap the material. This not only exerts economic pressure on the supply side, but it also assures a swift exploitation of secondary raw materials.

Although the sanction regulations contained in the combine ordinance are based on the general provisions of the Contract Law and its implementing decrees, it does prescribe through standard combine stipulations that penalties not be assessed in the case of minor contract violations. The aim is to simplify and reduce the cost of the legal work in those cases in which the effects resulting from inadequate fulfillment of contracts are not serious.

Thus, neither party charges penalties if they do not exceed a value of M 50. Penalties are also not assessed in the event of default in overrunning the delivery date by up to 30 calendar days, or in the event of defective deliveries if the costs of repair by the purchaser do not exceed 3 percent of the value of the product.

The ordinance provides that the general director has the right to decide contract disputes that cannot be settled by the enterprise directors involved.

In the area of metal-casting cooperation within a combine, a number of special regulations were established that resulted from the peculiarities of this kind of

production and the extensive reciprocal relations and obligations which it requires.

Production Growth Through Effective Management Organization

The expanded rights and duties which the combine decree grants to the combine general directors make it possible to use to even better advantage the qualitative factors that lead to a high level of production growth. As a result of the opportunities provided by the combine decree to employ control enterprises, the VEB John Schehr Machinery Factory, Meuselwitz, has been assigned control functions in the field of foundry production. This VEB's foundry is one of the largest and most modern in Europe, putting out 35 kilotons of cast iron products annually. The buildup of this foundry has also made for an increased scientific-technical potential which, by virtue of the control function, is now of direct benefit to the other five foundries of the combine.

Some of the responsibilities of the control enterprise:

Development of long-range plans for research, technology, rationalization and development of the material-technical base, including decisionmaking proposals;

Coordination of studies in the area of technological research and development;

Conduct of technological research experiments within the technological testing department;

Generalization of progressive experiences in the field of technology and industrial organization;

Improvement of index figures on economy in the use of materials;

Coordination of repair and maintenance capacities for foundry equipment;

Preparation and implementation of investments for foundry equipment;

Manufacture of process-related rationalization means using the division-of-labor process;

Conduct of enterprise comparisons (foundry and sectors producing die castings) and analyses as well as their evaluation in competition;

Drafting of plan proposals to ensure foundry production that meets demand (optimization of product mix, classification of consumers according to capital shares, coordination with the account balancing organ and supervision of price coordination operations);

Development of plan proposals for providing die castings to meet demand (coordination and specialization of all die-casting capacities in the combine, drafting of proposals for production cooperation and supply relations with partners outside the combine).

Resulting from this new management organization at the VEB John Schehr Machinery Factory, Meuselwitz, are the following effects:

A process-related management now exists for machine construction, with above-average growth in its share of machine tools for specific customers, especially for NSW [nonsocialist monetary area] export, and for the foundry, with its HAN [main contractor] function for the comprehensive remodeling of equipment and its control function for foundry operations in the combine. This creates better accord between the workers' readiness to produce and the prerequisites of management;

Management can influence more effectively the development of science and technology as well as conversion of the results into increased production in the enterprise's foundry process;

There can be a more comprehensive assurance that material interest as well as personal responsibility for capital and capital goods will prevail and continue to develop.

Long-Range Assurance of Subcontractor Deliveries

In addition to the regulation of economic ties within the combine, also a factor in assuring production growth is a consistent and comprehensive perception of the possibilities and obligations of commercial law involved in the relationships of combine enterprises with their cooperation partners outside the combine. A combine guideline has been issued covering the interpretation and application of provisions contained in the Decree To Assure the Uniformity of Plan and Contract in the Conclusion and Fulfillment of Commercial Contracts,[2] dated 26 January 1978.

The guideline stipulates the critical subcontractor sectors with which long-term contracts are to be concluded, so that the most important subcontractor deliveries are assured up to the time of the respective plan justification session.

The technical directors were made personally responsible for seeing that this task is carried out; the responsibility may not be delegated to others.

Influence of the Law on Increasing Scientific-Technical Progress

New and more advanced products must help determine the highest scientific-technical level while production is going on. Entrusted with a great responsibility in this regard is the machine tool construction research center, as a combine enterprise charged with gaining a scientific-technical lead for the combines of the industrial branch in critical cross sections.

In accordance with the importance that lies in the work of the research center to the faster exploitation and conversion of the results of scientific-technical progress, there is strict observance of the commercial law regulations governing the division of labor between the research center and the combine's enterprises. The commercial contracts between this center and the enterprises are to be made explicit by the addition of definitive terms of reference manuals. The combine's director of product development personally sees to it that the coordination of these commercial

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2 GESETZBLATT, Part I, No 6, p 85.

contracts between the enterprises and the research center is done on the basis of the predetermined material, thematic and time requirements that will open the door to additional combine results leading to a large increase in production.

The close contractual interdependence among researcher collectives from the research center and development collectives in the enterprises has been producing creative teamwork.

Important criteria for the required degree of innovation of the products are the content and the number of patents issued for the new product. Its established utility features must be of critical relevance to the proposed circle of consumers.

For systematic and active work with patent rights, the terms of reference manuals must list objectives which derive from the technical and economic parameters of the established utility features of the products. In determining management priorities for science and technology, the enterprise directors must advance the creative work of the inventors, guide their initiative toward economically productive scientific-technical tasks and be aware of their responsibilities when applying state regulations with reference to work with inventions.

They are receiving effective support in this work from the patent rights commissions of the combine, the research center and the combine's export enterprises.

Fundamental combine regulations exist in the following areas for management of the research and development process:

Planning, implementation and verification of Science and Technology Plan items;

Science and technology information system.

The combine ordinances contain illustrations of the required work flows and represent a permanent working basis for the combine's research and development director in his monthly meetings with the directors for research and development of the combine enterprises. In addition, combine guidelines have been developed for special problems — on implementing the resolution on measures designed to support the work of inventors, for example.

The management decisions made by the general director, the enterprise directors and the technical directors are basically derived from long-range documents. This facilitates the precise translation into commercial law of these kinds of management decisions in the commercial contracts covering scientific-technical services between enterprises, between the enterprises and the research center and between the combine and its scientific cooperation partners, particularly the Karl-Marx-Stadt Advanced Technical School.

The long-range plan on combine development up to 1985 contains objectives aimed at production development through the intensive expansion of production.

A long-range three-way scientific cooperation contract exists between the combine, the Karl-Marx-Stadt Advanced Technical School and the research center. The contract is designed to assure lead time in special fields of science and technology — like automation technology and technological research.

The aforementioned major increase in research results and their rapid exploitation internationally are forcing the VEB Fritz Heckert Machine Tool Combine, too, to steadily raise the level of its scientific-technical work.

We are assuming that we can still do a great deal to accelerate the pace of scientific-technical progress by improving management work. Every manager in the combine and in the enterprises has the obligation to continue to improve everyday managerial and organizational work through a precise knowledge and proper application of state rules of law and internal combine regulations. The skills needed for this are taught by means of the exchange of experiences in management meetings and with selective training courses.

Clear Contractual Relations for Export

The large percentage of exports in the combine's total output of machine tools requires a precise structuring of foreign economic relations. Making up the basis for management cooperation between the Industry Ministry's own WMW [Machine Tools and Tools] Export/Import Foreign Trade Enterprise [AHB] and the combine is a production cooperation contract which, because of the special characteristics of the products, includes stipulations that are binding upon the combine's enterprises in all matters, starting with joint market research and market canvassing and going on through the conclusion of contracts and delivery all the way to service.

This immediate cooperation regulated by contract has proved successful. The correctness of the arrangements made under the cooperation contract is confirmed in part by the fact that joint efforts made it possible to achieve an average increase in exports to more than 200 percent in the period between 1976 and 1979.

Cited as the most recent example of the results that can be obtained from close cooperation between the WMW Export/Import AHB and the combine is the contract on industrial cooperation between the GDR and the Republic of France involving the FHK [Fritz Heckert Combine] and AHB and the PSM Lin6, signed for the GDR by the general directors of the AHB and the combine on 14 May 1980.

In an important area of the export business, that of supplying customers with spare parts, the combine is a direct partner of the foreign customer and user as a result of the authority granted it by the WMW AHB to conduct its own business operations.

Not only does this direct contact assure effective short-notice service, but the experiential feedback gives us the chance to draw conclusions as to design and technology so that further production improvements can be made without loss of time.

The combine sees as an essential basis for its stable production development the purposeful expansion of socialist economic integration by CEMA member nations and the SFRJ [Socialist Federative Republic of Yugoslavia]. As a result of planning coordination among the CEMA member nations, we have seen and are seeing the emergence of coordinated main lines of development for the structure of production according to the machine tool construction requirements of the participating countries. The multilateral agreements on specialization and cooperation in production that have been or are yet to be concluded strengthen the export lines that have emerged from the ongoing traditional goods exchange between the countries.

The multilateral agreement concluded for the 1981-1985 period covers around 75 percent of the combine's product nomenclature and about 60 percent of its production volume.

Cooperation is being expanded further by means of bilateral relations that concentrate on research and assembly cooperation in particular. For example, as the result of an agreement between the GDR minister for machine tool and processing machinery building and his counterpart in the USSR, a fruitful exchange of ideas in the field of design and technology evolved on a contractual basis with the Ivanovo Production Association for Heavy Machine Tools. This cooperation has progressed so far at present that specific development tasks for separate sectors are being worked out jointly. The advantage of this cooperation consists in a saving of development capacity, in the assurance of an increase in utility value and in increased production.

As a consequence of these experiences and findings, cooperation on a contractual basis is being expanded to include other fields and other enterprises in the USSR.

Also in existence is a contract with the TOS Kurim machine tool enterprise in the CSSR, one which regulates cooperation in the area of assemblies for special machines and assembly lines; a production cooperation contract concluded in 1979 perpetuates this agreement. This cooperation has produced and is still producing direct savings in development capacities, including the no longer necessary engineering services for the assemblies delivered by the partners to the contract.

For a long time we have had a cooperation contract with the SFRJ for the production of milling machines, including assemblies and fittings; this contract assures a stable production of end products in the combine and an increasing volume of exports to the SFRJ.

Organization of Legal Work

The use of law as a management tool requires not only extensive knowledge — law propaganda has long been a permanent part of our work in conveying this knowledge — but also a system of verifying whether the law has been put into practice. In accordance with a directive from the general director, action plans for legal work and verification have been instituted in all combine enterprises; these plans are amended regularly.

Managers at the respective levels are responsible and accountable for the enforcement of socialist law and the combine's ordinances and regulations based on this law. The general directors and directors are supported in this by their legal advisors, but also by the head bookkeeper, the state TKO [Technical Control Organization] manager and the inspectorate manager. Different aspects of the application and observance of law are also examined in conjunction with external control organs — for example, the State Financial Auditing Commission, the ABI [Worker and Peasant Inspectorate], the Office for Prices and the State Contract Court. Legal verification is an inseparable part of the regular management work performed by the general director, particularly in the coordination meetings, meetings with the technical directors, the combine management's monthly sessions with enterprise directors, reporting sessions and written reports. On the one hand, we derive from the determinations made and information gathered on these occasions suggestions for further

improving our work with the law and setting it down in ordinances, guidelines and directives; on the other hand, violations of the law lead to educative — if necessary, to disciplinary — measures.

The use of law as a management tool at the VEB Fritz Heckert Machine Tool Combine has contributed to the all-around assurance of legality and to effective support for the development of production.

7458
CSO: 2300

CROP, WEATHER REPORT PUBLISHED FOR SEPTEMBER 1980

East Berlin FELDWIRTSCHAFT in German Vol 21 No 11, Nov 80 p 528

[Article by Dr D. Krumbiegel, GDR Meteorological Service, Central Weather Bureau, Potsdam]

[Text] The Weather Picture in September 1980

Only for short periods did daily air temperature averages deviate markedly from the norm. There was relatively little rain in the first 5-day period and starting at midmonth.

The beginning of the month was from 2 to 4K below normal and the period from the 4th to the 8th slightly above. Thereafter, subnormal air temperatures were minor. From the end of the second to the middle of the third 10-day period, daytime averages mostly ranged from 2 to 4 above normal, in the southern part, around the 22nd, up to 5K above normal. Subsequently, temperature conditions were normal. During the mild weather periods, daytime maxima ranged between 20 and 25°C. For the rest of the time, maxima mostly stayed below 20°C, during a few days in the third and sixth 5-day periods regionally even below 15°C. Nighttime ground minima dropped below 5°C only on the 2nd and 3rd and around the 28th. Early local frosts down to -2°C occurred on those days. There was abundant sunshine in the first 10-day period, the period from the 15th to the 22nd, and the days around the 27th. Daytime relative air humidity averages mostly stayed above 70%. The rain was heavy on the 5th (northern part 10 to 25 mm), the 10th (around 5 mm), and the 14th (5 to 10 mm, in some places up to 25 mm). Some stations in Halle Bezirk recorded as much as 20 mm on the 23rd, Sonneberg, 36 mm. On the 25th, the soutern part in many places recorded from 5 to 15 mm on the 25th, the Erz mountains, from 15 to 30 mm.

Temperature Data for September 1980 According To the Chief Climatological Office, Potsdam

1. Monthly Air Temperature Averages and Deviations from the Norm

Schwerin	14.0°C	+0.4K	Erfurt	14.1°C	+1.2K
Neubrandenburg	13.5°C	0.0K	Leipzig	14.4°C	+0.8K
Potsdam	14.1°C	+0.3K	Goerlitz	13.5°C	0.0K

2. Average Precipitation According To Bezirks

Rostock	48 mm - 91%	Halle	38 mm - 91%
Schwerin	61 mm - 127%	Erfurt	53 mm - 106%
Neubrandenburg	33 mm - 72%	Gera	45 mm - 88%
Potsdam	35 mm - 80%	Suhl	45 mm - 79%
Frankfurt	34 mm - 79%	Dresden	68 mm - 117%
Cottbus	61 mm - 130%	Leipzig	53 mm - 113%
Magdeburg	48 mm - 109%	Karl-Marx-Stadt	67 mm - 105%

3. Evaporation Potential

Northern bezirks	40...50 mm
Central bezirks	40...45 mm
Southern bezirks	35...45 mm

Soil, Crop and Labor

Surface soil temperatures dropped in the transition from the first to the second 10-day period. It warmed up once more at the 20th but cooled off in the last 5-day period. The 15°C-limit was crossed on the 25th or 26th, circa 10 days later than what has been the average over many years. In the subsoil there was a slow temperature drop in the first two 10-day periods which, after a temporary warming period, continued in the fifth and sixth 5-day period. By the end of the month, the values generally recorded, at a 50-cm as well as 100-cm depth, ranged between 13 and 15°C. The water level mostly dropped. Except for the plains in the bezirks of Halle, Erfurt, Leipzig and Magdeburg (the southern part), where on the 30th less than 50% of the useable field capacity was recorded, values ranging between 50 and 80% of useable field capacity (below the turf) clearly showed above-normal ground water volumes. Even if one must assume lower values for agricultural cultures due to a great water consumption, this situation lets us infer that the ground water volumes will be rapidly and completely replenished. Its difference from field capacity ranged from -35 to -95 mm widespread, in the southwestern plains from -80 to -145 mm, however. average precipitation volumes from November to February in the last-mentioned area ranged around 130 mm, elsewhere, mainly between 140 and 180 mm. Soil climatic conditions for nutrient mobilization and composting were favorable. In some areas they were hampered by lack of humidity and, at the end of the month, by the cooling of the ground. Most of the time it was easy to traverse and work the ground. Some hardening was noticed on heavy soils in the southwest, and some lumps formed in some areas in the northern bezirks.

The ample water supplies in the most of the GDR, the temperature conditions being so favorable, made for fine growth in the forage crops, beets and late vegetables. Summer catch crop made up for the backlogs due to late cultivation. Unusually favorable conditions made the winter crop come up. Sowing having been expert, there were only from 4 to 7 days for the cultures to germinate. This made up for the disadvantages resulting from exceeding optimum seeding schedules due to belatedly clearing off the previous crop.

The fine growth of forage crop gave us a third cut on most of our pasture land. Weeds continued to have a heyday. They intermingled with the grain on site. The root crop had a case of belated weed formation, which brought interference with the digging of, mainly, the potatoes due to premature phytophthora. In the northern bezirks, the weather facilitated tumerous growth in the barley and winter rye. The mostly high night temperatures up to the middle of the third 10-day period are likely to have led to higher respiration losses and thus to a relatively low net assimilation rate. The formation of nutrients continued to be under the disadvantage of little sunshine at times. Though the phenological delay typical of the current year came close to normal, considerable delays in ripening could be observed for varieties with great heat requirements, especially the corn and the tomatoes.

There was interference with field work due to rain which was widespread from the 9th to midmonth and regional in the southern part of the GDR around the 24th. For the rest of the time, conditions were mostly favorable. In the central and souterh plains, the grain harvest was by and large completed within the first 10-day period, in the northern bezirks, except for barley, by midmonth, and in the mountainous areas by the end of the month. Roughly 50% of the potato digging was completed by the end of the month. The silo corn harvest was held back in many places to obtain a better degree of ripening. In the winter catch crop and winter rye, seeding schedules could often not be observed because of the belated clearing of the acreages of the previous crop. Drying conditions were quite good, mainly in the first 10-day period. Thereafter, the time available for concluding the straw harvest and ensilage production was considerably diminished by dew formation and relatively high air humidity. The same was true for the harvesting-threshing of grain cereals. There was hardly any further need generally for additional water supplies. In the southwestern plains up to midmonth there existed still possibilities for an effective application of irrigation.

Meteorologial Prcjections for Farming in November 1980

Given the mostly above-normal water level, fully completing the fall furrow is the principal condition for reducing weather-conditioned disturbances of the 1981 spring cultivation.

5885
CSO: 2300

DECREES ON OPERATION OF SMALL RETAIL SHOPS PUBLISHED

Budapest MAGYAR KOZLONY in Hungarian No 72, 30 Sep 80 pp 1000-1005

[Decree No 38/1980 (9-30) of the Council of Ministers on Contractual Operation of Certain Retail Shops and Restaurants]

[Text]

Article 1

Economic organizations (Civil Law Code, Article 685 (c)) shall be permitted to operate retail shops and restaurants on a contractual basis (hereinafter called 'contractual operation') in areas defined by the Minister of Domestic Trade.

(2) The economic organization shall sign a contract with the private party endeavoring to manage the establishment on a contractual basis (hereinafter called 'manager') according to the provisions of civil law. The contract shall be in writing and its duration shall not exceed five years.

Article 2

(1) The economic organization must sign a contract with the party offering the most favorable terms at a publicly announced competitive bidding.

(2) Contracts for contractual operation may be signed only with persons who

a) are employees or members of the economic organization (hereinafter called 'employee');

b) have suitable technical qualifications and

c) are not subject to employment prohibitions defined in separate legal provisions.

(3) Contracts may be signed with at most 5 persons forming an association under civil law. In this case it suffices for one person only to possess technical qualifications. The contract governing the association must define the exercise of managerial rights.

(4) One person (including a member of an association under civil law), his or her close relative living in the same household (Civil Law Code, Article 685 (b)) or spouse can participate in at most one contract for contractual operation of a shop.

(5) The manager shall not transfer to any other person the rights to operate the establishment.

Article 3

Purchase and marketing of goods, restaurant production and service, inventory management and use of assets are organized and directed in an autonomous fashion by the manager who bears all responsibility and risk in the name of the economic organization. The manager shall pay a fee, set by the contract, to cover the costs and profits of the economic organization.

Article 4

(1) Fixed assets necessary for the operation of the establishment are provided by the economic organization for the use of the manager for the duration of the contract.

(2) The manager shall be responsible for the care, maintenance and needed repairs of fixed assets.

(3) Replacement or renovation of fixed assets worn out in the course of normal use is the responsibility of the economic organization.

Article 5

(1) The economic organization shall make available to the manager revolving assets defined in the contract. The manager may purchase revolving assets from the economic organization and shall pay a use fee for the use of revolving assets not purchased.

(2) For the duration of the contract, the manager may use revolving assets, including non-purchased assets, at his own discretion. Replacement of worn-out revolving assets and additions to revolving assets shall be paid for by the manager.

Article 6

The manager must start the operation of the establishment no later than the deadline set by the contract.

Article 7

For the duration of the contract, the employment of the manager is suspended. For purposes of the provisions of labor laws, the duration of such suspension is considered as being employed.

(2) The amount to be considered as the basis for calculating social security and pension contributions of the manager must be set in the contract on the basis of the average earnings of those working in identical or similar positions.

Article 8

(1) Workers employed in the establishment are employed by the economic organization.

(2) The number of workers employed in the establishment and the upper limit of the yearly or monthly wage bill used by the establishment must be defined in the contract.

(3) The manager may exercise the rights of the employer within an area defined by the economic organization. With the exception of temporary employees, the economic organization may not transfer the right to establish or terminate employment or to discipline or to impose monetary penalties. When the manager does not wish to use an employee's services in the establishment and presents a justified request to that effect, the economic organization must terminate employment at the establishment in accordance with the provisions of labor law within the deadline set for notice of termination.

Article 9

The manager is free to dispose of any income generated by the establishment left over after fulfilling all obligations arising from legal and contractual obligations. He may transfer any part of such income to employees of the establishment over and above the wages set by the employment contract. This shall not be considered as wage payment.

Article 10

The economic organization may demand a security deposit or other auxiliary obligations to secure the contract (Civil Law Code, Chapter 23) in order to secure its claims against the manager under the contract.

Article 11

The manager shall pay taxes in accordance with rates set in separate legal provisions.

Article 12

The contract expires
a) at the end of the expiration period set in the contract;
b) by termination;
c) upon the death of the manager.

Article 13

(1) The manager may terminate the contract immediately if he is unable to fulfil his contractual obligations due to the deterioration of his health.

(2) The manager may terminate the contract upon three months' notice if the economic organization fails to fulfil its contractual obligations in spite of a request to do so, or if his living conditions have changed to such an extent that he is no longer able to fulfil the obligations agreed to.

(3) The economic organization shall terminate the contract immediately if new conditions arise which would exclude the signing of a contract (Article 2 (2)).

(4) The economic organization may terminate the contract immediately if the manager
a) fails to begin operation of the establishment by the date set by the contract;
b) is in serious conflict with legal provisions and regulations applicable to the operation of the establishment;
c) fails to fulfil his payment obligations to the economic organization or his tax liabilities by the official deadline.

(5) The economic organization may terminate the contract on three months' notice if a manager fails to fulfill his contractual obligations other than those listed in Section (4).

Article 14

(1) At the termination of the contract the parties shall settle their accounts.

(2) The economic organization is required to buy back all revolving assets fit for normal use or sale.

Article 15

This decree becomes effective on 1 January 1981. Its implementation is the responsibility of the minister of domestic trade.

(signed) Gyorgy Lazar
Chairman of the Council of Ministers

[Decree No 14/1980 (9-30) BkM of the Minister of Domestic Trade on the Implementation of Decree No 38/1980 (9-30) MT of the Council of Ministers on the contractual operation of Certain Retail Shops and Restaurants]

[Text]

In agreement with the ministers involved, the heads of organs with a nationwide jurisdiction, national representative organizations of cooperatives and the KPVDSZ [Trade Union of Workers in Commerce, Finance and the Catering Industries], in the interest of implementing Decree No 38/1980 (9-30)MT of the Council of Ministers on the contractual operation of certain retail shops and restaurants (hereinafter called 'D'), based on the authorization contained in Article 15 of said decree, I order the following.

(To Article 1 of D)

Article 1

(1) The number of employees in a retail establishment to be operated on a contractual basis cannot exceed five; in restaurants serving hot food, twelve; in other catering establishments, six.

(2) The ceiling on the number of employees set in Section (1) must be calculated without regard to the number of shifts, not including musicians, performers, temporary workers or apprentices.

(3) Commission stores, pawn shops, pharmacies, catering establishments located in hotels and kitchens or cafeterias at workplaces or children's establishments may not be operated on a contractual basis. Shops operating on a contractual basis may not sell watches, jewelry, vehicles, hunting equipment (weapons or ammunition). Furthermore, such stores may not sell furniture, photographic and optical equipment, telecommunications equipment or electric household appliances with a consumer price above 1,000 forints.

(4) Establishments to be operated on a contractual basis shall be designated by the enterprise director, governing body of the cooperative or the board of directors of the economic association.

(To Article 2 of D)
Article 2

(1) The economic organization shall advertise the transfer of a designated establishment to contractual operation in the central or megye press and by other means at least 30 days before the public tender, The economic organization is required to provide written information to interested parties regarding receipt and turnover of the establishment during the previous year, the value of assets within the establishment, the number of employees, the minimum size and conditions of the fee as well as the minimum size of the security deposit or other auxiliary obligations to secure the contract.

(3) The economic organization must sign a contract with the participant at the public tender willing to pay the highest fee. In case of equal offers, preference must be given to those willing to purchase a greater percentage of revolving assets. In case of equal willingness to purchase, preference must be given to the manager of the establishment at the time of the publication of the tender. Lacking such an applicant, preference must be given to employees of the establishment or enterprise. No public tender is necessary if there is on y a single applicant.

Article 3

(1) Applicants not employed by the economic organization at the time of the publication of the tender can participate in the public tender provided that they undertake to establish an employment relationship with the economic organization at the time of the signature of the contract.

(2) For purposes of implementing this decree, suitable qualifications may consist of a master's certificate, journeyman's certificate, skilled worker's certificate or equivalent as well as 3 years of experience as store manager, deputy manager or salesperson (except in the case of catering establishments serving hot food and meat stores).

(To Article 3 of D)
Article 4

(1) The fee includes

- social security contributions to be paid on behalf of the manager and employees of the establishment as well as pension contributions to be paid by the manager;

- depreciation costs of fixed assets within the establishment calculated on the basis of depreciation rates defined in the Standard Amortization Schedule and use fees for fixed assets belonging to the economic organization;

- rent for store space or area;

- a contribution to the profits and general costs of the economic organization.

(2) The fee may cover other expenses based on mutual agreement between the economic organization and the manager.

(3) Costs not included in the fee are the responsibility of the manager, with the exception of those defined in Article 4 (3) of D.

(4) The contract may specify a varying annual fee as well as varying annual sales receipts. The percentage of monthly fee payments may also vary from time to time.

Article 5

(1) The manager may purchase goods within the domain of his business freely within the framework of legal provisions regarding the marketing of products, at conditions identical to trade organizations, and he may sell them to anyone for cash.

(2) The manager must document all purchases with bills, check stubs or shipping invoice. If goods are purchased from private parties then the purchase price must be certified by a document (bill) or, if this is not possible, with an affidavit specified in the legal provisions regarding general income tax.

(3) The price of goods purchased for other than cash from other economic organization based on a certificate issued by the manager, unless there is an agreement to the contrary. The certification method is defined by the economic organization. The price of such purchases must be paid by the manager no later than the deadline set by the economic organization.

Article 6

(1) The manager of a catering enterprise must prepare a price calculation for products sold within the establishment in accordance with regulations concerning catering industry prices. Price calculations must be kept for 5 years.

(2) Regulations concerning private shopkeepers regarding price calculations and procedures to be followed in the case of price measures by the authorities and hours of operation shall apply to shops converted to contractual operation.

To Article 4 of D)
Article 7

For purposes of applying this regulation, renovation includes remodeling of the

store as well as modernization, replacement and expansion of floors, coverings, roofs, gas, electricity and water conduits, related equipment and heating appliances.

Article 8

The manager may place and use fixed assets in his private possession within the store provided that prior notice is given.

(To Article 5 of D)
Article 9

(1) The value of goods and materials transferred must be calculated on the basis of purchase or accounting prices; those of packaging materials at deposit rates. The value of revolving assets must be calculated at 100 percent for eating utensils, glass and china and at a price corresponding to the degree of wear for other revolving assets and furnishings.

(2) The manager shall receive all fixed and revolving assets on the basis of an inventory.

(To Article 8 of D)
Article 10

(1) The economic organization may not employ any person at an establishment operated on a contractual basis not approved by the manager.

(2) The contract shall include the number of employees at the establishment in accordance with Article 1 (2).

(3) The manager may enter into an employment relationship with temporary workers that can be employed without a labor book for a period not to exceed 7 days in the name of the economic organization provided that the conditions of employment are met and such employment is reported to the economic organization on a monthly basis by a date determined by the economic organization.

Article 11

(1) The labor contract must define the wages of employees as a fixed sum. The wage must be set on the basis of average earnings less payments from share funds of employees working in identical or similar jobs within the economic organization. The calculation must be based on basic wage within the framework of the appropriate wage item. The wage includes all fees paid out of wage cost.

(2) The wage bill of the establishment available pursuant to the terms of the contract may not be exceeded as a result of the employment of temporary workers.

(3) The wages of store employees are paid by the manager in the name of the organization. If the manager fails to fulfil this obligation by the deadline set for wage payment, the economic organization must pay the wages of employees directly and assert its resulting claims against the manager.

(4) The economic organization shall inform the manager of the amount of wages to be paid and all applicable deductions. The manager is required to pay the amount of all wage deductions to the economic organization together with the monthly portion of the fee.

Article 12

(1) The economic organization is required to account for and record the wages of store employees and the amount used to calculate the manager's social security and pension contributions as part of wage costs.

(2) For purposes of wage regulations, wages paid to store employees must be considered in the category of other payments out of wage costs.

(To Article 14 of D)
Article 13

(1) At the time of the termination of contract, the manager is required to return all fixed assets received from the economic organization in accordance with inventories and to account for the value of all revolving assess not purchased.

(2) The manager must compensate the economic organization for the value of all missing fixed assets together with an amount representing any depreciation of the value of fixed assets occurring as a result of improper use or lack of maintenance.

Miscellaneous and Closing Clauses

Article 14

(1) In accordance with general regulations, the store must carry a sign showing the name of the economic organization and the name of the manager together with a reference to the mode of operation of the establishment.

(2) The manager is required to conform to all laws and regulations pertaining to commercial activity.

Article 15

The economic organization shall exercise continuous supervision over the operation of the establishment and to inventory all fixed assets at least once every two years. It may call for an accounting of all assets received by the manager if such an action is indicated.

Article 16

The economic organization shall account for the turnover set by the contract as the sales receipts of the store.

Article 17

(1) This decree will come into effect on 1 January 1981.

(2) The following decrees are not applicable to stores operated on a contractual basis:

- Decree No 12/1970 (8-30) BkM on business hours of stores, as modified by Decrees No 3/1971 (7-17) BkM, 1/1974 (1-17) BkM-MuM, 15/1976 (8-25) BkM and 4/1980 (4-4) BkM;

- Decree No 13/1972 (6-5) BkM on certain questions pertaining to accounting of turnover;

- Decree No 16/1976 (8-29) BkM on regulation of accounting price differentials of food raw materials used in the catering industry;

- Decree No 8/1978 (5-8) BkM on the operation of cloak rooms and lavatories of catering establishments;

- Decree No 21/1979 (12-16) BkM on the price risk fund;

- Decree No 124/1956 (KE 37) BkM on the accounting price of packaging materials;

- Article 2 (1) and (2) of Decree No 15/1968 (12-27) BkM on the General Commercial Business Regulations and Business Work Schedule;

- Article 7 (2) of Decree No 12/1978 (7-1) BkM on operating permits for businesses and areas of specialization for businesses;

- Clauses 2 b) and 4 of Decree No 31/1968 (KE 33) BkM on the regulation of incompatible employment relationships.

(signed) Dr Vilmos Saghy
Minister of Domestic Trade

9164
CSO: 2500

ROMANIA

NEED FOR EFFICIENCY IN SOCIOECONOMIC DEVELOPMENT

Bucharest ERA SOCIALISTA in Romanian No 20, 20 Oct 80 pp 4-7

[Article by Liviu Melinte]

[Text] Approaching is the moment which separates and, at the same time, unites the two five-year plans--the fifth and seventh--in the series of plans which through their fulfillment have provided for and are providing for the uninterrupted and multilateral progress of socialist Romania. On the eve of this moment, the recent plenum of the party's Central Committee and the Grand National Assembly made a concise balance of the achievements of the 1976-1980 period, examined and unanimously adopted the single national plan for 1981, the first year of the next five-year plan and the beginning of a new stage in implementation of the party's program for building the multilaterally developed socialist society in our country. The work of the highest party and state forums has been characterized by demandingness and a spirit of responsibility in analyzing the situations in the various areas of our society's life through a sharp critical but constructive position toward the shortcomings which in enough places are hindering the normal procedure of economic and social activity and hindering results from being obtained according to existing possibilities.

In the speech of Comrade Nicolae Ceausescu delivered at the close of the Central Committee plenum he formulated in an overall way, with realism and complete clarity, the main problems confronting our national economy at present and in the immediate future, the directions and means of action to solve them well, the tasks and priority goals which must be in the attention of the party, state and public organs and organizations and collective leadership organs in all links and all steps of the social organism and all workers. Mastering and, in particular, precisely fulfilling the provisions of this document are the guarantee for a good start to fulfilling the new five-year plan, a plan conceived to mark an important step in the direction of consolidating and modernizing the national economy, raising efficiency and increasing quality in all sectors of social-economic life with the goal of placing Romania among the states with average economic development by 1985.

Logically, of course, any new plan, any new development program fixes its "roots" in previous achievements, which form the base for proceeding to fulfill it. Shortly before closing this current five-year plan one may state that encouraging results have been obtained between 1976-and 1980 in the country's social-economic development, going through a new stage in fulfillment of the party program.

Extending and improving the material-technical base have been sought during these years with special perseverance and, in the end, the progress of any "segment" of the social system depends on that. In this regard the policy of accumulation and investment has had its say. The allocation of nearly one-third of the national income for development--and even more in some years--has permitted more than 2,400 new industrial and agricultural units to be placed into production and has permitted a rise in the volume of fixed assets from around 1.2 billion lei at the beginning of the five-year plan to approximately 1.9 billion this year. Thus, nearly 40 percent of existing fixed assets today has gone into operation during the current five-year plan, being very young and modern!

The country's economic power is increasing more and more due to the results of the industrialization policy. During the five-year plan still going on, industrial production calculated on the base of value of net production has increased an average of 10.6 percent annually and 10 percent on the base of value of total production. It is the first time that the growth rate of net production is surpassing that of total production, which validates the orientation toward a more reasonable hierarchical system of the plan indicators, giving priority to the ones which measure the substantial aspects of efficiency and quality of economic activity and moving the indicators in total expression, particularly useful for specifically statistical needs, to a secondary spot.

Romanian industry is acquiring in a more and more emphatic way the features of a modern one, to a greater extent including the achievements of the scientific-technical revolution. Primarily this fact is reflected in the different growth rates of the industrial branches, with a trend of increasing the share of the "peak" sectors, which propel overall industrial and economic progress. Thus, in the 1976-1980 period, the machine building industry rose an average of 13 percent anually, ferrous metallurgy--11.6 percent and the chemical industry--10.8 percent. At the same time, light industry increased its production an average of 10.3 percent annually, while the food industry raised it 7.3 percent. Second, we note a similar development in the "industrializing industries," since they have available the ability to solve all the technical and quality problems when they assimilate and improve products, assuring their competitiveness on the international markets.

The material-technical base of agriculture and the production potential of this main branch of our national economy are in full expansion and modernization. Total agricultural production has increased at an average annual rate of more than 5 percent during the five-year plan we are closing; however, plan forecasts were not fulfilled due to shortcomings in the organization, development and leadership of activity in this sector and incomplete use of existing possibilities.

The positive action of intensive and quality factors of activity is making itself felt more and more in the country's economic life. Of course, extensive development continues to maintain certain importance, but the dominant trend lies in increasing labor productivity, reducing production--particularly material--expenses, improving quality and permanently renovating products and raising profits and profitability. The principles of self-leadership and self-management and the measures taken in recent years to strengthen them are intended precisely to direct all efforts and resources toward emphasizing the action of the factors mentioned here.

The general results in the development of the national economy in this five-year plan find their overall expression in the 8-percent average annual rise in national income and, from here, in the creation of increased resources for economic progress as well as for raising the people's material and spiritual well-being. Statistical data show that the population's total incomes rose from 247 billion lei in 1975 to 363 billion in this year, with an average annual rate of 8 percent. Taking into account the increase in nominal incomes and the increase in the indicator of prices and tariffs, we see that in this five-year plan real salaries rose around 30 percent compared with the 20 percent forecast in the plan, while the real incomes of the cooperative member peasants also rose around 30 percent. The social consumption funds increased by total and per capita, housing construction was extended and the material base of education, culture, health protection and so forth developed.

The complete significance of the progress in the country's social-economic development in the 1976-1980 five year plan is seen even more powerfully if we keep in mind a number of phenomena which were a burden to activity during these years. The earthquake of 4 March 1977 , floods during certain periods, the world energy and raw material crisis and the rise in prices for a number of products on foreign markets and other things cause big losses or serious difficulties.

However, it is no less true that the results obtained could have been higher as a whole if a number of lacks and shortcomings had not persisted in certain sectors. The 14-15 October 1980 Central Committee Plenum uncovered the main causes for them and indicated the decisive measures for eliminating them in a hurry. Failures in fulfillment in industry and agriculture, investments and foreign trade, gaps in the area of material-technical supply and promotion of technical progress, a slowdown in applying measures for self-leadership and self-management and so forth, in many regards have at their base subjective causes, phenomena of bureaucratism and lack of responsibility, lack of discipline and disorder which continue in a number of economic units and organs, local or central. Criticizing these phenomena, the party's secretary general said: "It is time we understand that we are responsible before the people for assuring appropriate leadership and timely solutions to problems. That is why we cannot say we are satisfied with general achievements or cover or minimize the shortcomings shown in our activity. I am convinced that our Central Committee, the party organs, the state organs, the working class and the workers will understand that, by evaluating the big achievements properly, we are obligated to do everything to work better and to assure our country's progress forward even more firmly. We have everything necessary in this regard and I am convinced that many of the negative situations I have referred to will be eliminated in a very short time and that we will obtain a general improvement in our activity in the period immediately coming up."

The stage reached in the development of the overall industry and national economy, the sizes and variety of the resources for economic growth which we have available, the trends of the world economy and prospects for the scientific-technical revolution--all analyzed through the prismof the goals sought by Romanian socialist society--of course bring specific options in the development policy at a given mome . The documents of the 12th party congress stand out precisely for this lucid analysis, including forecasts which in the end, speaking in a general sense, aim for basic reorganizations in the economy and in industry in particular, correlation of the economic growth rates with the need for speeding up the process to modernize the economy, protection of the raw material and energy resources known and promotion of new resources, substantially raising efficiency and competitiveness of Romanian products and improving our country's position in the world division of labor.

The plan for 1981 was conceived in strict agreement with the directing lines and the tasks and goals decided by the party congress for the 1981-1985 five-year plan. The thought of Comrade Nicolae Ceausescu powerfully placed its mark on it and , as was pointed out at the Central Committee plenum and the Grand National Assembly session, he systematically examined the plan proposals and guided the work of working it out toward the directions which assure the dynamic and balanced development of the national economy under conditions of raising the degree of utilization of raw materials, reduction in energy consumption, recovery and reuse of materials, concentration of investments for speeding up the start of new capacities into operation, rise in the efficiency of production and export, broad introduction of the achievements of modern science and technology into the economy and achievement of a program to raise the people's standard of living.

A particular feature of next year's plan lies in the diminished rates compared with those established until now for the development of some areas of economic activity. For example, in industry the value of net production will rise 8.1 percent according to forecasts and total production--7 percent.

At first glance a certain slowing in the growth rate may constitute the subject of speculation, but matters appear natural in their real light upon a more thorough analysis. Economists, and not only they, know that always and everywhere, following a more or less prolonged period of rapid economic growth, logically a slower rate of development is demanded. This is for many reasons. First, each percentage point of growth in absolute values represents a continually larger figure according to economic progress. Second, the predominantly extensive growth during a certain period makes it possible and absolutely necessary to have a gradual move to a predominantly intensive growth, placing the emphasis on aspects of the efficiency and quality of production. Third, the rise in available resources, with regard to their proportions and structure, seen at the national and world level for the present and in the future, also involve at certain intervals a critical review of the tempo of development. Finally, last but not least, it should be remembered that, despite the reduction in certain rates under the influence of the conditions shown, the economic growth rate in Romania will continue to be one of the highest in the world next year, also.

The country's industrial development in 1981 is to be powerfully marked by intensification of the modernization process, in accordance with the plan forecasts, by sustained growth of the branches which produce raw materials, priority promotion of the sectors and products which have high processing of the resources, rise in the technical and quality level of the products, full utilization of the production capacities, more emphatic growth in labor productivity, management in the spirit of a strict system for saving raw materials, fuel and energy. Implementation of these guidelines, as was pointed out at the Central Committee plenum, of course involve the joint efforts of all workers in industry, a spirit of responsibility and demandingness in plan fulfillment, of being uncompromising with lacks and shortcomings, a general aspiration for surpassing oneself, innovation and improvement and toward assimilating any progressive experience.

Broadening our own base of raw materials takes on crucial importance under present circumstances, even if it involves--and most times it does involve--incomparably greater efforts than in the past. Although in many cases the conditions of the deposit and of extraction are more and more difficult and costly, although the substance of certain ores inuseful substance or quality of other resources is lower,

often it seems more advantageous to use them as such than to import them from unsure markets and at continually rising prices.

In this spirit, next year's plan is concentrating massive efforts on intensifying geological research, bringing out new energy and raw material sources and then putting them into production, particularly petroleum, coal, ferrous and nonferrous ores. The measures planned which aim at increasing the material incentives for those working in the extraction sectors, by giving special prizes for overfulfilling the plan, undoubtedly will exercise a positive influence on fulfillment of the tasks in this area, together with the large funds being allocated for the organization of projects and increasing material-technical supply to carry them out.

Of course, the base of raw materials and energy resources can bring the expected benefits if it is utilized rationally and utilized on a high level, in other words, if the predominant development takes place in the processing branches and subbranches in general and the advanced processing ones in particular. It is a matter of industries such as the machine construction and chemical industries, and,within them, electronics, electrotechnics, precision mechanics and optics, the production of technological equipment and installations, fine-synthesis and low-tonnage chemistry, the production of fibers and chemical thread, pesticides and tires and so forth. Plan tasks for next year for all the processing branches also were established in accordance with these principle guidelines written in the 12th party congress documents.

Together with the priority development of the branches, subbranches and products which utilize raw materials and energy resources on a high level, there is special importance in restricting production, up to reasonable limits, in the energy-intensive areas as well as finding other ways to save resources. It is no secret--and the working meetings of the RCP Central Committee this summer as well as the Central Committee plenum a few days ago stressed it forcefully--that our consumption standards in many cases are too broad and, even so, are not always respected and that in many places there is poor management of resources, negligence and disorder, which lead to an inadmissible waste of material values. Rapid elimination of these negative phenomena , which have the most serious consequences for the economy, is demanded with every force. As the party's secretary general stressed at the plenum, "Measures are needed for a faster close to the standardization and norming jobs of material consumption, since the plan for 1981 and the five-year plan are based precisely on a rational norming, on rational consumption, on standardization of products and materials and various assemblies and subassemblies, which means assuring the appropriate technical level, quality and productivity."

A major imperative is the steady achievement of planned physical and net production. There are notorious cases where this demand has failed to be taken into consideration, which creates a chain of big difficulties in economic activity and in obtaining the anticipated efficiency from one enterprise to another, from one branch to another.In order for economic life to take place normally and steadily and the results gained to be at the highest quotas, it is necessary to use the production potential of the industrial enterprises to the maximum by raising the degree of utilization of the machinery, equipment, installations and areas built, by assuring technical assistance during all the shifts by appropriate distribution of the technical cadres. At the same time it is necessary to increase security in operation of the installations, machinery and equipment by eliminating interruptions in production and reducing the length of time they remain immobile during repair, by

raising the quality of maintenance, review and capital repair jobs, by providing the needed spare parts through maximum utilization of the capacities in this area and by adopting measures to recondition the used subassemblies and parts to a greater proportion.

Big tasks belong to workers in agriculture in the new year. The average 9-percent increase forecast for net agricultural production is higher than the one in industry and takes into account the lag in 1980 due to climatic conditions as well as also takes into account the progress which will be achieved in material-technical supply of this branch, in improving the structure of crops and considerable rise in harvests per hectare and the production in zootechnics. It is forecast that cereal production should reach more than 23.7 million tons (more than a ton per capita!) as well as the emphatic increase in the production of sunflower, soy, sugar beet and hemp and flax for fiber, vegetables and fruit; the area of double crops and solariums for early vegetables will be extended. In the area of zootechnics the view is to increase the number of animals as well as obtain higher output and production in meat, milk, eggs and wool. In order to provide the fodder base, consideration has been taken to have better use of natural hayfields, to cultivate nearly 1.7 million hectares with fodder plants as well as to raise the production of combined fodder.

It has been said more than once that our socialist agriculture, despite the progress achieved, still has not exhibited the full measure of its possibilities. There are many causes and they have been analyzed at various levels repeatedly, establishing concrete measures to improve the situation. Unfortunately, these measures have not been carried out to the end. Basically it is a matter of the need for actual improvement--not in words or in writing--in the activity for organization and leadership in all the state and cooperative agricultural units as well as all along the way up to the county organs and the ministry, the establishing of order and discipline in work, strict application of legal regulations for agriculture, responsible commitment of all the peasants and all workers from the villages to the process for revolutionizing agricultural production and rapidly increasing vegetable and animal production. "Fulfillment of the plan for cereals, technical plants, vegetables as well as in fruit tree and vine growing should be a constant concern of all the party organs and organizations, the agricultural organs, the cooperatives, the workers in agriculture, the people's councils and all of us," said the party's secretary general at the Central Committee plenum, stressing the need to understand once and for all that the good development of agriculture is a national cause for all the people.

The economic development forecast for next year is supported by a large investment program which totals 220 billion lei, that is, as much as the funds represented in 1980, marking a reduction in the quota of accumulation in the national income compared with the average in this five-year plan. The activity in this area, oriented by branches and sectors according to the goals sought through the plan, must answer some particular demands which are much higher than in the past. First, there is the acute problem of concentrating resources and forces on a restricted number of jobsites, that is, those which meet all the conditions for entering into production rapidly. In this regard it is relevant that of the around 6,100 Investment projects forecast in the plan, more than 5,150 are continuing jobs. Second, the start of new projects is strictly prohibited if the execution documents approved do not exist and absolutely all conditions are prepared, conditions which guarantee their finalization in the best terms and with the efficiency established.

There can be a substantial improvement in the ratio between investments made and fixed assets placed into operation and between new jobs and continuing jobs by strict application of these decisions, placing a final end to the old practice of pulverizing the assets on an exaggerated number of jobsites and the length of time it takes to carry out the projects will be shorter and society will benefit faster and more fully from the results expected.

Of course, the efficiency of investments is influenced by many factors which act throughout the investment process or only during its phases. For that reason, finding the ways and means to have maximum achievement of advantages following the assets spent equally concerns the beneficiaries and the designers, the suppliers of materials and equipment and the builders and assemblers, the financing banks and the investment holders. The law for plan adoption requires of all of them, among other things,entering into the investment documents, for the jobs being executed and for the new jobs, the most efficient technological and construction solutions, reduction in the consumption of energy-intensive materials, metal and cement, limiting the volume and area of industrial and agrozootechnical construction in accordance with the needs of the technological processes and extending the utilization of construction materials and elements and standard installations as well as local materials and resources. At the same time, execution of the construction-assembly jobs and assurance of the delivery of equipment and materials in accordance with the graphs spacing out the investments, respect and assurance of the necessary labor force for carrying them out under optimum condition, appropriate organization of the participation of specialists from the beneficiary units in doing the assembly jobs for equipment and making tests, operating the goals placed into operation under good conditions and reaching the parameters planned on schedule.

Foreign trade activity must take place next year under the same sign of efficiency and quality. The plan is conceived in such a way as to provide a balance between the commercial balance and foreign payments; the total volume of foreign trade is to increase 10 percent, of which export taken separately is 21 percent. It should be remembered that in the five-year plan we are ending the average annual growth rate of imports was somewhat higher (16.8 percent) than that of exports (16.4 percent), a fact which negatively affected the balance of foreign payments. The interests of the national economy under current circumstances require considering that the export tasks are minimum ones, while the import tasks are maximum ones. This offers the guarantee for creating the resources for reducing the foreign obligation, giving up new foreign credits as much as possible.

Unfortunately, not all cadres in the economy have a clear awareness of the importance of well-organized, efficient foreign trade activity. Only in this way can one explain why production for export is not being fulfilled in its entirety and on time, why unjustified imports are requested and approved easily , and why there are delays in closing contracts with foreign partners and so forth. Eliminating these situations, taking energetic measures for the development of export production and improving its structure and for raising the competitiveness of Romanian products on the foreign markets and for limiting imports to what is strictly necessary, by utilizing to the maximum our internal resources are prime demands posed by the party for workers in this sector of maximum economic, and not only economic interest. At the same time, actions are required to diversify the forms for commercialization and broadening of the sales markets, to carry out export-import operations, particularly in the area of machinery and equipment, increasing the deliveries of design, documents, technologies and technical assistance abroad, having complete implementation of the conventions for international economic and technical cooperation and increasing the profitability of the joint companies.

The start of the new 1981-1985 five-year plan is going to be promising, giving hope to all our people. In the period remaining until this start, the party is calling on all workers collectives to make sustained efforts to successfully close the 1980 economic year, the last of the current five-year plan, and to prepare the most favorable conditions to move to fulfilling the tasks and goals of the coming year.

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ROLE OF ENERGY IN NATIONAL ECONOMIC DEVELOPMENT

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[Discussion conducted by Ion Chirculescu with Nicolae Gavrilescu, first secretary of Gorj County Party Committee; Ionel Dicu, first vice chairman of the Gorj County People's Council; Nicolae Bodescu, secretary of the Gorj County Party Committee; Vasile Ogherlaci, director of the Oltenia Mining Combine; Ion Popescu, director of the Rogojelu Electrical Enterprise; Constantin Cioata, director of the Sadu Mechanical Enterprise; Dumitru Iacob, director of the Turceni Electrical Enterprise; Nicolae Haranaciu, director of the Birsesti Cement and Asbestos Cement Combine; Victor Murea, director of the Tirgu Jiu Petroleum Trust; Valeriu Olaru, director general of the Gorj County Agricultural General Directorate; Ion Tomescu, director of the Tirgu Jiu Fruit-Growing Research and Production Station; and Gheorghe Vlad, director of the Tismana Hydrotechnical Construction Trust]

[Text] Keeping a high economic growth rate, to which we add the implications caused by the world energy crisis, defines energy as a vital problem in our country's strategy of development in the coming decades.

Proceeding from these considerations, the 12th party congress established the strategic goal that in the next decade our country should become independent from the viewpoint of fuel and energy, taking action consistently, in conformity with the Program-Directive for research and development in the area of energy, to extend geological research, to discover and utilize new energy resources, to manage the country' entire energy potential with maximum efficiency and actually reduce energy consumption in all areas of activity.

Saving of energy, substantially reducing energy consumption per unit of product in industry, transportation, agriculture, construction, far from being a demand required by a particular circumstance, are one of the basic conditions which raise economic efficiency to the highest dimension, as a result being imperative as a lasting concern in all areas of the production of material goods.

In the speech he gave at the recent RCP Central Committee plenum, Comrade Nicolae Ceausescu brought out the special importance which reduction in consumption of useful energy, modernization of production technologies, rationalization of the utilization of raw

materials and energy-intensive materials and increase in the efficiency of energy transformation have for the success of the new five-year plan.

The discussion organized by ERA SOCIALISTA, together with the Gorj County Party Committee, in which cadres with responsible work in the county's economy and party activists participated, brought out several major aspects in the energy area. At this time a number of opinions were expressed and suggestion were formulated referring to the development of energy resources and to the saving and efficient utilization of energy and fuel.

Demands for the Development of the Energy Base

Nicolae Gavrilescu: The current and future requirements of the accelerated social-economic progress of the country place development of the energy base among the priority concerns of our party and state so that Romania becomes independent from the energy viewpoint within a relatively short time, substantially reducing the import of raw materials. This priority goal, whose importance for economic growth has become overwhelming under the conditions of the world energy crisis, is completely realistic and carrying it out is based on the joint efforts of all the counties with a view to improving the balance of the country's fuel and energy through amplification of geological research, the discovery and utilization of new energy sources and through reducing energy consumption per unit of national income.

Gorj County, an important complex of fuel and energy in Romania, is decisively committed to the broad action of the development and superior utilization of the energy base, with more than 70 percent of coal production and more than one-fifth of the country's electrical energy production and large quantities of petroleum and gases to be produced here by 1985. In order to get a picture of the size and complexity of the energy problem confronting our county, it is enough to show that coal production is to rise from approximately 23 million tons this year to more than 60 million tons in 1985. The rate at which production rose for the first 9 months this year compared with the same period in 1979--that is, 24 percent for coal, 38 percent for electrical energy and 37.2 percent for crude oil--is an assurance of fulfillment of the tasks assumed. Precisely for that reason, the development and intensification of geological prospecting activity with a view to the discovery and utilization of new deposits and energy resources, the efficient rise in the production of coal, electrical energy, crude oil and gases as well as the saving of fuel and energy basically polarize the entire series of concerns of the county party committee.

The actions taking place in these areas are an integral part of the broad process of moving to a new quality. That is why we are particularly concerned with raising the quality level of the party organizations' activity and raising the competence of the workers' councils. Because the effective application of the new economic-financial mechanism is not produced automatically but, rather, involves the collective contribution of thought, a high spirit of social responsibility and elimination of old practices and overcoming of inertia and routine from economic activity. The political-educational actions we are carrying out with more and more intensity, along with the steadfast concern with raising the competence of the leadership, are intended to contribute effectively to a radical change in the concept of economic development so that efforts are successfully

directed toward the quality aspects of production. We are aiming for each party organization, each workers' council to understand that it is not a question of an extra concern or of ordinary measures, but of multilateral and permanent activity based on concrete goals which include the entire life of the enterprise and aim at obtaining maximum economic efficiency with minimum material and financial effort.

A reconsideration of all the activity referring to the development of the county's energy potential has in mind a substantial rise in its contribution to improving the country's fuel and energy balance. Precisely for that reason it has become acutely critical to intensify geological research, which has lagged behind the needs of the development of the national economy, with geological research activity currently not being at the level of requirements imposed by the development of the energy base. And total energy consumption, as we know all too well, can only rise as new energy resources are identified. Requesting that scientific research be at the level of existing possibilities, optimum conditions are created for the rational organization of development and utilization of energy resources and for carrying out activity with a greater view of the future, with the energy of the future involving the broad-scale organization of the utilization of solar and geothermal energy and coal gasification, besides nuclear energy. Even now, the Sadu Mechanical Enterprise has moved to the organization of solar panels. The first steps also are being taken in the use of biogas in agricultural production.

But whatever rate energetics develops at, the savings of fuels and energy now and in the future is one of the most important and certain energy resources. Whereas Gorj County is a big energy producer, it is just as true that it also is distinguished as a big consumer of energy, particularly electrical energy, with the Oltenia Mining Combine, the petroleum fields, the Rogojelu and Turceni thermoelectric power centrals and the Cement and Asbestos Cement Combine being representative from this viewpoint. Through application of the program of measures for saving energy resources the view is to reduce the average indicator of energy consumption per 1,000 lei industrial production, an action which is not and cannot be a matter of circumstances but is a long-lasting strategy, a basic constant of economic efficiency. Precisely for that reason, in the actions which are taking place in all areas of activity under the leadership of the party organizations, we are proceeding from the consideration that the reduction of energy consumption cannot be viewed only through the prism of reducing consumption for some products by several percentage points--a matter which is extremely important, too--but rather as a profound and wide-reaching activity whose main goal is to replace the technologies which are big consumers of fuels and electrical energy, to promote the products which are less consumers of energy-intensive raw materials and to manage the entire energy potential which the county has available with maximum efficiency.

The county committee is guiding the party organizations to give more vigor to political-educational work so that it contributes through its content of ideas and its concrete nature to developing the workers' feeling as owners and producers, with their involvement gathering more force and efficiency in the action to manage energy, to combat demonstrations of a "free hand" in the use of raw materials and materials. The effort to increase the workers' maturity and to develop their personality and initiative in the organization and leadership of production is synonymous with the effort to assert worker democracy, with any success at these levels

having particular importance, sincein the end the measures, programs or decisions, no matter how well-based they are, are not carried out by themselves but through the direct activity of the people.

Vasile Ogherlaci: Modern energetics more and more is based on the achievements of science and highly-productive technology. This is a truth we know rather well and as proof there are the achievements we have obtained in geological research. The demands of the national economy under the conditions of the move to a new quality as well as the current world energy crisis, which has not bypassed any country, regardless of size or degree of economic development, are changing substantially the data of the problem in geological research as in all branches of science, with the main desirable being to intensify research for the purpose of discovering newer and newer sources of energy and new deposits of coal, crude oil and gases. This makes is possible for us not only to know the reserves we have available for a longer period but also to organize each operation depending on the deposit's conditions , according to the principles of high economic efficiency. In this way we also can overcome those practices of moving to open a mine before having all the technical-economic documents. True, there have been a few of these cases but this is not an excusive but a serious cause for reflection because such practices end in large material and financial expenses which do not end in corresponding production. For example, in Rosiuta, without having solid documents existing for the deposit conditions,it was decided to open an underground mine--one later which,it would be found,had to take another variation, that,is, pit operation, which involved other expenses, since it is a matter of a totally different technology.

In more situations the stress has been placed in the research done by macrozones, perhaps for financial reasons ignoring detailed geological research by microzones, the only one capable of offering the most true information about the perimeter of the deposit and the conditions in which it is.

Nicolae Gavrilescu: I do not dispute this conclusion. But I think the problem should be viewed in a much broader framework, which permits us to understand at the true dimensions the decisive importance of the osmosis between production and research. Whereas geological research did not also act as an opener of roads, which among other things also brought the practice of starting some projects to exploit the deposit without having all the necessary data beforehand, this also is due to the mentality according to which each one solves his "slice." Research solves its part and raises its monetary rights, the design does the same, while production in many cases manages as it can.

The antidote for this old and harmful mentality is the organization of careful geological research carried out in close collaboration with design and production, that is, exactly what is being done now, but, unfortunately, not yet at the level of demands. It would be a real help for the development of research and technological engineering to form a nucleus of scientific research which also would include the most gif ed specialists from production.

Victor Murea: In our drilling-extraction trust, the rate of geological activity has not always risen to the desired intensity, having been below the possibilities. I think one of the causes has its source in the trend toward gigantism, which has made research and exploitation activity more difficult. Thus, until recently our trust was organized with a radius of 11 counties--from Gorj up to Maramures--with

research and exploitation jobs being carried out in this space. In these conditions the coordination of activity was difficult, which had negative effects on the rate of the work. As a result, there could not be corresponding development of the work capacity, with the number of meters drilled being lower. Now the zone of the old trust is organized into two trusts, which makes it possible to have optimum organization of activity, to have rational spacing of the jobs, with the proof being the intensification of the drilling rate and rise in the volume of extraction of the crude oil and natural gases.

Ion Popescu: In all cases efficiency starts from the drawing board, where the designer, basing himself on the data of scientific research and broad documentation, can offer the best solution, with the condition that he have close and productive collaboration with the builder and the beneficiary. Sometimes this collaboration stops at a certain point , with the solutions planned being deprived of the effort of collective thought and practical experience, in other words, of that plus of economic efficiency. This state of affairs is met at the Rogojelu Thermoelectric Power Central, where we have been placed in the situation of making all kinds of improving and spending large amounts of money.

Nicolae Gavrilescu: This is a typical case, demonstrating--if there still is a need to do so—that it is not enough to conceive of something but rather you must carry it out to the end, carrying out the idea in conformity with the data offered by experience, by the innovations in the area of technology. In the case of the Rogojelu Thermoelectric Power Central, new data and experience has been accumulated in the period since it was designed and put into operation, experience in the utilization of inferior coal, with solutions having been found to raise the caloric power through water elimination and elimination of waste plus better homogenization. Our researchers know these things but they have not overcome the phase of sterile discussions and good intentions so that in the period of the design and construction of the thermoelectric power central the necessary improvements no longer could be made, as was natural.

Nicolae Bodescu: In the area of the collaboration between research, design and production certain deficiencies are being demonstrated. It is hard to say whether they are caused by the organizational structure or the lack of convergence of financial interests. Things differ from case to case. There can be otherwise ideal situations where the production organism can include both research as well as design,with this unified whole eliminating any hindrance in the research-design-production circuit. However there are situations where this is not possible or is not justified economically.

As has been stated here, too, in the activity of the discovery and utilization of new energy resources there are bigger or smaller difficulties cultivated by some negative situations which are shown in the scientific research-design-production circuit and the practical solution would be an understanding of the essence of the principles of the new economic-financial mechanism in the area of research and not the pursuit of easy income at any price.

As we know, as in all areas, both in research and in design plan fulfillment must be synonymous with obtaining profits following the activity put forth. However, there are situations where certain objective causes can endanger plan fulfillment and, as a consequence , the solutions chosen are not studied thoroughly from the technical and economic aspects, having been given over to production. So the plan was fulfilled,the profits were achieved, but it is not known whether production,

which honored its contract, can benefit effectively from the solutions offered by research or by design. Precisely for that reason I think it is necessary, by virtue of the new economic mechanism, to keep in mind the economic efficiency obtained in production upon payment for each job worked out by scientific research or by design. This would have a beneficial effect in all regards, making the efforts to be directed toward quality and toward maximum economic efficiency in all departments of economic-social life.

Ionel Dicu: I completely share this viewpoint, with achievement of it meaning a real and effective contribution to the integration of research and design with production. In this way we also could end those practices where any problem given for study by a scientific research institute is taxed as research, although it was solved at the world level or not. And, generally, what should be resolved is known at the world level, with all research activity confining itself to documentation and design; however these services, which basically are nothing more than solutions of engineering and technological design, are presented as scientific research and are paid as such. That is why it is good to make a precise definition of boundaries, considering scientific research as that which truly brings something new , while documentation work for design and achievement of a technology or already existing installation at the world level should be considered as technological engineering and paid as such. Viewed in the totality of production efficiency, this stimulates scientific research, increasing its role in the modernization of techniques and technologies and in increasing economic efficiency.

Valeriu Olaru: Broadening the range of energy resources is a main means in our county for the multilateral utilization of the energy potential we have available. I have in mind here the move to the broad-scale use of solar and wind energy, the water of rivers and brooks and of biogas. And for this we do not have to wait for everything from scientific research but we should prove our initiative in the use of local resources.

Agriculture is capable of becoming and can become a supplier of energy through biogas production. If biogas production installations were built in the existing 100 agricultural units in the county, installations which are rather simple and mean small costs, 15-6 MW could be obtained, energy which could be used in the production of vegetables in greenhouses and so forth. Installations for biogas production can operate successfully in the 90,000 farms of the population which exist in the county, too, thus providing around 200,000 kW.

Constantin Cioata: Our enterprise right fully can be considered a true pioneer in the use of solar energy, with its having reoriented a portion of its activity for the production of solar panels. This year we are producing around 2,400 solar panels, in 1981 we should produce 70,000 and in 1985—more than 250,000.

Although the product is not very well-known, we have enough clients, with its being requested in particular by institutes and enterprises in Constanta and Timisoara. Precisely for that reason a portion of our collective's concerns aims at organizing the technological flow of the manufacture of solar panels as well as the diversification of this new product.

Nicolae Gavrilescu: Our concerns for broadening the range of energy resources is clear and this permits us on one hand to utilize the county's energy potential to the maximum and, on the other, to contribute to a greater extent to improving the balance of the country's fuel and energy. But, unfortunately, it seems that we

are acting in slow motion in an area where nearly everything depends on us, on the work collective's initiative and the people's managerial spirit, qualities we do not lack at all. In exchange, we lack that developed spirit of organization involved in innovation. If we evaluated, and rightfully so, the concerns of the collective at the Sadu Mechanical Enterprise for the production of solar panels, we cannot agree with the indifference with which the use of solar panels is treated in our county. It is good that these panels are being delivered in other counties and we will increase these deliveries, but why do not our economic or social organs, institutes or enterprises think about using solar energy? The county party committee plans to work out a specific program for the use of solar panels in the heating of microgreenhouses, apartment houses, dormitories and so forth.

Things are just the same with regard to biogas production, with only five-six installations being in the entire county. Despite the fact that we have available great hydroenergy potential,we do not insist convincingly enough on building microhydroelectric power centrals, although I do not think the design would raise any problem, since several have been operating in the county for more than 40 years.

Raising these few aspects does not mean that we limit ourselves to determining a state of fact. On the contrary, the county committee is preparing a complex porgram on whose basis the party organs and organizations should carry out broad actions for the multilateral utilization of Gorj's energy potential.

Victor Murea: To answer the continually rising demands of the national economy as best as possible means that the efforts we are making with a view to discovering new energy resourcesshould be joined with constant concern for rapid utilization of the new deposits. But, along with this, with regard to the extraction of crude oil and natural gases, I feel there is a need to eliminate those bureaucratic barriers we meet when we must obtain the necessary approvals to make payments for the investments brought on by utilization of the new deposits. Although our trust, as well as the research institute, present clear data on the deposit's potential, they cannot convince the economist from the Investment Bank--I have forgotten the reason--who asks for all kinds of papers. So that, for a year or even two years, instead of giving petroleum, we give explanations and draw up memoranda or documents on top of the old documents, since following some unbased calculations they show us that the particular production allegedly could not be profitable, as a result requiring us to reduce the value of investment expenses requested. Of course, in the end, that is, following 1 or 2 years, we receive the approvals but production suffers and we, instead of being concerned more with the problems of organization or of prospecting, waste our time drawing up all kinds of papers.

Vasile Ogherlaci: The major demand in coal production is the rapid introduction of modern techniques and technologies together with the start of new production capacities into operation. And in this direction notable efforts are being made to create all the conditions without which it would not be possible for us to obtain a production of 35 million tons of coal in 1981 in the Gorj basin and more than 60 million tons by 1985.

This spectacular rise we have proposed is fully achievable if action is taken with perseverance and efficiency to intensify geological research as well as to modernize the technologies and introduce highly-productive equipment.

Whereas a peak technique comparable with the technique existing at the world level has been reached in surface mining operations, in the underground ones the situation

is not satisfactory. More than ever there is a need for productive collaboration between the Ministry of Machine Construction, scientific research and the Ministry of Mines, Petroleum and Geology. If it is true that Gorj has available large coal deposits, it is just as true that without a joint effort and without the efficient contribution of other ministries we cannot raise coal production to the level of tasks assumed.

The safety of operation of the equipment and the mining installations is of vital importance. The technical qualities of some of the equipment and installations produced by our machine construction industry are notable. However, some produce big shortcomings for us, as is the case with the underground mechanized complexes and the conveyor belts. For example, last year 16,255 hours of downtime for the belts were recorded at the Gorj mining basin as a whole due to torn rubber covers, which equals a loss of around 9 million cubic meters of excavations. Matters are being repeated this year, too, with more than 6 million cubic meters of excavations having been lost in 8 months.

Ionel Dicu: Rise in the degree to which modern techniques and technologies are incorporated into production requires more than ever the stimulation of technical, competitive thought, the only thing capable of bringing the active participation of the engineers and technicians in each enterprise in the introduction of modern technologies and improvement in the quality parameters of production. In each production unit there are engineers with rich experience and programs of measures aiming at the modernization of technologies are being worked out. Unfortunately, consistent action is not being taken everywhere to solve some big problems of modern technology and energy consumption, with the concerns for the most part being limited to solving some problems which really are useful but of less importance. The causes for such situations are many, but one of the most important is the fact that raising the quality level of production and assimilation of new products and technologies have not become a basic component of the party organizations' activity everywhere, although the enterprises have available the necessary technical capacity and potential. This explains why some engineers persist in avoiding complications, for which reason they work according to too-well-known procedures, while others, afraid to make a mistake, do not succeed in overcoming the status of "execution personnel," being content with dispatching activities or other kinds of activities which could be carried out well enough by the technicians.

We must strengthen our guidance and control activity so that the party organizations give concrete help to the workers' councils in the development of technological engineering activities, militate so that the engineers and technicians carry out as many ideas as possible, taking effective action to overcome the difficulties which appear or to combat conservatism.

Nicolae Bodescu: There are very efficient technologies whose application is made difficult because the organs rightfully called on to give these approvals see only the financial aspect.

For example, at the Cement and Asbestos Cement Combine a technology worked out in 1950 is being used for the transportation of limestone, that is, the usage of big-tonnage dump trucks. It is clear how much fuel is consumed annually if 3.5 million cubic meters of limestone are transported for the combine's production, while a dump truck transports 20 tons in a single trip. We have proposed the transport on belts, which is much more efficient but we were not given a favorable answer,

citing the large volume of investments required by this technique, although it is much more advantageous, bringing big savings of fuel, among other things. It goes without saying that a modern technology requires some investments, but this effort is fully repaid through the big economic effect provided by the high degree of energy utilization. I think it is necessary to analyze this aspect, especially since, under conditions of the new economic mechanism, the collectives in the enterprises are directly concerned with a systematic and rapid innovation for manufacturing techniques, reduction of material production expenses and rise in net and physical production and labor productivity, since their pay is organically linked with the economic results.

Reduction in Consumption, the Richest Source of Energy

Nicolae Gavrilescu: It is a truth fully demonstrated by our experience as well as by world experience, that the reduction in specific consumption of energy is the richest source of energy. Proceeding from this consideration, the 12th party congress established that in the coming decades the total consumption of energy can only rise as new sources of energy are identified andtechnological methods are applied which are intended to lead to their superior utilization and, as a result, the decisive condition for developing the national economy at a sustained rate is a substantial rise in the economic efficiency of utilizing fuels and electrical energy.

The result of viewing this goal are tasks of great responsibility facing the party organizations and collective leaders in the enterprises to carry out the programs for saving energy. As we have already said, Gorj is a big producer of energy, but at the same time it also is a principle consumer. For the first 8 months this year, savings of 597 tons of metal, 5,050 cubic meters of wood, more than 1,000 tons of gasoline and diesel fuel were saved for the county as a whole. The savings could have been even greater, however, if action had been taken in all the enterprises to prevent and eliminate any kind of waste. The party organizations and workers' councils are not systematically following up on the way in which the programs of measures for fitting into the planned consumptions of raw materi materials, fuel and energy are being finalized.

Nicolae Haranaciu: The Cement and Asbestos Cement Combine is a big consumer of electrical energy, while the current technology upon which it is conceived to operate does not offer too many possibilities for reducing the consumption of electrical energy. Yet, by application of a series of technical and organizational measures such as improvement in the networks for the grinding ovens, raising the degree of usage of the equipment and working time, replacement of clay with pit coal waste, we have succeeded in reducing electrical energy consumption per ton of cement. The concerns we have in this direction are a sure guarantee that we will succeed in continuing to reduce the consumption of electrical energy.

Unfortunately, our combine actually does not have the possibility of mastering the entire problem of energy consumption. I have in mind here the compulsory nature of having the ovens stop rather frequently to reduce energy consumption, a measure which I feel is unnecessary, since in order to again bring the ovens up to the optimum temperature to produce we must heat them up by consuming methane gas , without obtaining one gram of cement. Last year these stops and reheatings required a consumption of 8,280,780 cubic meters of natural gas , while it was nearly 4 million cubic meters in the first half of this year.

The reasoning for saving energy is well-founded, only our higher organs have given a dogmatic interpretation in the sense that they did not take into account the specific nature of the technology of cement production. As a result, the quota of energy distributed, that is, the consumption standards established, are smaller than the requirements fixed by technology. In order for us to fit into the consumption standards established, we must stop the ovens because they "get stubborn" and will not operate with 80 percent of the energy and only with 100 percent, as the technology for them was conceived.

Dumitru Iacob: I believe that it is in the interest of the national economy to assure the quotas of energy and fuel in accordance with the consumption standards established in conformity with the requirements of production technologies. One cannot call it a savings to reduce the quotas of energy and fuels by failing to take into account technological requirements. Rather , this is a false savings, as it was stated well here, since a certain energy consumption does not have its correspondent in appropriate production.

It would be very good for this problem to be studied carefully and solved in the spirit of the principles of economic efficiency, since it has a decisive role in the realistic substantiation of the production plan.

Gheorghe Vlad: Successfully carrying out the measures to save energy is organically linked with the safety of operation of the equipment, aggregates and spare parts. Of course, there are good achievements in this direction from the machine construction enterprise . Unfortunately, some aggregates or equipment are made inappropr ate sizes, being conceived with big consumptions of energy or fuels. A number of spare parts do not operate at the level of technical parameters or have a number of defects, with all these producing disturbances in the production process and uneconomical consumption of energy.

Ion Popescu: Improvement in the quality of coal in the sense of raising its caloric power is of great importance for the operation of the thermoelectric power central aggregates at the parameters designed. The solution is to achieve homogenization of coal so that it has at least 1,600 kcal/kg. By using coal at the caloric power of 1,600 kcal/kg, at which the thermoelectric power central is designed, we will be capable of eliminating hydrocarbon consumption which we now are being forced to make in order to raise the caloric power of the coal. In addition, this will contribute substantially to raising the indicator of operation of the aggregates.

Nicolae Bodescu: An extremely efficient means for saving all types of energy is the precision, control and automation apparatuses, including the processing computers. Not supplying the enterprises with enough of these apparatuses makes it impossible for them to prevent irrational consumption of energy and to provide optimum operation of all installations. Here we see how important it is to organize the production of control, precision and automation apparatuses at the level of requirements.

On the other hand, it is necessary to decisively move to drawing up the energy balance in all the enterprises. There are many cases where the machinery or equipment of the same type have different consumptions—some have optimum consumptions, while others are super-consumers. Due to the lack of an energy balance, many enterprises do not know how much each equipment consumes or which installation or machine must be kept in production and which should be shelved.

Constantin Cioata: I totally share the opinion regarding drawing up an energy balance in all the enterprises. However, in order for this to become a reality, and an efficient means for directing production, it is necessary to regulate the problem of shelving. At this point, the standards in effect do not provide for the right to remove old equipment ofrom production although, due to usage or outdated technological concept, they are consuming very much energy.

Ion Tomescu: The development of agriculture on the basis of an energy balance is a vital condition for zoning and planning agricultural production and the mechanization and chemification of production. And in this framework the most efficient ways to utilize energy and fuels can be established. Currently we have available large resources in this direction, resources which would end in big savings of energy if utilized. For example, the chemical industry produces small quantities of complex chemical fertilizers. For this reason we are forced to administer fertilizer in three phases, which means passing by three times over the same area with the tractor. But if we had complex chemical fertilizer, the administering of it could be done in a single pass with the tractor, which would mean a big reduction in fuel consumption and avoidance of sinkage of the ground. Things are also the same with regard to administration of pesticides. The lack of complex pesticides, which permit combatting two or three pests at the same time, requires having the tractor go over the same area 10-15 times, using a certain type of pesticide for each pest.

Ionel Dicu: I find that a dialectical relationship exists between plan substantiation on realistic bases and efficient utilization of energy. Of course, notable efforts are being made in Romania so that account is taken in working out the plan of the concrete conditions and possibilities of the enterprise. Despite this, until now things have not radically changed so that the practice of failure to correlate the indicators continues to be kept. Although some production capacities are not placed into operation, production is planned according to them or, in other cases, a growth in labor productivity is established on the basis of some mechanization processes which are merely on paper. At the enterprise for rubber and regenerated rubber products, production was planned on the basis of some capacities which still have not been placed into operation for various reasons. Things are the same in other enteprises, too.

These situations, which contradict the principles of the new economic mechanism, remain since the industrial centrals and ministries do not take into account the realities of the ente prises and their concrete possibilities in substantiating the plan. The presence of these organs' representatives at the workers' general meetings or on other occasions is more of a formal nature and boils down to noting down the problems raised in a notebook.

Nicolae Gavrilescu: Efficiently carrying out the principles of the new economic mechanism, among other things, means correctly measuring the enterprises' effort. I have in mind the well-established principle in the practice of forming prices in Romania, strictly specified in the legislation in effect, of the social production costs being the basis for establishing prices. Real substantiation of production prices in accordance with the concrete objective conditions of production provide equitable condi ions for profitability and self-financing for all units.

Both in the area of coal extraction as well as in that of crude oil extraction, the costs necessitated by the introduction of new techniques and of mechanization

and electrification of production have risen 2-3 times. It is natural for strictly necessary costs to be recovered through the production price so that the particular enterprises obtain the necessary profits to establish their own assets and provide material incentives for the workers. This also better stimulates the saving of social labor, the enterprises' concern for reducing production costs, primarily material costs.

Iosel Dicu: In accordance with the law, the industrial centrals are invested with a number of duties by virtue of which they have the opportunity to base their concerns in the area of cooperation and closing of contracts and the organization of production and labor in the enterprises. These major obligations can only be carried out by efficient participation in solving problems for the whole period of working out the plan and fulfillment of it.

Nicolae Gavrilescu: The demands imposed by the development and utilization of the energy potential of the county require raising the level of leadership of the party organs and organizations, having each organization and each communist carry out its and his role in uniting the workers' efforts to increase physical and net production and to obtain bigger and bigger profits. Striving to bring a qualitative leap in the work of the party organizations and to instill a dynamic style of work, we will be able to better implement the principle of worker and socialist democracy by having a more active commitment from the workers in fulfilling the tasks assumed. The results will be better if the collective leadership is efficiently united with each one's responsibility and work and the workers take action steadfastly as representatives of the owners and the producers. That is why we must improve the content of guiding the party organizations at the level of current requirements, eliminating routine, formal actions and humdrum work. We are tending to reach a situation where everything undertaken in each party organization should specifically answer a goal, mass political actions should be efficient, interesting and convincing while demanding ness should be demonstrated not in general but specifically toward the conservative, bureaucratic demonstrations. The new tasks referring to the move to a new quality require not only competence but also a new way of thinking, of taking action so that high economic efficiency is obtained in exchange for a greater creative effort.

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STATUS OF YUGOSLAV FIRM IN WEST GERMANY

Hamburg DER SPIEGEL in German No 46, 10 Nov 80 pp 115, 117

[Article: "Something Is Going On"]

[Text] Koerting, the former People's Radio firm is currently managed by Yugoslavs--to date without success.

Two years ago, when the socialists from Yugoslavia assumed power over the bankrupt capitalist firm, they were unusually generous.

Oskar Pistor, new chief of the Koerting Radio Factory in Grassau on Chiemsee--which was bought by the Slovene Electro-Concern Gorenje, assured: "The enterprise will be administered by German managers in the future too."

The promise did not last very long. At the beginning of last month, the three German members of the Koerting management were relieved of their posts and replaced by Yugoslavs. Comrade Pistor can hardly be accused of breaking his promise: When his German colleagues on the executive committee were dismissed, he lost his beautiful job in the West as well.

In the meantime, the Yugoslavs also announced a "reduction in the work force." It has not yet been decided how many of the 1,400 Koerting workers, among them 300 Yugoslavs, are to be dismissed.

The German radio industry was from the very beginning suspicious of the peaceful coexistence between socialist and capitalist managers, because Bernhard Zumkeller, sales manager, Waldemar Moortgat-Pick, project manager, and Fritz Seyfferth, financial expert, were part of the management team when the old Koerting Works went bankrupt.

After the war, the firm--which during the time of the German Reich was very successful with the People's Radio--established too narrow an association with two partners. Koerting owner Gerhard Boehme sold his television sets primarily to the Neckermann mail order house and hi-fi equipment to the Elac Works in Kiel.

Both partners went downhill, one after the other. Neckermann was sold at a loss to the Karstadt department store concern, Elac went completely out of business.

The unavoidable demise of the old Koerting enterprise met with practically unconcealed glee among German competitors. After all, Koerting's Boehme had supplied the unpopular mail order house competition.

Nevertheless, the industry was quite unhappy,when, after a long search, Anton Jaumann, Bavaria's minister of economics, found someone who would rescue the bankrupt enterprise: Using an investment premium of DM 5 million, he attracted the Yugoslav Worker Concern Gorenje, an enterprise which, to be sure, was unknown in the West; nevertheless, it is not exactly a small enterprise. Today it has a sales volume of DM 1.3 billion and employs 18,000 people.

For a long time, specialty retail outlets which were catered to by representatives of the newly established "Gorenje Koerting Electronic GmbH & Co" would not let the representatives of the Grassau work forget the unsuitable liaison with Neckermann, the cheap retailer.

Soon it also became apparent that Pistor, the new Koerting boss, had bitten off more than he could chew. Instead of DM 216 million, as initially announced, last year's sales reached only DM 175 million. And there were no profits.

The gentlemen of the concern in Velenje, not far from the Austrian border, had given Pistor "a lot of freedom" (Zumkeller). It changed when at the beginning of this year a new man was elected to head the Gorenje concern: Gregor Svaiger, a trained engineer. Soon, more and more frequently Yugoslavs were looking after things in Grassau. Finally--3 months ago--Slavko Geratic, in charge of international marketing at Gorenje, settled in Grassau to oversee everything.

The Germans were right in suspecting that "something is going on." At the beginning of October, Svaiger suddenly replaced the entire management team. The Germans were demoted. Josef Pavlak from Velenje was promoted to the management position.

In Grassau, the times of beautiful freedom under socialist control are over. "The reins have been tightened," suspects a Koerting manager.

To be sure, this year the Germans can produce better results for their masters in the East: Last year's production of television sets (150,000 units) had already been reached by the end of September, sales are to increase by 2 percent and, at any rate, approximately 2,000 specialty retail dealers--one-fourth of the industry --are now carrying the Koerting brand.

But even this year it is unlikely that the coveted Western exchange will arrive in Velenje; there are still no profits. On the contrary: To be able to increase efficiency in production, the capital stock had to be increased by DM 20 million.

Gorenje has a difficult time on the Yugoslav market, which is plagued by crises. The managers from Velenje have every reason to watch the money of their German subsidiary. In the middle of October, Svaiger, the boss of the concern, paid a visit to the Minister of Economics Jaumann. In plain politburo style, the CSU man and the socialist announced subsequently that "a certain concentration and continued specialization will have to be achieved in Grassau."

Because in comparison to the Japanese competition, the personnel-intensive manner of production employed by the Yugoslavs and Bavarians seems still quite archaic.

Nevertheless, one factor remains to comfort the socialist owners. Christian-socialist Jaumann is underwriting up to 15 percent of the investments for modernization in a tourist region which has little industry--in spite of the fact that these funds will become the property of a socialist enterprise.

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15 December 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2072

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15 December 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2072

CONTENTS

BULGARIA

Conference Discusses Improvements of Grain Quality, Livestock Breeding
(RABOTNICHESKO DELO, 27 Oct 80) 1

CZECHOSLOVAKIA

Involvement of Workers in Management Called Fundamental
(Editorial; PRACA, 24 Oct 80) 8

GERMAN DEMOCRATIC REPUBLIC

Advantages, Problems in Bloc Ties With 'Multis' Analyzed
(Juergen Nitz; IPW-BERICHTE, Oct 80) 12

HUNGARY

Future of East-West Trade Viewed
(Andras Koves; MAGYAR HIRLAP, 23 Oct 80) 27

Economic Regulation Changes Discussed in Interview
(Miklos Pulai Interview; NEPSZAVA, 7 Nov 80) 30

Tasks of Food Industry Reviewed in View of New Regulations
(Balint Balogh; ELELMEZESI IPAR, No 10, 1980) 35

Experiences With New Producer Prices Described
(Karoly Kemenes; NEPSZABADSAG, 29 Oct 80) 45

Development of Consumer Prices Examined
(Mihaly Zafir; FIGYELO, 22 Oct 80) 48

Country Richer in Natural Resources Than Assumed
(Peter Mach Interview; ELET ES IRODALOM, 25 Oct 80) 53

Costly Inputs Reducing Production Value of Agriculture
(Laszlo Nemeti; FIGYELO, 29 Oct 80) 58

POLAND

Survey of Domestic Trade, Services in Light of Additional Free Time Discussed
(Krystyna Zielinska; POLITYKA, 18 Oct 80) 62

ROMANIA

Role of Income, Expenditures Budget in Self-Management
(Radu Ciurilescu; ERA SOCIALISTA, 5 Nov 80) 67

Increased Savings Viewed as Reflection of Income Growth
(Mircea Popovici; REVISTA ECONOMICA, 31 Oct 80) 73

YUGOSLAVIA

Data on Increased Pension Costs, Number of Pensioners
(DELEGATSKI VJESNIK, 29 Oct 80) 76

Data on 1980 Grain, Other Crops in Croatia
(DELEGATSKI VJESNIK, 29 Oct 80) 80

Briefs
Japanese Licensed X-Ray Film 85
Macedonian Telephone Service 85

CONFERENCE DISCUSSES IMPROVEMENTS OF GRAIN QUALITY, LIVESTOCK BREEDING

Sofia RABOTNICHESKO DELO in Bulgarian 27 Oct 80 pp 1, 4

[Round table discussion: "Topical Task of Science and Practice"]

[Protein--Basic Prerequisite for Resolving the Food Supply Problem

The 11th Party Congress and the National Party Conference, as we know, faced science and technical progress with important tasks and updated their development into a production force. The July 1978 BCP Central Committee Plenum extensively discussed the strategic directions of scientific and technical progress, indicating that the development of chemistry and, particularly, biology is the main way to resolve the number of vitally important problems, among which that of protein is considered the most important. This problem will be raised on an even more urgent basis in the biosynthesis of animal protein. Increasing livestock output presumes the food utilization of its biological advantages.

Based on the exceptionally important tasks stipulated in the party documents, the editors of RABOTNICHESKO DELO organized together with the Union of Scientific workers in Bulgaria a round table discussion attended by noted Bulgarian scientists and specialists. The discussion dealt with the role of scientific achievements in protein synthesis, i.e., the intellectualizing of the implementation of the most important task of the Eighth Five-Year Plan--intensification in livestock breeding.

The following participated in the discussion: Academician Kiril Bratanov, chairman of the Union of Scientific Workers and director of the Unified Center for Biology of the BAN [Bulgarian Academy of Sciences]; Academician Pavel Popov, chairman of the Grain Crops Commission of the NAPS [National Agroindustrial Union]; Professor Nikola Palagachev, head of the forecasting problem of the NAPK at the Scientific Research Institute of Economics and Organization of Agriculture; Senior Scientific Associate First Class Nikola Tomov, director of the Corn Institute in Knezha; Senior Scientific Associate First Class Trifon Dardzhonov of the Livestock Breeding Institute in Kostinbrod; Senior Associate First Class Todor Mitkov; Senior Scientific Associate Second Class Khristo Goranov, director of the Soybean Institute in Pavlikeni; and Scientific Associate Dencho Denchev, Institute of Microbiology of the BAN. This discussion was a subject we chose for our regular weekly topic on problems of public production intellectualization.

Selection Successes

Academician P. Popov: As was reemphasized at the National Conference on Grain Production, the grain problem is a strategic global problem of great political importance. I related it to the problem of proteins. This is based on the fact that with the development of grain production we are increasing protein production as well. I believe that our very useful discussion should focus precisely on this strategic step which we must take in the future: increasing grain production with a view to increasing the amount of protein. I bear in mind that at this stage we are obtaining our protein mainly from vegetal organisms. This possibility must be put to practical use.

Let us note that along with the development of new strains of intensive wheat, combining high grain productivity with high flour and bread quality, extensively developed over the past five years in our country, our selection work has scored steady progress in upgrading the protein content. This year we obtained, for the first time, an average of 405 kilograms per decare of wheat containing from 12 to 14 percent protein. Our objective, however, is to raise the protein content to 16-18 percent in soft wheat.

Lately there has been a particular increase throughout the world, including our country, in triticale--a new interstrain hybrid obtained by crossing wheat with rye--in connection with the development of new strains aimed at increasing grain production and raising the content of protein in order to meet animal husbandry requirements. Most scientists believe that the introduction of this new crop is one of the most significant accomplishments of world selection in the 20th century. That is why this year the Central Council of the NAPS drafted and approved a long-term program according to which by 1985 between 800,000 and 1,000,000 decares will be planted in triticale; 400,000-500,000 decares will be planted in low stem grain crops and as many will be planted in high stem grain crops for fresh feed (hay, silage, hay meal) and straw, yielding considerable economic results.

Professor N. Palagachev: I wish to emphasize that the problem of obtaining a unit of animal husbandry output with lesser outlays of fodder units and protein cannot be resolved merely by increasing grain production. More grain is needed. However, we must also have a great deal of high grade grass feed output from alfalfa, natural meadows, and all artificial and cultivated pastureland, as well as fresh and rough fodder. We can achieve our main objective by properly storing, processing and harvesting vegetal resources. The elementary truth, however, is that this is not being practiced. Anywhere you look you would see that the livestock is not eating alfalfa in the proper form but is consuming hay and straw or even straw-like products. Consequently, the problems related to the proper harvesting of fodder crops are very urgent. The reason for this weakness is that the qualitative and proper harvesting requires model equipment which is currently in short supply. Let us not even mention the fact that very few of the existing machines do not waste fodder.

We must equally make use of rough fodder through the rapid development of cattle and sheep breeding. Our country has considerable possibilities which, however, remain unused. For example, if you visit Mount Strandzha in the spring you

would see big areas of green grass which dries out in July and August and remains unharvested. Only a small percentage of it is used for the reason that, first of all, no beef cattle farms have been set up, sheep breeding has been poorly developed, and so on; secondly, when the vegetation is at its peak it is not mowed and used as hay, silage, and others. A second grass crop grows in the autumn, when the rains begin. This crop could be used as well. The activities of the APK [Agroindustrial Combines] must be focused in this direction.

The problem of the land arises in this connection. According to Western specialists, by the year 2000 the arable land will have been reduced by six to seven billion decares. A similar trend exists in our country as well. On a parallel basis, however, again by the year 2000, the overall agricultural output of our country should be tripled or quadrupled. Therefore, two conflicting trends develop. Naturally, agricultural output will be increased through intensification. However, the concept that it alone could compensate for a reduction in the size of the arable land is wrong. That is why the forecast on the development of our agriculture by the year 2000, formulated by scientific workers in the spirit of the party's decisions, shows a radically opposite direction in terms of the utilization of our land. The amount of land should be increased rather than decreased. The conclusion is that our country could double or triple its agricultural output. Grain production alone could be doubled on a per capita basis, reaching 1.850 kilograms. All such problems could be properly resolved through the application of all known achievements of scientific and technical progress, i.e., by intellectualizing agricultural work (use of high grade equipment, refrigeration, and modern warehousing facilities).

Underrated Source

Senior Scientific Associate First Class N. Tomov: Proteins are an irreplaceable component in human and animal food. That is why, along with insuring the necessary amount of food for each living being, we must seek means with which to compensate for the protein shortage. Considering the more restricted conditions prevailing in the case of traditional leguminous crops, corn assumes exceptional importance. An additional 25,000 tons of proteins could be obtained by increasing the protein content in the grain by only one percent, considering the 2.5 million tons of grain grown by the country.

The protein content in the grain can be increased through the development of hybrids with a 10-12 percent or higher protein content compared with the current 8-9 percent. Selection work, however, is considerably hindered by the polygenic nature of this indicator. It has been established that some 20 genes and gene systems are involved in protein synthesis in the grain. Their combination within a single gene (a combination of hereditary elements in the nucleus of the cell) is difficult.

Oypek 2 and Flauri 2 are two mutant genes which considerably increase the content of irreplaceable amino acids such as lysine, tryptophan, methionine, etc. Whereas standard corn contains 0.25-0.30 percent lysine in its dry substance, the carriers of the first of these genes contain nearly twice the amount of lysine--0.45 to 0.55 percent. This valuable biological discovery, made in 1963, changed the entire amino acid structure of the protein in a desired and sought after direction. Such corns are described as high-lysine content corns because of their increased content of lysine, which is the most important limiting amino acid. They are of interest to nonruminant animals and to people wherever it is used as a food source. Extensive studies have confirmed the great advantages and possibilities of high-lysine corn.

At the present stage our high-lysine hybrid corns such as Knezha 3, Knezha 32, and Trakiya, along with Soviet, Romanian and Yugoslav hybrids can meet current requirements because of their increased lysine content.

Important Protein Raw Material

Senior Scientific Associate Second Class Khristo Goranov: The great interest in soybeans is due, above all, to the high protein content in the soybean grain (averaging 40 percent) and its high effectiveness in animal husbandry, the production of protein-balanced human nutrition, and the creation of high grade industrial products for consumers and industry.

In order to improve scientific services in the production of soybeans in Bulgaria a specialized soybean institute was set up in Pavlikeni. Its purpose is to determine the strain structure, develop the necessary technology for soybean growing, and insure the microbiological production of the preparation Nitragin serving the needs of the entire system.

The effectiveness of the soybean produced is determined by the yield. Consequently, it varies in individual okrugs. On the national scale, however, soybeans remain an effective crop within the framework of the crop rotation system and its application in animal husbandry and the food industry.

Our country has the substantial potential for increasing the production of soybeans and upgrading its effectiveness. Above all, a fuller use must be made of the possibilities offered by the strains and the new technologies developed throughout the world.

Problems Awaiting a solution

Senior Scientific Associate First Class T. Mitkov: In the past 15 to 20 years we have replaced basic strains and hybrids four to six times. The various rayons are using the most productive and the most qualitative among them. However, the new requirements calling for the production of more grain over the next ten years raise new problems as well facing scientific selection workers and agrotechnicians, as well as the experimentation workers within the system of the State Strains Commission.

Above all, we need rich data on selection achievements in CEMA and on a global scale.

Another essential problem is that of improving scientific zoning and utilization of strains and hybrids. The currently followed principle is based on results obtained within a specific okrug. However, it is the result of the work of no more than one or two experimental stations. Yet, all of us know that zoning on the basis of data which do not cover the entire variety of natural conditions is incomplete. In a number of countries, including some members of CEMA, the strains are zoned on the basis of soil and weather areas, ignoring administrative boundaries. It would be expedient, for this purpose, to undertake the establishment of soil-weather zones in the production areas and to organize, wherever necessary, additional strain testing with experimental areas (something which is

being locally done[1]. We must also organize a single management of the entire experimental work with strains within a given settlement system. This will summarize and make prompt and objective use of the results obtained not only by experimental sectors but on an industrial basis as well along with other data.

Taking weather conditions into consideration, we must organize on a broader scale the development of early ripening strains and hybrids.

Based on the Criteria of the New Requirements

Senior Scientific Associate First Class Tr. Dardzhonov: From 65 to 85 percent of the energy and from 65 to 92 percent of the protein accumulated in the plants are lost in the conversion of the vegetal resources, which are the main source of animal husbandry raw materials, into milk, meat, and eggs. That is why upgrading the efficiency in animal husbandry is the main task of livestock breeding and of the Animal Husbandry Institute in Kostinbrod.

What are, in our view, the most important ways for the solution of the protein problem? The first is improving the approach used in the scientific assessment of the effectiveness of the rations used in animal nutrition. Emphasizing, above all, the amount of protein reached in the growth of the animals enables us to properly balance rations and improve their utilization.

Another direction is related to improving the quality of the sunflower and soybean groats which has an impact on growth. In this respect we should seek possibilities mainly in improving the production of groats by observing a strict technological regime. In the opposite case a valuable protein raw material such as soybeans yields only half of the expected results.

The use of grain crops richer in protein and, above all, the lysine-rich corn and barley, will be of exceptional importance in resolving the problem of the protein shortage which, in terms of our animal husbandry, consists mainly of a shortage of the amino acid lysine. The practical use of these strains would require, first of all, the solution of the price differentiation problem based on their protein and lysine content.

High effectiveness in the conversion of grains into meat and eggs could be achieved only by providing the necessary quantity of high quality protein. The full utilization of the solar energy and the chlorophyll of the vegetal cell, which are the basis of plant growing, remains, for the time being, the most accessible way for the solution of the protein problem in our animal husbandry.

The Microbiological Method

Scientific Associate D. Denchev: In our country the average protein requirement has been virtually secured. The trouble is that in this norm the share of animal protein reaches no more than about 50-55 percent of requirements. For this reason the need for animal feed rises sharply. This need could be considerably met through the use of microbiological and biochemical protein production methods.

Currently no more than a few units are engaged independently and almost isolatedly in work on problems of the industrial production of unicellular protein. Such lack of coordination hinders the focusing of all efforts in order to encompass

the problem simultaneously from several sides: the biological, technological, and nutritional. Furthermore, the reconstruction and modernization, which were planned 7-8 years ago, have not been carried out as yet and the technical condition of the currently existing plants for fodder yeasts does not allow the development of highly productive and inexpensive technology.

The wood oxidized hydrolysates are the basic raw material used in our country, found in adequate amounts. We could also use some agricultural (corn stalks, plant stems, fruit and vegetable waste) and industrial (alcohol residue, waste water, lignin from yeast production, milk curd, and so on) waste. We should also be interested in methods used to enrich straw and agricultural materials with microbial protein. The USSR, Czechoslovakia and the United States have already developed technological systems to achieve this. They could be adapted to our conditions.

Comment by Academician Kiril Bratanov

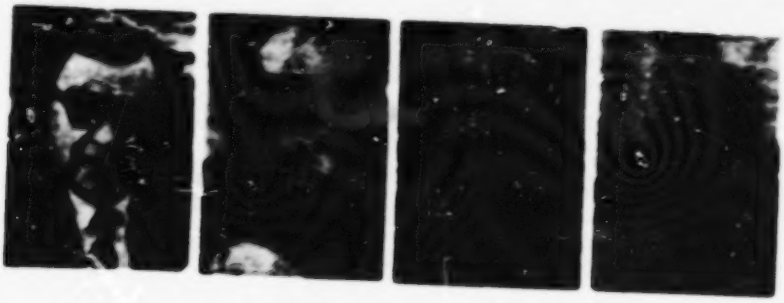
The achievements reached in the biosynthesis of protein are the result of the scientific interpretation of all stages in the course of this complex process and, particularly, comprehensive research conducted on an extensive international basis in the areas of manifestation of the intellectualization process in biology, genetics, biochemistry, and microbiology, i.e., of some forms of manifestation of the intellectualization process in biology. This method must be continued even more emphatically in the Eighth Five-Year Plan.

The statements made here prove that the protein problem could be considered in two aspects. The first is the study of protein as a basic component of animate matter. Today all basic and theoretical research in biology is focused on the study of the processes occurring in the protein on the molecular level. The task is not only their clarification but the scientific substantiation and development of technologies which would direct such processes in channels useful to man, i.e., the development of technologies for the industrial production of proteins at different levels. This includes the technologies for the intensification and upgrading the productivity of plants and animals, and the intensive production of biologically active agents and of protein and its components with the help of microorganisms.

The second aspect of the protein problem is to master already familiar technologies using industrial methods for protein biosynthesis and in order to increase its output. It is a question of increasing the amount of protein in its numerous forms. Both aspects of the protein problem are today an important task facing all scientific units in our country working in the field of biology.

One of the methods of increasing the amount of protein is the extensive use of industrial methods in animal husbandry. Recently they have been applied in our country not only in poultry and hog breeding but in cattle and sheep breeding as well. In order to increase the production of meat, i.e., of protein, the intensification of the breeding process makes a great contribution to contemporary sheep and cattle breeding. In recent years the Institute of Biology and Immunology of Breeding and Development of Organisms of the BAN has worked on technologies for the intensification of the breeding process in sheep, twin calving in cows and other methods for increasing animal husbandry output, i.e., the output of protein.

I believe that the entire protein production process in the area of animal husbandry must be paralleled, from beginning to end, by scientific and technical progress and, at the same time, supported by the latest scientific data. This will lead to the development of an integrated modern complex: science-research-experimentation-application-marketing. This means the intellectualization of the national economy.



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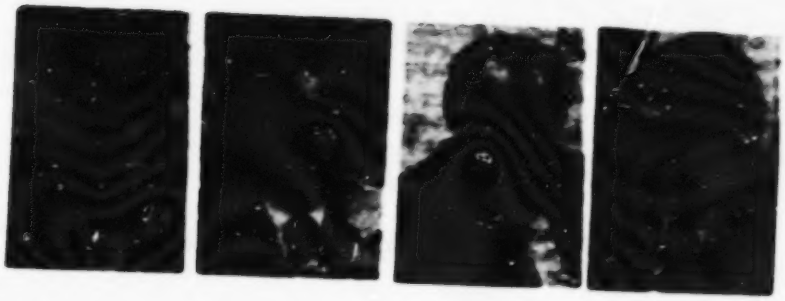

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INVOLVEMENT OF WORKERS IN MANAGEMENT CALLED FUNDAMENTAL

Bratislava PRACA in Slovak 24 Oct 80 pp 1,2

[Editorial: "Workers and Their Rights"]

[Text] Not only in our country but all over the world people have become conscious of Marx' thesis that the working masses shape history. Moreover, it has been found to be true that socialist society cannot arise and develop without restraints, and therefore the party must have a leading role in it, the state must fulfill the organizational, educational and administrative function, and the trade unions must play two roles in one. This premise applies simultaneously when expanded by the principle that the conception and development of socialism presupposes active and conscious participation of the workers not only in the socialist revolution, but also in the process of building a socialist society.

Why do we repeat these axioms? Because we are facing complex tasks, and because those tasks may be resolved only if public opinion supports us. Social opinions in places of work always represent the sum total of the workers' views and suggestions.

Of course, we are fond of saying--often enough--that our workers have the right to participate in the management and control of the production and administration of the economic sector, and the right to participate in planning of administrative measures, and that they have a voice in the decisionmaking process. We never forget to emphasize this fact in all our reports. Nevertheless, those principles when translated into practice frequently appear completely different. For instance, in a place of work a man complained quite recently that while taking part in a discussion at a trade union conference he was told by the executive board that "a trade union member has no business talking about the organization of the enterprise!" Naturally, this is not an isolated case demonstrating the lack of willingness to listen to the problems or suggestions of the people in the places of work. Many economists or officials as well look askance at the critic, however legitimate and objective he may be. By the same token, they never omit mentioning that every trade union member should be a manager of his place of work, without realizing that if we want to develop and strengthen the worker's managerial attitude--which determines the strength of the leading role of the workers' class--preconditions must be set for real participation in the decisionmaking process, the more so because workers, acting through their trade union, are directly responsible for decisions of numerous problems. Our workers must see and personally experience that management

f production involves the solution of all their problems related to their inter-
sts, demands and needs; their own experience must convince them that their word
as weight and that our society needs their cooperation in managing all its affairs.

xperience has shown that people in places of work call above all for improved qual-
tative indicators of democracy within the enterprise. They demand honest informa-
ion concerning current problems in the life of their enterprise, in order to be
ble to express their attitude even during the preparations for the decision, and
o make their views heard and considered during the decisionmaking process. Exper-
ence has shown that if the workers are excluded from participation in shaping the
ife of their enterprise and their place of work, then their interest in their
nvolvement in social affairs diminished, their creativity vanishes, and their ini-
iative declines. This is reflected in overall production as well as in their
nitiative at work, in socialist competition, in the atmosphere of their enterprise,
n interpersonal relations, and in relations between the management and the workers.
s it then possible to disregard the opinion of the workers?

evertheless, this also implies that every right of the trade unions must be inter-
reted in such a way that it does not belong to the trade union, but that it repre-
ents a legitimate right of the workers.

f course, we recognize in theory the role of trade unions in democracy within the
nterprise. We admit that the activity of trade union officials in plants and
ther places of work offers direct opportunities and organizational forms for the
orkers' participation in management, including the protection of their legitimate
nterests in relation to every level of economic management. In practice, however,
here has been too much pussyfooting and many things are simply swept under the
ug.

et us take, for example, consultations on production. Their entire history is
arked by an effort to overcome the controversies between their function as postu-
ated in theory and as it really is, and to give realistic contents to this method
f workers' participation. This effort has been demonstrated by the adoption of
he principles for the organization and procedures of consultations on production,
pproved by the CPCZ Cebtral Committee, by the CSSR Government and by the ÚRO [Cen-
ral Council of Trade Unions] in 1974. Those principles provided an institutional
ramework enabling consultations on production to fulfill their social purpose to
he fullest extent.

here is little doubt that over the years the number of consultations on produc-
ion and the number of the participants in them, as well as the ratio of implemented
roposals, have substantially increased, as have the numbers of places of work
here the views of the people are seriously considered. Nevertheless, in too many
onsultations not a single proposal is offered, nor are any decisions reached. May
his be the result of the predominantly informative orientation of such consulta-
ions on production? Naturally, the purpose of the consultations is to discuss
he tasks stemming from the fulfillment of the plan, and to define the tasks facing
hat particular place of work. Although it has been systematically stressed that
uch consultations should focus primarily on the qualitative aspects of management,
lanning thus far has resulted mainly in assessments of the volume of production.

Thus, the suggestions gathered in the consultations may often be summarized in a single demand: Provide us with adequate supplies of materials or parts and we will take care of the plan.

The improved planned management system, however, introduces indicators of adjusted value added and return on operating assets, and ties them also to material incentives. The same criteria must be applied also to the agenda of consultations on production, and the workers must learn that the resources for the development of every level of management, wages and cultural and social services fund will depend primarily on how much the whole collective can earn for that purpose; they must learn that it is more advantageous for them to accept more demanding tasks even in the plan. Naturally, in order to understand these and other correlations, and to inspire the workers for more economic management according to the principles of enterprise khozrashchot, proper preconditions must be created, which is primarily the task of the economic management as well as of the plant committees and of all trade union officials.

The Set of Measures stresses that consultations on production must be systematically focused on the solution of vital tasks of production. Thus, the decisive factor will be the extent to which the economic management and the plant committees will be able to introduce a better system into the life of workers' collectives and to include individual problems in the agenda of consultations on production. That, however, is not all. It is important to analyze the reasons why in some places the workers display very little activity in consultations on production, why the contents of the discussion demonstrate such great differences, and why they frequently tend to concentrate not only on problems of production, but also on other questions related to the workers' life, including social security in the enterprise. This indicates that the workers do not regard consultations on production as an institution which specializes in problems of production but rather as one serving multiple purposes. Moreover, this proves that in fact the work is not adequately divided between consultations on production and ROH [Revolutionary Trade Union Council] membership meetings.

All these problems must be recognized and resolved, if in every place of work in the next period we want to intensify our comprehensive efforts to develop activities and to intensify the initiative and coordination of work in sectors and workshops. This does not merely imply that the workers must be given general information and involved in such tasks, but also that their participation must be creative and bring specific contributions. This cannot be accomplished by mere appeals, challenges and proclamations of facts. The turning point toward overall peak efficiency in our national economy may be achieved by truly active participation of our workers in management and by their creative activity--and thus, also by the ability of the trade union movement to upgrade workers' participation in management. In all organizations and economic organs, however, this presupposes systematic respect for the rights of the trade union organs based on the decision of the Fourth All-Trade Union Congress. It is imperative to follow the Labor Code, to develop cooperation and joint activities, and to turn it into a positive factor in the development of dynamic powers of our economy.

Comrade Gustav Husak did not talk idly when he reminded the 18th Meeting of the CPCZ Central Committee of the fundamental, intrinsic task of the ROH, saying:

"Our policy will continue focusing on the development of the ROH mission in consolidating the workers' rights and interests and its coresponsibility for the solution of tasks relevant to our entire society, in resolving every problem of social development, and in improving efficiency and quality of our economic program."

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ADVANTAGES, PROBLEMS IN BLOC TIES WITH 'MULTIS' ANALYZED

East Berlin IPW-BERICHTE in German Vol 9 No 10, Oct 80 pp 29-36

[Article by Juergen Nitz: "East-West Economic Relations and International Monopolies: Unity of Struggle and Cooperation Between Partners With Differing Social Systems--Economic Ties Strengthen Peaceful Coexistence." Translations of the following related information are available in JPRS issues of this series as indicated: same author, article cited in footnote 8 below, published under heading, "Socialist-Capitalist Economic Relations Problems Analyzed," in 69571, 9 Aug 77, No 1659, pp 1-124 and two earlier analyses (Oct-Nov 75) in 66610, 19 Jan 76, pp 12-49; East Berlin HORIZONT article by Max Schmidt cited in footnote 23, published in 74996, 24 Jan 80, No 1972, pp 28-41]

[Text] There is more and more talk in public, and in political and scientific organizations such as the UN, UNCTAD, ILO and UNIDO, about the role of the international monopolies in the world economy.[1] The focal point of many scientific publications in socialist and developing countries, but also of authors in capitalist industrial countries, is placed on the negative practices of the transnational monopolies in the economic, political and social fields and on recommendations to curb their activities.[2]

The critics of the multinational corporations proceed from the proposition that they today constitute the main form for the internationalization of the economy in the capitalist world economy. They also are the main pillar of the scientific-technical potential in contemporary capitalism. H. Beininger, for instance, reaches this conclusion: "On account of this economic potential and its ramified international structure, which includes the direct power positions in the economy of the states, they constitute a crucial factor in the international division of labor and the mechanism of international economic relations in the capitalist world economy."[3] It furthermore is being shown that they control the social structure in the capitalist industrial countries.

The compelling motive for their expansion within and to the outside has always been gaining monopolist profits through their overpowering position in the economy and their aggressive economic, political and military foreign expansion, especially vis-a-vis the developing countries, supported by the

monopoly-capitalist state. Increasingly the multinationals have started to use the state directly for their own expansive objectives. They occupy predominant positions in the raw materials economy, exploit the working people in their own countries and in other states in new dimensions, curb their national sovereignty and loot the developing countries. A special point must also be made of the danger to peace coming from the monopolies that deal with armaments.

The effect of the international corporations is not confined only to the capitalist economic system. Their activities also play a significant role in the important field of economic cooperation between socialist and capitalist countries.[4] It must be kept in mind that, on the one hand, the multinationals are a main partner of socialism in their economic relations between the systems while they still constitute, as the crucial social foundation of the imperialist system, the chief enemy of socialist progress in the world, which, among other things, results in a complex dialectical interaction between the cooperation and the class conflict of socially opposed partners. Cooperation and struggle in their contradictory unity cause positive as well as negative aspects which must be precisely balanced off with each other on behalf of socialism.

Remarkable Results

Thus far there have only been few instances of comprehensively and systematically investigating the considerable share the international corporations have in the trade with socialist states. Even so, such analyses yield the following:

We must proceed from the fact that many of the economically strongest corporations in the world have economic relations with socialist countries--even if they greatly differ in intensity.[5] Circa 1,000 of the 3,000 economically most important ones of them have economic relations with enterprises and institutions in five or more socialist countries. As the USSR occupies an outstanding economic position in CEMA, it is the country with which the most important contracts have been concluded.

Circa one-third of the multinationals having economic relations with socialist countries doubtless are among the "giants" in their countries. According to a survey of the mid-1970's which included 180 capitalist large-scale enterprises, 20 of them had capital assets of more than $ 5 billion, 24 of them, more than 3 billion, 73 of them, more than $ 1 billion, and 33 of them, less than $ 1 billion.

The largest share comes from the economically most important Western countries, with the international corporations of the United States, the FRG, Japan, Great Britain and France in the lead. A smaller share goes to monopolies of Sweden, Italy, Netherlands, Switzerland, Belgium and Austria. Now it must of course be kept in mind that in such countries as the FRG and France, and even more so in Sweden, Italy and Austria and in still smaller countries, far fewer corporations have their own corporate management than in the United States, but the share of these corporations handling East-West trade enjoys a higher place value in their countries' economic potential.

The international corporations are active mainly in the leading scientific-technical branches of East-West trade, for instance in plant construction, modern equipment, ADP installations, electrical engineering, the construction of scientific devices, and some areas of the chemical industry. Far less involved are the consumer goods industry (textile, glass and ceramics and food processing) and agriculture.

Some international monopolies have as a matter of fact a considerable share in East-West trade. There are some large-scale enterprises in capitalist countries that have geared a high percentage of their output to orders from the East. The Mannesmann corporation in the FRG, for example, has at times produced up to 70 percent of its tubing on orders from the USSR, whereby it became the chief supplier of seamless pipe for the CEMA area.[6] The annual export volume of DM 700 million from the Salzgitter corporation in the FRG to socialist states amounts to circa 25 percent of the corporation's total exports.[7]

Mainly for large-scale projects on a cooperation or compensation basis and in scientific-technical exchange, the partners and contractors found on the Western side are corporations. In 1976 alone, the USSR worked together with research facilities of developed capitalist firms on 600 scientific projects.

Many hundred multinationals have set up bureaus, outlets and so forth in capitals of socialist countries or in cities they regard as "turntables for East-West trade," for instance in Vienna.

The big capitalist banks play an increasing role in East-West economic relations, mainly those of the United States (with circa 20 percent of all the banks working in this field), Japan (20 percent), the FRG (15), Great Britain, France and Italy (circa 10 percent each). Credits are principally used for supplying equipment.

The GDR--along with the other CEMA member countries--also of course maintains intensive relations with many leading industrial enterprises and banks in capitalist industrial countries, as shown especially by business contracts with firms in France, Italy, Japan, the FRG, Sweden, Austria and so forth. At the Leipzig fairs alone, circa 2,000 international corporations are represented directly or indirectly. Circa 100 large FRG corporations with an export volume of 2.5 billion valuta mark were part of GDR imports in 1978.

What explains these no doubt important relations between the enterprises, combines and foreign trade organizations of the socialist countries and the large Western corporations? What turns the latter into a useful and interesting economic partner of the CEMA countries?

Important Economic Factors

From the special vantage point of the socialist countries, the economic factors should first be mentioned. Let us start with the observation that the general interests of the capitalist states and corporations in trade with

socialist countries do not differ in essence from the specific interests of the big international corporations. Here then too, first and foremost, such general capitalist interests are most pronounced as the use made of capital, the expansion of sales, higher capacity use, the diversification of raw material and energy supplies, the securing of jobs and so forth. What is at stake here is obtaining economic advantages and profits from the objective process of the growing internationalization of economic life under the conditions and requirements of the scientific-technical revolution.[8] With it, however, the international corporations are introducing some particular factors into mutual economic relations which principally evolve from their organizational and productive strength and mobility.[9]

The big corporations with their important production and R&D possibilities are the main source of the latest technologies in the Western countries, which the socialist states are interested in purchasing. The magnitude of their potential enables the multinationals to hold the lead in many economic and technical fields. Abandoning economic relations with them would reduce the socialist countries' gains in growth and effectiveness--while at the same time hurt the interests of the capitalist side as well.

Due to their multifaceted production assortments and their skill in commercial operations at large dimensions, they are virtually predestined for large-scale orders and investments in the various branches of industry. And it is precisely such projects that the socialist countries are planning, as for instance the extraction of petroleum and natural gas deposits in the USSR, the construction of large-scale chemical plants in the GDR (Schwedt, Buna II) and so forth.

The corporations are especially suited to compensation arrangements as they are in the position to direct and distribute compensatory deliveries through enterprises they own or through their business partners. An example is the plant that makes drive shafts that is being built with the French Citroen Corporation near Zwickau. Another one is the reconstruction of steel plants in the GDR.

For the development of licensed production, that is for the contractually arranged manufacture of products of leading capitalist corporations in socialist enterprises, mainly in the form of compensatory transactions, high-quality products and brand commodities are wanted which the multinationals primarily have been introducing at Western markets. The GDR has concluded such contracts, for instance, with leading corporations in the FRG, Austria, Switzerland and so forth in the consumer goods industry.

The big capitalist corporations are in the best position to insure the sale of jointly manufactured products coming out of a division-of-labor corporation in the nonsocialist economic region since they have multifaceted distribution networks available there. VOEST-ALPINE in Austria, for instance, has just set up its own sales organization in Linz which also organizes sales to third countries.

Orders often are handled by subsidiaries and branches the production activities of which are directly or indirectly subordinated to the interests of the corporation. More than 30 Italian firms belonging to ENI and Montedison are carrying out joint investment programs in chemical complexes of the USSR.

The monopolies are potent buyers of large quantities of products from socialist countries. Raw material and fuel shipments are gaining increasing importance in this. Especially department-house corporations are buying considerable volumes of industrial consumer goods, manufactured in series production in socialist countries. But the big corporations also increasingly appear as purchasers of equipment from socialist countries. "Many readers will be astonished to learn that the multinational corporations now also belong among the importers of manufactured commodities, tools, machines, transport commodities, even whole industrial installations, from the socialist countries. It is in fact ironical that some of the products the socialist states export to the West once were placed on the West's strategic embargo list vis-a-vis the East," as J. Wilczynski has observed.[10]

The big Western industrial monopolies are as a rule affiliated with financially potent banks which can make available copious credits requisite for large-scale projects and compensations business. For some large contracts, credit operations have meanwhile reached amounts of several million and even several billion dollars, magnitudes that can no longer be coped with by individual banks but only by consortia.

Finally, because of their structure, international corporations are suitable for economic relations with the combines and foreign trade organizations in the socialist countries. The latter, as the Czech economist J. Vrany points out while quoting the bourgeois scientists J. Wilczynski, have set up a most effective system of legislative, institutional and procedural measures for negotiations with the international capitalist monopolies. They, however, are not permitted to become predominant in the economy of the socialist states or indispensable for investments or for economic development."[11] And Professor F. Knirsch of West Berlin has made the point that the large-scale enterprises of the West have more experience in dealing with socialist states than the smaller firms. For the socialist foreign trade organizations it would also be less complicated to do business with a small number of large capitalist firms and make it more of a long-term business (of benefit to socialist planning) than with a large number of small Western companies.[12]

Ultimately, the cooperation with capitalist states also involved the solution of such global problems that have to do with environmental protection, transport and energy and fuel supply, for which once again the large capitalist corporations are the potent partners.

Economic Relations With the Multinationals Cause Many Problems

The socialist countries' relations with the international monopolies are of course not unproblematic, given the mere fact that the latter seek to reach economic objectives resulting from their class interests, which in turn are in principle opposed to the socialist states.

This attitude of the capitalist large corporations also is often being discussed in public. The U.S. economist William Diebold Jr. said at a symposium that "the multinational corporations still engage in their 'normal activities' in their industrial cooperation with the socialist countries, which means they cannot and will not change their business attitudes. Whether they do business in East or West, their cooperation will be marked by their profiteering."[13] So one can be surprised that the monopolies seek profits when trading with the socialist countries. That, after all, is germane to the capitalist system.[14]

This basic interest makes contracts with corporations both possible and difficult because, with it, the principle of mutual advantage must be observed. Among the disturbing factors are, no doubt, attempts by the monopolies to turn over to the socialist countries products that are harmful to the environment even though, in general, the capitalist side is pledged to international cooperation in the field of environmental protection. Moreover it seeks to use economic areas in the socialist countries as an "elongated workbench" for the international monopolies, i.e., seeks to have the CEMA states handle relatively "simple" productions while reserving "intelligence-intensive" productions for the monopolies.

In many cases the corporations offer products to the socialist countries that do not meet with highest standards so as to obstruct technical progress in socialism. And they also seek to interfere on the markets and so forth. P. Knirsch points out that the multinationals "embody a commensurately large market power and can in some cases apply monopolist modes of conduct in international economic relations too. This market power they will necessarily seek to use against any trade partners, which also includes the socialist countries." He adds, however, that the "concentration of the foreign trade authorizations in the socialist countries," that is the socialist state monopoly in foreign trade, certainly remains able "to curb the market position of Western large-scale enterprises."[15]

It would make no sense to reject the economic relations with the international corporations simply because they pursue the designs alluded to. The Romanian scientist I. Serbanescu, for instance, has said: "We must accept and even encourage these relations but see to it that the forms used will turn these relations into genuine cooperation. Forms must be found, in other words, that would prevent those corporations from gaining control of certain areas of the economies or from using practices that would have detrimental effects on the interests of other countries."[16]

Thus we must always, in general and in any individual instance, act in accordance with the consideration for what is useful for socialism or how imperialist attempts at hurting socialism are to be prevented. In their cooperation with Western corporations, the socialist countries of course pursue economic interests that are specific to their system and are aimed at using advantages from the international division of labor for their own development. Cooperation with the monopolies serves as an important supplementary source of activities within the framework of the socialist plan economy, including the economic integration within the CEMA framework.

This way economic tasks can be solved that could otherwise not yet be tackled at this point or completed with the same rapidity or on the same high level.

This then is not merely a matter of an "altered distribution of benefits in the East-West business," as W. Meissner of Frankfurt/Main University presumes,[17] but of constantly enforcing the principle of mutual advantage, the essential element on which the foreign economy relations of the socialist states are based. The points of intersection in interests as well as the divergencies within the economic relations between socialism and capitalism have to be embedded within the policy of peaceful coexistence between states with differing social systems, for which--also in the view of more realistic imperialist circles--there is no other acceptable alternative for mankind. As the material foundation for the process of political detente, the socialist countries are thus developing economic relations with all essential elements in the capitalist industrial states, with the larger as well as the smaller enterprises.

The 'Large' and 'Small' Ones in East-West Trade

The West not infrequently accusesthe socialist countries or foreign trade organizations they are "not doing enough" for the "small ones," that is, enterprises in the small and medium-size industry, in East-West trade, and are placing them at a disadvantage for the benefit of the "large ones," the monopolies, in particular the international corporations.[18] What actually is one to make of the role of the "small ones" in East-West economic relations?

No doubt there are these contrasts and contradictions between the "large ones" and the "small ones." The first point to be made here, however, is that they are caused by the capitalist production relations and the contradictory developments in capitalism itself. Under the pressure from the multinationals, more and more small and medium-size enterprises are getting into economic difficulties and are ruined. So this amounts to an objective problem in the capitalist world economy. The contradiction is not the outcome of the antagonism between socialism and capitalism, and it has in no way been caused by the former. And so one cannot blame the socialist states for the differences existing in the possibilities for participating in foreign trade as between capitalist large and small-scale companies.

Nonetheless it can be seen that the opposition inherent in capitalism between corporations on the one side, and the middle-class and petty bourgeoisie, on the other, also in a certain way is reflected in East-West trade. The CEMA states, to be sure, offer no unilateral advantage to the "large ones." The socialist countries maintain well-balanced relations both with the corporations and the small and medium-size companies. A Soviet study relevant to this, presented at the 12th International Eastern Trade Seminar in Bad Ischl by the representative of the Soviet Chamber of Industry and Commerce, G. Doneman, indicates the following:

More than 1,500 FRG corporations hold trade contracts with Soviet foreign trade enterprises in 1977. Almost 1,400 of them were small and medium-size enterprises accounting for circa half of the FRG trade with the USSR. Medium firms furthermore have the possibility to participate as ancillary suppliers for large-scale projects in the Soviet Union. Doneman presented some examples in this context. It turns out that in the construction of the world's largest truck factory on the Kama River, at the Chkalov natural gas complex, and at the Ust-Ilimsk lumber processing complex, 500 small and medium-size enterprises are participating along with some large-scale French corporations. In equipping two methanol plants in the USSR, 200 British small and medium-size companies are involved among others.[19]

The importance of GDR commodity transactions with enterprises in this order of magnitude is underscored by a study of the Institute for Middle-Class Research, Research Group Bonn of 1978.[20] According to that study, more than 70 percent of the FRG companies engaged in GDR trade are small and medium-size enterprises, i.e., enterprises with a labor force below 500. A detailed look shows that 366 of them--i.e., nearly 20 percent--even had fewer than 50 employees in 1977, which makes them small-size enterprises. Some 31.5 percent employed between 50 and 199, and 20.5 percent between 200 and 499. "The size structure of the FRG firms supplying the GDR with goods indicates that small and medium-size enterprises not only take part in this trade indirectly as ancillary suppliers but actively in the trade relations," as the study referred to summarizes the situation.

As to the branches the enterprises analyzed belong to, the emphasis clearly goes to machine construction (37 percent of the enterprises). "This means that an industrial group with a markedly middle-class structure significantly contributes to deliveries to the GDR. Other important industrial groups are electrical engineering and the chemical industry, which both are branches where larger enterprises rather predominate. Yet even in these fields, a relatively large number of small and medium enterprises participates in deliveries to the GDR."[21]

The survey by the Bonn research group is corroborated by various other analyses produced both in the FRG and the GDR, which reveal the following: At present there are circa 5,000 trade partners of the GDR in the FRG and in West Berlin, roughly 100 of them important, mostly international, corporations, 800 large-size companies and circa 4,000 small and medium-size enterprises, which annually conclude approximately 10,000 contracts of various kinds with GDR enterprises. Between 1978 and 30 June 1980, according to the FRG Ministry for Economics, the GDR imported from the FRG machines, installations and equipment and electrical devices at a total value of more than 3 billion valuta mark. More than 1,000 noted middle-class enterprises are participating in it.

Not only is the share of small and medium-size enterprises very high in the total number of companies, their share in the trade turnover between the GDR and the FRG or West Berlin is very high as well. Circa 50 percent of this overall trade turnover is handled by small and medium-size companies. And the role of the "small ones" is significant in both export and import.

The imports in 1978 involved along with 100 corporations with shipments at a level of 2.5 billion valuta mark all other enterprises with approximately 4 billion. Especially engaged are enterprises in branches that have efficient lines of special machinery to offer. Furthermore smaller enterprises appear as subsidiary suppliers in the implementation of large projects contracted for between the GDR and the FRG, partly on a compensation basis. In the construction of the Buna - Schkopau complex alone that involved 200 FRG firms.

Thus the GDR takes into account that especially enterprises in the so-called middle-class industry carry much weight in the development and supplying of modern equipment and that scientific-technical progress plays a great role among them too. They are very flexible in their fields and are forced to react rapidly by the competition from the monopolies. Often their production assortments supplement what the corporations have to offer.[22]

When the GDR supplies the Western states, the "small ones" also are fully integrated as buyers. GDR exports to the FRG in 1978, for instance, amounted to circa 700 million valuta mark to the larger corporations and roughly 3.5 billion to the small and middle-size enterprises. The GDR seeks to promote the "small ones" in East-West trade by still other ways and means, however.

At the Leipzig fairs at present circa 75 percent of those who exhibit belongs to the group of firms called "middle-class industry." All this reflects a GDR economic policy with a long-term orientation which grants the small and medium-size enterprises of Western countries a solid position in GDR import and export.

However much the socialist countries are doing to promote their economic relations with the "small ones," there is one thing that still has to be underscored with emphasis: They too are enterprises of the capitalist system, and their "survival" possibilities are not a problem of socialist trade policy but one of its inherent inevitabilities. That also is the position from which alone the question can be answered of who in East-West trade has the obligation to do something for them. The responsibility of the West doubtless is unequivocal.

On the part of the capitalist governments and other official institutions and organizations and so forth, there are various promotion measures for small and medium-size enterprises, such as, for instance, economic consultation offices in the FRG embassies in Moscow, Budapest, Bucharest and now also in Prague. Some Western countries have taken initial steps in organizing the small and medium-size enterprises for East-West trade under a "government umbrella." Commercial consulting firms with government help or government-sponsored have been set up that exercise consulting and organizational functions, such as, for instance, "Berlin Consult" in West Berlin which also maintains active business relations with the GDR.

And then there are the well-known attempts at setting up "promotion bureaus" for the "little ones" in Western countries. That includes there also the activities in developing or founding cooperation centers in which enterprises can coordinate their interests or get advice and counsel for East-West trade

and so forth. Criticism expressed by the small and medium-size enterprises of the work of many of these institutions confirms once again that lack of promotion can by no means be blamed on the socialist states.

State Monopoly Mechanisms Do More for the Multinationals

Specialized circles in Western countries note that the measures engaged in by the capitalist state in its trade with socialist countries are adapted to the needs and interests of the large corporations. Through economic associations and entrepreneurs organizations, where the representatives of the leading corporations have the say-so, through their direct brokers in parliament and its commissions and within the government, with the help of the in part strongly developed industrial lobby, the corporations affect the legislation and various economic policy measures and regulations in the capitalist countries. They get credits at favorable interest rates or with government subsidies attached or they are stimulated toward "Eastern trade activities" by government securities, as in the FRG. This applies particularly to large-size orders.

The agents of leading corporations have the say-so in the state monopolist institutions of East-West trade (in the FRG, for instance, in the "Eastern Commission of the German Economy"). They also appear as the repreentatives of the West in mixed international commissions, as experts in specialized commission and so forth, where economic cooperation with the socialist countries is under discussion. Measures practiced by the capitalist industrial states that obstruct East-West trade, such as customs or the fixing of quotas and so forth, in many cases are due to the interests of the monopolies. To the extent that such or similar measures affect the interests of the monopolies, they are a subject of constant domestic policy debate.

Concerning Some Political Factors

The economic relations of socialist states with international corporations amount not merely to relations between partners in economic enterprises, organizations, institutions and so forth as such. In consequence of the socioeconomically opposed property and power structures in the two social systems, they are by no means politically neutral in value as some ideologues in Western countries claim they are. These are reciprocal relations of socially differing classes on an international level and essentially a part of the conflict between the two systems. The socialist states take that into consideration, of course.[23]

For one thing, the socialist countries understand that precisely the transnational corporations have considerable influence on the governments in the countries in which they carry out their activities or have their corporate management. What could possibly make more sense than engaging with them in the kind of relations that would induce them to influence any of these governments in terms of consolidating peace and developing peaceful coexistence and to move them positively toward more realistic positions in their foreign policy vis-a-vis socialist countries, if for no other reason than that a departure from the process of political detente could have direct economic disadvantages for the large-scale corporations concerned?

Under that aspect the economic cooperation with the international monopolies transcends socialism's desire to strengthen its own foundations. It serves to enforce peaceful coexistence, to consolidate world peace and hence the interests of all peace-loving people. This neither does away with or weaken the contradiction between the workers class in the capitalist industrial countries fighting for social progress, peace and democracy and the monopoly bourgeoisie historically condemned to perish. Rather, through the policy of the socialist community of states better conditions are created for the social struggle of the workers class and all working people than had been possible under the conditions of the cold war or the dangerous confrontation between socialism and imperialism.

Developed economic relations with socialist countries or sound prospects for them can induce an attitude in the international corporations that is conducive to detente and disarmament. But on the other hand it would be illusory to assume that this is an effect they would necessarily have, inasmuch as the military-industrial complex most unequivocally exercises a crucial influence within the main NATO powers at this time.

And then again it should not be ignored that the large corporations tend to develop or stimulate political activities against socialist countries that are in essence anticommunist even if they appear neutral in terms of class interests. So it makes no sense to talk about a "harmony of interests between the multinationals and socialist enterprises or countries," as alleged, for instance, by leading representatives of Western organizations.[24]

Each side proceeds from its own class-bound social interests and thus approaches this cooperation in different terms. The economic relations of the socialist countries or enterprises with transnational corporations thus amount to a dialectical unity between struggle and cooperation by socially opposed partners, to a unity of contradictions. Yet they are being dealt with not by military means but by means that conform to the conditions of peaceful coexistence.

Clear Differentiation Processes

As there is no uniformity of attitude in the Western governments, there neither is any in the position of the international monopolies in the various capitalist countries on economic cooperation with the socialist states and their enterprises. That is seen particularly in recent times by the influence of a tougher U.S. imperialist policy against the Soviet Union.[25]

For instance, current attempts by the United States to drag other imperialist countries into its course of confrontation directed against detente and peaceful East-West cooperation are being rejected by many Western governments as well as by representatives of the international monopolies, especially in Western Europe. That is true particularly of France and such nonalined countries as Austria, Finland and Sweden but similarly also--as far as the defense of economic positions is concerned--of the FRG. There we find almost

unanimous pronouncements on this matter by Federal Chancellor H. Schmidt, Minister for Economics O. Graf Lambsdorff and the leading circles of FRG monopoly capital (for instance by DIHT President Otto Wolf von Amerongen),[26] advocating the further development of economic relations with socialist countries, which also is reflected in their economic policy and practice.

This evidently is greatly affected by the different interest situations of the various capitalist monopolies and their countries in East-West trade. Looked at it from this vantage point one must remember that the FRG alone had a 27-percent share in East-West trade in 1979, France one of approximately 10 percent, all EC states together circa 60 percent, all of Western Europe as much as circa 75 percent, yet the United States less than 10 percent. There also are many international monopolies in the United States itself that do not support the aggressive Carter policy. They include, according to their public pronouncements, Occidental Petrol, Armco Steel, Dresser Industries, Honeywell Inc., Pan American World Airways and others.

As the military-industrial complex is closely intertwined with the state monopoly government system and its political representatives, the result is that those U.S. corporations exercise the main influence right now which are interested in exacerbating East-West relations. They determine the U.S. government's course of confrontation. A similar trend is also found in the position of the British government and in the political positions of the CDU/CSU in the FRG, which in many respects oppose the basic requirements of an East-West trade based on mutual advantage.

For a Democratization of Economic Relations

The socialist countries proceed from the consideration that the negative effects on the world economy resulting from the activities of the transnational corporations must be curtailed or prevented. Their policy underscores the intention to bring about relations on equal terms among the participants and turn back or eliminate the especially harmful international practices of the imperialist side. Economic relations with monpolies internationally active are feasible only if they recognize a number of essential prerequisites that are part and parcel of peaceful coexistence, as for instance: the recognition of or respect for the political system or the social conditions of the other side; nonintervention in its internal affairs; respect for territorial integrity and sovereignty; and renouncing subversive activities directed against the partner and so forth.

All these maxims are by no means accepted from the outset by the monopolies and taken account of in what they do. In fact they contradict their character and goals. Making democratic principles prevail in accordance with the principles of peaceful cooperation therefore is an area of tenacious struggle through which the negative activities and at times also the hostile intentions of the multinational corporations are turned back.

The concrete East-West economic contracts demonstrate that in this field of world economic relations it is impossible for the transnational corporations

to put their hands on the raw material resources of the other side and exploit its manpower potential. That also holds true for setting up mixed corporations in the territory of socialist countries subject to their laws. Prices cannot be dictated but they become subject to well-balanced accords between equals. The socialist ownership in the means of production, the political rule of the workers class, the socialist planned economy and the socialist foreign trade state monopoly insure that the East-West economic relations, including those in which internationa. monopolies participate, serve the development and consolidation of socialism.

Establishing contracutual rules with the transnational corporations often is a complicated process because the monopolies maintain their characteristic features when dealing with their socialist contract partners and seek to make them prevail through stubborn negotiations. Any accord with them can therefore be understood only as the outcome of struggle between opposing interests.

The general efforts and advances toward the democratization of world economic relations also have positive effects in this context because the practice of economic cooperation for mutual advantage among the socialist countries is an effective example for it.

The further development of East-West economic relations, including the participation in them by the international monopolies, will no doubt contribute to the formation of a new international economic order, which in turn will be conducive to the economic relations between socialist and capitalist countries.

FOOTNOTES

1. As a contribution to it could be seen also the science symposium on peace, security and the role of international monopolies, sponsored by the GDR Institute for International Politics and Economics and the Vienna International Institute for Peace, and held in Ahrenshoop on 29 and 30 September 1979. Papers and discussion contributions in "Wissenschaft und Frieden" (Science and Peace), Vienna 4/1979; Conference proceedings in IPW-BERICHTE, Berlin, 12/1979, pp 47-50. The present article is based on statements made by the author at that symposium.

2. Cf., inter alia, C. Fundulis and H. Heininger, "Internationale Monopole," Berlin, 1978; H. Heininger, "Transnational Corporations and Their Harmful Role in International Relations, "Wissenschaft und Frieden," 4/1979; cf. also H. Heininger, "Peace, Security and Today's Role of the International Monopolies," IPW-BERICHTE, 12/1979, pp 1-10.

3. H. Heininger, "Peace, Security and . . .," loc. cit., p 2.

4. J. Wilczynski, "The Multinationals and East-West Relations--Towards Transideological Collaboration," London, 1976; W. Diebold Jr., "The Role of the Western Multinationals as Partners in East-West Cooperation--Lecture at the Colloquium on East-West Relations in West Berlin, 11 August 1975"; P. Knirsch, "Some Particulars With Regard to the Multinational Corporations as Partners in East-West Economic Relations"; C. Fundulis, "The Role of the Multinational Monopolies in International Economic Relations"; I Serbanescu, "Enforcing New International Economic Relations Only Through Confrontation With the Transnational Corporations"; J. Vrany, "International Monopolies--The Movement of Capital and the Reorganization of International Economic Relations"; W. Meissner, "Altered Distribution of Benefits in the East-West Business?" All this in "Wissenschaft und Frieden," loc. cit., 4/1979.

5. J. Wilczynski, op. cit.

6. O. Reinhold, in EINHEIT, Berlin, 6/1980, p 605.

7. FRANKFURTER ALLGEMEINE, Frankfurt/Main, 23 April 1980.

8. Cf. on the general problems in economic relations between socialist and capitalist countries: J. Nitz, "Problems in Economic Relations Between Socialism and Capitalism," IPW-FORSCHUNGSHEFTE, Berlin, 2/1977.

9. Cf. also "Westeuropa in der heutigen Welt" (Western Europe Today), Berlin, 1979.

10. J. Wilczynski, op. cit., p 61.

11. J. Vrany, op. cit., p 89.

12. P. Knirsch, op. cit., p 53.

13. W. Diebold Jr., op. cit.

14. Cf. E. Honecker, "Die Sozialistische Revolution in der DDR und Ihre Perspektiven" (The Socialist Revolution in the GDR and Its Prospects), Berlin, 1977, p 29.

15. P. Knirsch, op. cit., p 53.

16. J. Serbanescu, op. cit., pp 61-62.

17. W. Meissner, op. cit., pp 89-90.

18. "Ost-West Kooperation," West Berlin, 8/1979, p 128.

19. DEUTSCHE VOLKSZEITUNG, Duesseldorf, 30 August 1979.

20. A. Schlemper, "Trade With the GDR and Its Importance for the Small and Medium Enterprises," "Cooperation Ost-West," Essen 1978, p 31.

21 Ibid.

22. P. Knirsch, op. cit., p 52.

23. Cf. also M. Schmidt, "Cooperation, Trade, Detente—Economic Cooperation as a Factor in Materializing Relations of Peaceful Coexistence Between States With Differing Social Orders," HORIZONT, Berlin, NO 47 and 48/1979).

24. C. Levinson "Wodka - Cola," Zurich, 1978.

25. Cf. C. Fiedler, "U.S. Foreign Economic Policy Against Peaceful Coexistence," IPW-BERICHTE, 4/1980, pp 19-27.

26. SUEDDEUTSCHE ZEITUNG, Munich, 21 March 1980; ALLGEMEINE ZEITUNG, Mainz, 16 February 1980.

5885
CSO: 2300

FUTURE OF EAST-WEST TRADE VIEWED

Budapest MAGYAR HIRLAP in Hungarian 23 Oct 80 p 5

[Report by Dr Andras Kovacs: "The Future of East-West Trade"]

[Text] East-West trade increased faster in 1979 than any time since the mid-1970s: the value of the CEMA-country exports exceeded the previous year's level by 35 percent, and their imports by 29 percent. Most of this increase, however, was the result of price increases and not the increase in volume, but the latter was also noteworthy. This is especially true of the CEMA-countries' exports, the volume of which exceeded the previous years' average significantly—by an estimated 10 percent. The estimated 6 or 7 percent increase in the volume of imports is very slight when compared to the usual pace of the 1970s: there was only a single year—that of 1977—when the CEMA-countries were able to decrease their imports from the West by a greater degree, i.e., by almost 7 percent.

The Situation Today

As a result of the differences in the increase of exports and imports, the CEMA-country trade liabilities decreased substantially in 1979: it hardly exceeded 2 billion dollars. This sum is only one-fourth of the record deficit of 1975 (6.2 billion dollars), and is much lower than that of 1978. Since the CEMA countries consider the improvement of trade balance their most important short-range economic goal, this is looked upon everywhere as a positive--if not always a satisfactory--development.

Behind the compound data above, there is the different balance situation of the Soviet Union and the smaller CEMA-countries. According to the OECD statistics the Soviet Union for the first time since 1974, achieved a balance surplus in its trade with the developed capitalist countries. This was made possible, in addition to a 22-percent increase in imports (which is higher than the CEMA countries' increase), primarily by a new increase of its export prices.

The tendency of deficit decrease is also shown by the data of the six smaller European CEMA countries. But the pace of the decrease is much slower. The six countries' combined deficit was about 3 billion dollars in 1979 alone; this is compared with the 4.5 billion-dollar deficit of 1975 and the 4.1 billion-dollar deficit of 1978. Still, the annual 25 percent decrease of the present foreign trade deficit is, by all means, a respectable achievement in the midst of unfavorable price developments.

The question is, however, what consequences can be drawn for the future from the present balance situation. Even the repetition of the 1979 export increase is difficult in the present world economic situation. The cyclical situation is worse when compared to that of 1979. According to an analysis made at the Business Cycle and Market Research Institute, we cannot count this year with an economic growth in the developed capitalist countries that is faster than 1 or 1.5 percent--as opposed to last year's 3 percent growth--and the increase in world trade will hardly exceed 3 percent. Higher figures for next year cannot be predicted with certainty either--even if the global situation is likely to improve slightly instead of becoming worse.

In principle, the slow increase in world trade does not exclude the possibility for certain countries or groups of countries to increase their exports to less dynamic or stagnating markets by pushing others out of the market. This is the traditional strategy of countries which are increasing their exports dynamically. It is to be feared, however, that the increase of the European CEMA countries' exports, with their level of economic efficiency and development, their pace of changing the product structure and their well-known problems in export production and trade, cannot permanently and significantly exceed the rate of increase in world trade. This question leads us to the fundamental problems in economic policy which are related to the trade between East and West.

The Gaps of Improving Balance

In examining the CEMA countries' efforts to improve their balance of payment, it becomes apparent that the decrease in deficit came about in every country as a result of reducing domestic demand and economic growth. The years 1978 and 1979 saw the slowest growth of the CEMA countries. More limited investments and a more moderate increase in production and demand made it possible to increase imports slower and exports faster. This was, by the way, dynamically promoted by the economic management of the individual countries. No matter how extensively the resources for limiting imports and expanding exports could be mobilized, this in itself cannot solve the problems of balance for an extended period. The "boom policy" means of growth decrease or increase (also including the various prohibitions and limitations that are directly related to the sphere of circulation) may be suitable for one or two years as a countermeasure for the tipping balance resulting from a boom (worsening terms of trade and market conditions), but cannot fully compensate for a lack of structural balance which the CEMA countries have had to face since the mid-1970s. And if, as a result of a lack of external balance, production and consumption would fall back--or even decrease--this could lead to problems in the domestic economy and to an increased lack of market balance. And, under these circumstances, it would be even more difficult to stop, or control, the lack of external balance--as the events in Poland also show.

Thus the future of East-West trade, approached from the viewpoint of the CEMA countries' economic policies, depends on the elimination of the causes which make the lack of balance structural, i.e., their export-increasing capacity in the long run lags behind the expansion pace of their needs. The causes, which have been frequently mentioned in Hungary, too, at the debates on the paths of economic policy to be followed and on the mechanism which makes possible to increase efficient exports are complex and extensive. But they are closely connected to the fact that the CEMA strategy of economic development and cooperation is still not permanently free of a CEMA autarky policy or efforts to achieve regional self-sufficiency. The goal is still being proclaimed that all products needed by the

CEMA countries must be produced by themselves. Thus, they must consider the decrease in imports from the West not only as a short-term "tactical" necessity but also as a long-range policy.

But it is entirely clear today that this effort is outdated and impossible to realize: the policy of regional self-sufficiency would not only unfavorably influence socio-economic development in the CEMA-countries, but it is impossible to implement it as well. This follows, among other things, from the cooperation which is characterized by a more protracted and more extensive shortages of goods resulting from a rearrangement of terms of trade. For this reason, the individual countries must acquire an increasing part of their import needs from without the CEMA. This follows from the difficulties which are related to an increasing use of the economic development's "intensive" resources. And they make us more and more aware that continuous and large-scale imports of modern machines and equipment, obtaining technical, technological and organizational information, and the establishment of an attitude of efficiency and innovation are indispensable requisites for scientific-technological development, higher efficiency and higher living standards.

A Long-Range Program is Needed

The consequences of internal processes are connected with requirements resulting from world economic development. Dynamic technical-developmental changes of production structure are continuing to take place in world economy. All of this requires, more than ever, that every country which does not wish to lag behind economic and technological development, take part in the global division of labor—a participation that is dynamic, extensive and partly different than before. In order to make export orientation more than a system of short and middle-range measures that do not change the conditions of economic operations essentially, the int-nsive participation in world economy must be formulated as a long-range program, a strategy of socio-economic development.

All of this means in today's intensified foreign economy [fesritett kulgazdasagi helyzet] that the CEMA-countries must continue to implement import policies which are cautious and circumspect, which carefully consider the macro-economic limitations, which do not hinder a continuous and efficient economy, which guarantee an adequate supply of goods to the population, and which serve longer-range developmental goals better than today's policies. Import policies are necessarily related to the CEMA-countries' possibilities of acquiring credit. The most recent developments in East-West economic relations (including conceptions, still embryonic, regarding existing and further credits offered to Poland) show that the Western countries are continuing to have an interest in developing financial and trade relations with the CEMA-countries. This means that, although the external conditions of such import policies cannot be considered easy, they can be implemented if tensions in international relationships can be avoided.

9414
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ECONOMIC REGULATION CHANGES DICUSSED IN INTERVIEW

Budapest NEPSZAVA in Hungarian 7 Nov 80 p 5

[Interview with Miklos Pulai, deputy chairman of the National Planning Office, by James Najda]

> [Text] On the basis of a report presented by the chairman of the National Planning Office, the government approved the proposals for modifying the economic regulators as of 1 January 1981. The government instructed the ministers and national agency chiefs concerned to draft and promulgate the necessary statutory provisions. We interviewed Miklos Pulai, deputy chairman of the National Planning Office, on how to sum up the nature and objectives of these modifications

[Question] Much is being said these days about the economic regulators. On the one hand the reader gains the impression that they are some sort of "mythical" automatism that solves everything by itself, without human intervention. On the other hand enterprise managers complain that changes in the regulators are all too frequent, making it impossible to plan farther ahead and to develop an enterprise strategy. Would you care to comment on this?

[Answer] It will be useful to clarify that the system of regulators is only one element of the system for managing the economy. In addition to the system of regulators, also the national economic plan and the organizational system of management are important components. Moreover, quite a few forms of the management mechanism function as parts of economic regulation: price regulation, credit policy, the system of taxes and subsidies. No less important are personnel work at the enterprises, wage policy, and the various labor-law regulations that rely very much on the individual and provide incentives for workers in various assignments. Thus the mentioned system of economic regulation is by no means omnipotent, nor is its effect divorced from the work, thinking and aspirations of individuals. Concerning the second part of your question: amidst the economy's complex system of conditions and its dynamic changes, it is difficult to imagine a regulation mechanism that is permanent and unalterable, yet always acts in the desired direction. Despite the unavoidable major or minor corrections, we are striving to keep

as permanent as possible the fundamental nature of regulation, its conformity to the norms, so that the economic units may plan with more or less certainty, at least for the intermediate term. I would like to emphasize that this is also my personal opinion.

[Question] The regulators will nevertheless undergo modification as of 1 January 1981. Why and to what extent are they being modified?

[Answer] Actually we are talking about the correction of some elements of the present regulators. These corrections have become necessary for several reasons. At the time of the 1 January 1980 changes in the system of regulation, and of the price system in particular, we already anticipated that certain adjustments and corrections would have to be made eventually, on the basis of practical experience. Actually we are talking about correcting errors--for example, in the case of the starting prices and the base of the wage-development indicator--and about adapting to changes in the conditions of the world market. However, it has become necessary to regulate also the demand for investments. Lately the investment equilibrium has improved somewhat, and it would not be good if next year this trend were to shift again toward unfavorable. The more so because this would further increase the already heavy burden of budgetary expenditures. I wish to emphasize that there will be no basic change in the conditions of economic activity as compared with the system of regulation introduced this year, and we will merely be tightening the requirements here and there, in order to realize more consistently the objectives of economic policy.

I would now like to call attention to some of the changes that must be introduced in the price mechanism, in the regulation of enterprise incomes, in wage regulation and incentives, in technical development and in agriculture.

[Question] We obviously should not think of consumer prices in this context.

[Answer] Of course not. It will be remembered that in their producer prices the enterprises employing competitive pricing cannot include more profit than what is included in the world-market prices of the products these enterprises export. Some domestic enterprises, however, have not complied with the regulations, and it is necessary to assert the rule that the domestic price--on average for the year--may not exceed the export price. The purpose of this is to encourage the enterprises in improving their operations, through the efficiency of export. Investigations show that most enterprises--including the over 30 engineering enterprises where the profitability of domestic trade and the profitability of export still differ today--will eventually be able to follow the export prices, by observing the regulations on pricing. At a few enterprise, however, it is warrented to make certain corrections in the interest of supporting the

modernization of production, and to extend the time limit by which the domestic and the export price and profit levels must be identical, which in most cases involves a reduction of the producer prices.

In those areas where competitive pricing does not apply, the government is likewise encouraging the economic units to conserve energy and raw materials. The various instruments of regulation attempt to prevent the enterprises, for example, from passing on automatically in the prices of their products the higher costs of energy. This forces the enterprises to seek instead methods for the more efficient use of energy.

[Question] You mentioned that some elements of income regulation and wage regulation will be modified. Why is this necessary?

[Answer] The reduction of domestic consumption--or more accurately, of the accumulation-related expenditures--envisaged in the national economic plan, and the greater effectiveness of regulation warrant these measures. Otherwise the basic principles of wage regulation and income regulation will not change. The correction merely attempts to boost their incentive effect, to assert more decisively than up to now the requirements of performance.

The rate of the municipal and community contribution will increase from 10 to 15 percent. Simultaneously, in order to maintain the level of social services at the enterprises, the per capita allocation to the welfare and cultural fund is being increased from 950 forints this year to 1000 forints next year. In other words, this will be the compulsory allocation to the welfare and cultural fund (the number of workers times 1000 forints). Spending from this fund in any given year may be less than the allocation, in accordance with the needs. During the drafting of the modifications, there were differences of opinion concerning compulsory allocation, but finally the standpoint of the SZOT [National Council of Trade Unions] representative was adopted.

[Question] The measures related to wage regulation will affect everyone directly. We know that a spectacular rise in the standard of living would not be feasible now. But anyone who does outstanding work deserves above-average financial recognition.

[Answer] So far as wage regulation is concerned, this is the very reason why we did not wish to restrict wage increases commensurate with a rise in performance. On the other hand, any possibility to increase wages that is not supported by more-effective work must be prevented. The centrally determined possibilities for wage increases, and the 1980 values of the multipliers associated with wage regulation based on performance must be retained also in 1981. In economic activity next year the regulation will apply that the available payroll budget must be used if the decline of the wage-development indicator does not exceed 10 percent. From wage reserves, however, an amount may be used that is needed to raise the wage level by a maximum of 3 percent, over and above the wage increases that may be granted

on the basis of the results of operations in the current year. (A larger amount of the wage reserves may be used only if the wage-development indicator does not rise or declines. In such cases the wage reserves may be used for a rise of up to 4 percent in the wage level.)

They say that wage regulation is not advantageous for profitable enterprises. The exact opposite is true. If the indicator of wage development supports a rise of average wages, the enterprise will not be taxed for a rise of up to 9 percent in the wage level, as compared with a 6-percent rise previously. In other words, the curb on efficient enterprises begins only above 9 percent, which is about 1.5 times the planned increase in average wages.

In financial incentives for top managers, in 1981 the upper limit on bonuses based on comprehensive evaluation must be made independent of the given enterprise's category. The maximum bonus is uniformly 20 percent of the annual salary. In my opinion, the fact that the managers of small enterprises are not treated less favorably than the managers of large enterprises will provide a proper incentive, while this limit on the maximum bonuses that may be paid does not violate society's sense of fairness.

[Question] What changes can be anticipated in agriculture?

[Answer] It is obvious that under the Sixth Five-Year Plan less investment aid can be provided also in agriculture than in years past. Therefore the resources for development must be used more effectively than at present. The new system for financing investments must provide incentives for more-complete utilization of the available resources, and for investments that offer a high rate of return and are best suited for the specific conditions of the individual farms. Knowing these basic principles, the farms next year will be able to undertake capital construction--with the exception of facilities for dairy farming and hog production--only from their own resources or from credit obtained at favorable rates. This is the essence of the changes in agriculture.

[Question] Most of the corrections in the regulators could be summed up in everyday language as belt-tightening. The necessity of balancing the budget, and of improving the external economy's equilibrium, makes these measures understandable. But will they not curb entrepreneurial initiative specifically at the enterprises (and in the sectors) where there are prospects for rapid growth?

[Answer] Since the modification of the regulators will affect the sphere of production rather than the sphere of consumption, instead of your analogy of belt-tightening I would say that economic pressure is increasing on a certain group of enterprises. In any case the objective is to uncover the reserves still existing in economic activity, and to employ more-uniform criteria in evaluating the enterprises. Most of the measures in question are of a comprehensive nature. They do not allow individual

exceptions and tighten somewhat the requirements. The economic units that are able to operate successfully even under such conditions have and will continue to have a bright future. I feel that this is what will continue to stimulate the best enterprises, and this is what we are striving to achieve with the effects of the regulators.

1014
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TASKS OF FOOD INDUSTRY REVIEWED IN VIEW OF NEW REGULATIONS

Budapest ELELMEZESI IPAR in Hungarian No 10, 80 pp 364-368

[Article by Balint Balogh, department head, Ministry of Agriculture and Food Industry: "Situation and Tasks of the Food Industry in View of the New Regulation"]

[Text] Summary

The system of economic regulators which will be valid on 1 January 1980 will place greater requirements on the enterprises than before. The profit content of food has declined. In the distribution ratio for profits between the state and enterprises, the change in the revenue regulation system has resulted in a shift in favor of the budget. The enterprise incentive funds that can be formed have also been moderated by the increase in the centralized ratio of amortization. The financing system for variable assets has been changed significantly, a condition of increase in personal income.

A growth in the incentives for food industry enterprises gives grounds for an examination and modification of the extent of the regulators.

Situation and Tasks of the Food Industry in View of the New Regulation

The share of the food industry in the gross production value of socialist industry comes to about 18 percent, and its net production value 7 percent. To fulfill this task, it takes up approximately 12 percent of the producer fixed assets and manpower of socialist industry. The basic task of the food industry is to meet the domestic food demand in quantity, range and quality. Together with restaurant consumption, the branch shares in about 45 percent of the domestic trade, but in addition it also has an extremely important export task to fulfill. The food industry provides more than 10 percent of ruble-account exports, and almost one-third of nonruble-account exports. These ratios make us aware that we cannot be indifferent to how the economic regulators serve realization of the planned economic political goals in the targeting of which the effects of the regulator system must also be taken into account.

Experiences With the Operation of the Regulator System in the Fifth Five-Year Plan Period

Affirming the characteristics of the branch, the regulator system which was developed for the Fifth Five-Year Plan period included many variations from the

general industrial regulator system (the withholding of a part of the general profit tax and 100 percent of the amortization for development goals, direct budgetary support of investments, and so forth).

To a great extent this regulation promoted the creation of the financial conditions for independent enterprise management and particularly the realization of these plan goals:

--along with a relatively rapid growth in consumption, the further improvement of the equilibrium situation on the consumer market and a better satisfaction of demand;

--the increase of exports, including primarily nonruble account exports;

--the creation of new processing capacities which are designed

--to increase commodities that are economically salable on all markets,

--to reduce tensions between agricultural production and food-processing capacity.

However, the growth of production efficiency and the development of a more economic production and marketing structure was less favorable than expected. In addition to the shortcomings of enterprise management, an important role was also played by the unfavorable development, for the enterprises, of the conditions for foreign market activity. (This was also contributed to by the fact that the net income per 100 forints of resources and per 1 worker came to scarcely somewhat more than one-third of the average for the socialist industry.)

In the interest of improving the budgetary balance situation and limiting investment purchasing power, the regulator system was modified a number of times, which has caused problems in the elapsed period of the Fifth Five-Year Plan; and these modifications will also have an effect on the Sixth Five-Year Plan. The problem became evident, and is still present in this form, in that on the basis of the regulatory conditions as shaped for the Fifth Five-Year Plan the enterprises undertook important financial obligations (accepted credits) for the repayment of which the necessary resources following the modification of regulators are not available, or are available only in part despite the quantitative increase in production.

Beyond the question of fulfilling existing obligations, this circumstance hinders the unconditionally justified and necessary supplementing of fixed assets, maintaining of level and assuring the earlier level of personal incentive.

The Goal of Developing the Regulator System

The basic economic political goal of modifying the 1 January 1980 regulator system may be summarized in the following. The new system should promote more intensely than before:

--an improvement in the equilibrium situation of the economy (consumption, savings, foreign trade, and so forth);

--an increase in production efficiency;

--the development of a more economic production or marketing structure to provide a basis for fulfilling equilibrium and efficiency requirements.

The goal of modifying the regulator system basically also defines the possible direction of the modifications because there was no way to carry through such measures as would have intensified enterprise incentive by means of an increase in profits or incentive funds. With the further development of the 1980 regulator system, the enterprises will have to fulfill higher requirements. This is particularly true of the food industry enterprises since as a consequence of the elimination or reduction of the formerly valid subsidies the normative strengthening of the regulation (elimination of general profit tax withholding, moderation of the withholding of amortization, and so forth) has resulted in a greater strictness than average for the regulator system of the branch.

The Enterprise Revenue Regulation System

The system and extent of revenue regulation on one hand determine to a great degree the revenue due to the state from the enterprises, and on the other hand the enterprises' available financial sources for personal income, for increasing personal income, and for development goals. The modification of the 1 January 1980 revenue regulation system had a two-way effect on the share and development funds that enterprises can form. The town and village contribution rose from 6 percent to 10 percent of the rpofit serving as the accounting base, the incentive; and the general profit tax rose from 40 percent to 45 percent of the tax base), and the elimination of the general profit tax for development purposes (18 percent in 1979) reduced the ratio of profit usable to form enterprise incentive funds. At the same time, the reduction of the extent of forming the required enterprise reserve fund (from 25 percent to 15 percent) increased the ratio of the usable sharing and development fund. The effect of these changes on the branch as a whole is reviewed in the accompanying table.

Key:

1. Designation
2. Ratio of profit use
3. 1979 regulation
4. According to 1 January 1980
5. In percent
6. Profit serving as accounting base (incentive)
7. Town and village contribution
8. General profit tax
9. Progressive profit tax
10. Ratio of profit centralization
11. Required enterprise reserve fund
12. Sharing fund
13. Total development fund
14. From the development fund
15. From withholding the general profit tax
16. From the profit
17. Ratio of profit remaining with the enterprise

In summary, the following may be stated:

--the profit distribution share has been altered by 14.2 percentage points to the advantage of the state;

--the ratio of profits that can be used by the enterprises (for the formation of share and development funds) has been reduced by 7.5 percentage points;

--in the case of the formation of the same wage-ratio sharing fund, the progressive tax increases are a result of the fact that the progression of the tax is influenced as of 1 January 1980 by the capital wage ratio profitability level beyond the annual wage ratio.

In addition to the foregoing, we also need to emphasize the following in regard to the change in the income regulation system.

--In shaping the producer price for food industry prices, an average profit of 4.2 percent according to capital-wage ratio for the branch could be taken into account, and by sub-branch the profit varied from 3 to 5 percent. In view of the fact that the basis for developing the producer prices was shaped by 1977 actual figures, let us assume that the 1980 profitability of the branch developed at a capital-wage ratio of about 6 percent as a consequence of the quantitative increase in production and the improvement in efficiency, and the more profitable export than average for certain branches. With a significant spread in the sub-branches, the 1980 enterprise plans called for an average profitability level of 6.6 percent. As compared to previous years, this profitability level represents a substantial drop (12.1 percent in 1977, 8.3 percent in 1978, and 7.4 percent in 1979), and thus in addition to the increase in the centralized ratio of profit, the decline in the profitability level reduces the formation possibilities in the enterprise sharing and development fund both in the absolute and the relative extent.

We also need to note than among the industrial branches the profitability level is the lowest in the food industry. The increase in enterprise incentive, the development of sub-branch profitability ratios more adequately expressing the efficiency of production, and the factoring in of costs already incurred and expected makes it necessary to investigate and increase the profit level of certain sub-branches (for example, the milk, beer, spirits industry, and so forth).

--The premiums and awards of workers in the higher managerial positions were charged to the wage bill until the end of 1979, while, since 1 January 1980, the source thereof has been the taxed profit. The goal of the modification is to assure that only the profitable enterprises have the possibility of paying premiums and awards.

--The enterprises themselves continue to make their own decisions regarding profit use by taking into account legal limits and the orientation effect of the tax system. Because of the large-scale obligations undertaken under the Fifth Five-Year Plan, however, the compulsory priorities for profit use limit to a substantially greater extent the decision-making possibilities of the enterprises. (But the only change that was made in the priorities for using the development fund was that the replenishing of the variable fund precedes the fulfillment of obligations vis-a-vis other enterprises and organs. Because of the priority obligation for development fund formation, an important share of the enterprises will not be able to form sharing funds unless measures are taken for rephasing the obligations. This tension can be further increased by the elimination of the subsidy which until 31 December 1979 made it possible for profitable enterprises to form a sharing fund equal to 6 days' wages before all obligations.

--Many factors limit in the food industry the consistent realization of a profit incentive system. For example, the price for materials and semi-finished products used in the food industry belong to the free form. The anticipated effects of these price-level increases can be moderated only by an increase in production efficiency, but their full extent cannot be countered. At the same time the preponderant share of consumer prices for foods are official prices, which make it impossible to pass on the cost increases. Similar problems are also evident in the field of export marketing (primarily in ruble-account export).

Taking into account the low profitability level of the branch, particularly the sub-branches, and the fact that exports represent an extremely important share of the production in certain sub-branches, the problem should be settled.

--The regulation modifications or the change in prescriptions regarding the use of the obligatory reserve fund create better conditions for a more flexible risk undertaking.

Since 1 January 1980 the obligatory reserve fund has filled a profit balancing function, and in the case of a profit decline can be used for supplementing the incentive funds, up to the previous year's level, with obligation to repay. But considering the circumstance that an important share of the reserve fund which has been formed thus far was utilized without obligation to repay the enterprises must strive, in the interest of creating secure enterprise management conditions, for the formation of a separate fund which can be shaped and used according to their own decisions.

It may be stated on the basis of the foregoing that the modification of the regulation, as opposed to the regulation that was developed in the Fifth Five-Year Plan period, has resulted on one hand in reducing the ratio of profit and on the other hand the ratio of the sharing and development fund formed from the profit. The planned rate of increase in personal income and the provision of sources for the most necessary investment call for an increase in production efficiency. It is necessary, therefore, that profitability should receive a greater role in enterprise decisions. The 1 January 1980 price change resulted in a further increase in the

material ratio of food production. Material costs make up 80 to 90 percent of total production costs. We cannot realistically count on a decline in the acquisition prices of raw materials of agricultural origin. The price and cost relations of agricultural production and the anticipated cost increases do not make this possible, and this has resulted in a production decrease. Instead we need enterprise measures that will make possible a material yield increase through an improvement in the quality of agricultural products, and an improvement in the quality of finished products. This task makes it necessary to increase the purchase of raw materials according to their quality, making production and purchasing work more organized, and to reduce storing and processing losses.

Economic regulation stimulates or compels enterprises to modernize the production structure or to speed up transformation. Without this, not only increased profitability but also its maintenance on level represents a task that is difficult to carry out considering the degressive nature of the modernization supports that can be temporarily extended to production. The most important directions in the transformation of the production structure may be the following:

--increased production of modern, economically produced products that are competitive on the world market;

--reduction or elimination of products that are not modern and cannot be economically produced;

--wide-scale application of more modern production procedures;

--an economic increase in the degree of raw material processing;

--an increase in the flexibility and adjustment capability of production;

--a complex processing of raw materials, and the utilization of by-products and waste.

In addition to all these things, it is necessary to increase the price level of our export products by intensifying the mutual incentives of the producer and foreign trade enterprises as well as foreign trade price work.

An increase in production efficiency, moreover, calls for an improvement in personnel and wage management, an increase in the ratio of wages tied to accomplishment, an intensification of the managing independence of enterprises and factory units, and the modernization of internal accounting and incentive systems.

The Incentive System of Trust Enterprises

Enterprises operating under the guidance of a trust are classified as one enterprise from the viewpoint of profit taxation, incentive fund formation and consumption. Trust-level accounting is justified by the fact that the technical and technological level of the individual enterprises and the production structure are divergent, and all these circumstances result in a significant spread in the profitability of individual enterprises. Moreover, this accounting system promotes the realization of industrial branch developments, the provision of the money sources necessary for the fulfillment of obligations undertaken at the trust level, and the fulfillment of export tasks that fall on the industrial branch. (The

export marketing prices are distributed by main relations, and within main relations by relations.) The modification of the economic regulators requires of the trusts and the large enterprises the further development of the internal guidance and incentive system and the realization of the higher requirements in the internal incentive system.

In the development of the incentive system within the trust, the most important principles may be summarized as follows.

—We must see to it that the general economic regulator system developed for the branch is consistently realized in all enterprises under the trust's guidance. The results from the managing and development activities of the trust enterprises must be planned and taken into account primarily according to the general regulator system. The regrouping of results among the enterprises can be carried out only thereafter. The execution causes difficulties above all in the accounting of export receipts since the price of the same product varies by main relation, relation, and even by contract. In such a case it is necessary to handle the accounts by using planned (accounting) prices, and with the difference of the used accounting and actual price it is necessary from time to time to correct the accounts.

--It is justifiable to link the personal and development interests of the trust enterprises, within trust possibilities, to the res-lts of individual enterprises, that is, to changes therein.

--For the fulfillment of obligations undertaken at the trust level, it is necessary to determine ahead of time, generally in the medium-range plan period, the enterprise money sources necessary for the realization of the industrial branch-level development tasks.

--A change in the incentive system within the trust is justified only in case of a modification of the general economic regulation.

--The internal incentive system must promote the economic independence of the enterprises, the increased responsibility for management, and the discovery of reserves in management.

Foreign Trade Regulation

The extent of the price multipliers (commercial exchange rates) serving organically to link the foreign trade and domestic producer prices changed significantly on 1 January 1980, following that also the commercial exchange rate of convertible foreign currencies. By taking into account the combined extent of the presently valid commercial exchange rates, the differential producer sales tax reimbursement, the export support (including the temporarily extendable modernization support of production) and the attainable foreign exchange prices, it can be established that the foreign exchange earnings level of the food industry sub-branches and of the individual product groups and products within the sub-branches is significantly spread out, and exports at the sub-branch level assure a greater enterprise profit than anticipated. In the field of export interest we need to reckon with a two-way problem. A further decline in the commercial exchange rate of convertible foreign currencies can significantly reduce export price receipts. To reduce or counter the effect, the enterprises must strive to increase export marketing prices. Assuming that the effect of the exchange rate reduction can be countered by a price increase, the expected cost factoring-in, however, can

result in a decline in export incentive. Careful attention thereto or incentive assurance must form the continuous task of the guiding organs.

An increase in economy requires the enterprises to improve the production or the marketing structure.

The Regulation of Investments

The nonrepayable budgetary allotments for new investments starting on 1 January 1980 can be granted only in extremely justifiable or exceptional cases. As a consequence, enterprise investment possibilities are determined above all by the formation of their own development sources. The enterprises can receive state support for investments only by indirect means (state loans), the amortization of which, in case of fulfillment of the profit expected from the investment, can be paid from the profits reduced by the town and village contributions and from the portion over and above the replacement needs.

For outstandingly profitable investments, exceeding 15 percent by capital ratio, the enterprises may share in basic state allotments for which they must pay 15 percent interest over a 10-year period which can be charged to profit reduced by the town-village contribution.

The condition for utilization of the investment credit is that the investment must reach a minimal profitability level of 8 percent by capital ratio. In view of the fact that for enterprise investments beginning after 1 January 1980 a special reserve must be planned and formed as a part of the development cost prescription, the capital ratio profitability level must be calculated after adding the development costs to the reserves.

If the implementation period of the enterprise investment exceeds 36 months, investment credit and state support cannot be extended. As of 1 January 1981 the investment tax and the construction-fitting task will be terminated. Basically two problems are evident in the field of investment activity. Because of the decline in profits and the change in regulators, the branch-profit development fund has been moderated, which is a further hardship on one hand because of the termination of the amortization withholding subsidy, and on the other hand because of the large-scale obligations undertaken for investments realized in the Fifth Five-Year Plan period.

In 1979 the food industry enterprises could withhold on the average 94 percent of the accounted amortization, and 72 percent beginning on 1 January 1980. The amortization that can be withheld in the Sixth Five-Year Plan period to repay obligations charged to the development fund, included the replenishment of the variable fund because of permanent inventory increases, will not provide cover either, and thus the development fund which is formed in the profit branch cannot be used for investment goals. Obligations of this extent are resulting in large-scale reduction of enterprise credit worthiness.

In the interest of establishing harmony between the formation and consumption of the development fund or assuring an unconditionally justified development possibility for individual sub-branches, there will be need in certain sub-branches for measures to increase sources (primarily an increase in amortization withholdings) in addition to examining or rephasing the obligations charged to the development fund.

The Financing System for Variable Assets

The financial system for permanent variable assets was basically changed on 1 January 1980. The most important problems of the modification may be summarized as follows:

--In establishing the replenishment of the variable fund, it is exclusively the value of inventories classified as permanent that are taken into account; other variable assets, the development of stocks for the sources, do not form the basis of replenishment for the variable fund.

--Instead of an increase in the value of inventories for the "minimum" period, the enterprises must finance the value increase of their annual average inventories from their own sources or from medium-term, variable fund credits.

--In case of an increase in the inventory value, at least 50 percent of the increment--or 100 percent in the case of an inventory increase above the plan--must be financed with variable asset replenishments from the development fund.

--In order to moderate inventory fluctuations because of annual variations in the production results of agriculture, the inventory growth in the food industry area may occur on a 3-year "sliding basis."

--That portion of the variable fund which is not necessary for financing permanent inventories can be regrouped in 1981 for investment goals.

A change in the method of financing does not result in the replenishment of the variable fund.

From the foregoing it can be stated that the financing system of the variable assets has become substantially more strict. The tightening occurred simultaneously with the modification of the regulator system, which however moderated the development fund that could be formed both from amortization and profits. In order for a greater share of the development fund to be available in the coming years for investment purposes, the enterprises must pay greater attention than heretofore to the improvement of inventory management, and to the reduction of dispensable and superfluous inventories. The inventory accounting system of the food industry would have resulted in an unjustifiable replenishing of the variable fund in those sub-branches where the inventory value increased between 1977 and 1979, and its financial settlement also occurred. To avoid this now, certain sub-branches have the possibility of accounting the increase in inventory value either with the general industrial or the food industrial inventory accounting system. This solution will be necessary, it can be anticipated, also for the next 2 years. A problem may still arise because of the fact that a favorable, but unplanned, agricultural production result in a given year can cause an inventory increase (for example, of wine, vegetable or fruit) which it is not justifiable to finance fully from self sources. A solution must be found beyond this for the financing of inventory value increases because of expected material price rises, the reevaluation of inventories, and calculating the reevaluation differences.

Earnings Regulation, Personal Incentive

Since 1 January 1980, the wage regulation forms used in the food industry area generally provide the conditions (taking into account also personnel reductions) for a possible wage-level increase under the given conditions.

In examining the earnings regulation system, however, it is necessary to examine certain regulation conditions. This refers primarily to the wage-bill regulation system tied to enterprise achievement.

The most important factors in the general wage-development index are wage cost, amortization, and enterprise results. The possibilities for increasing wage cost are rather limited, and the increase in the value depreciation write-off is limited by the extremely modest development (investment) possibilities. It may be expected that the use of a more flexible price mechanism will, because of the factoring-in costs, result--even in the case of an increase in production efficiency--in a decline in enterprise results in certain sub-branches.

In certain industrial branches the wage development index stimulates an increase in the volume of production. The justification for this is especially debateable in the export-oriented sub-branches since the incentive must be directed primarily at the development of a more economic export structure and an increase in foreign exchange earnings, which is moderated by the use of this wage development index.

In the foregoing I wished to emphasize the most important questions in the modification of the regulator system, the related tasks, and those questions which will need to be analyzed again this year in examining and evaluating the regulator system.

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EXPERIENCES WITH NEW PRODUCER PRICES DESCRIBED

Budapest NEPSZABADSAG in Hungarian 29 Oct 80 p 10

[Report by Karoly Kemenes, deputy director-general of the Red October Men's Clothing Factory: "A New Type of Enterprise Pricing: Experiences at the Red October Men's Clothing Factory"]

[Text] Of the new regulations that came in effect this year, the new producer prices had the greatest effect on the enterprises. The new principles of determining producer prices are very different from previous ones. Export-oriented enterprises--such as our enterprise, the Red October Men's Clothing Factory--introduced a so-called competitive price system which follows world market prices. The essence of this is that enterprise pricing is mainly determined by price increases and price profits in non-socialist markets. Domestic prices are also dependent on these factors.

The enterprise can reflect the changes in world market prices in its own domestic prices only to the extent to which it can reflect them in its non-socialist export business. This means--and this is the essence of the change--that the present pricing is not based on cost. If, for example, the cost of a product increased, earlier the enterprise was able to increase domestic prices without any difficulty. Now, however, according to the new pricing regulations, this is only possible when the enterprise is also able to increase its export prices together with the cost increase.

The new economic regulations do not have an effect on the enterprises' primary interest in profits. But they can show profits only if they can increase their export prices on the world market at least as much as--or more than--keeping pace with inflation, and only if they can acquire profits which improve the indexes of exchange earnings. If they cannot attain this, then they cannot pass their increasing costs onto domestic products either.

Associations, Joint Exports

As a consequence of these discernments, our enterprise also had to reassess its management policy. The views at the enterprise had to be changed from many aspects. We offered a course to the effected management and technical executives, informing them about the new statutes, their expected effects and consequences, and developing through a joint effort the views and behavior suitable for the new situation.

Our views on management had to be changed in two ways. On the one hand, we examined our relationship with other enterprises and, on the other hand, we made a critical assessment, within the enterprise, of earlier methods.

A new type of closer relationship with the foreign trade enterprise was a requisite for more success on the world market. We created a foreign trade association with our associate enterprises and the Hungarotex. Exporting industrial enterprises and the foreign trade enterprise are its members. The association's objective, in addition to the increase of exports, is the increase of profits. Its means are: a joint market and pricing policy, mutual financial interest, and profit sharing.

The necessity of new types of relationships with textile industrial enterprises is also part of making exports more efficient. We made agreements of joint exporting with several wool industry enterprises, e.g., with the Richards Fine Cloth Factory. In order to increase profitability, we are following fashion trends more closely, we are also accepting the production of smaller orders, and are shortening production time. We are making accounts to each other on a cost basis and are dividing profits in proportion to the added value.

We also examined the system of contracts at our enterprise. To increase price security, we shortened the time periods of delivery contracts.

Within the enterprise, the responsibility and work of the individual departments, as the pricing, the costing, and the acquisition departments has increased. We had to make sure that the various price indexes were accounted and regularly examined. Bookkeeping had to be adapted to account for and follow the changing prices et-.

The World Market of Textiles

The new system of producer prices has been in effect for 10 months. Before mentioning the experiences, we must talk about the economic environment in which the new price system was introduced.

There is a recession on the world market. According to the prognoses, we cannot reckon with any improvement in the near future. The consumption of textiles is stagnating or decreasing on the world market. Buyers on the capitalist market are trying to survive recession by temporarily decreasing their profits or by searching for cheaper sources of acquisition. Consequently, demand is slackening, but the expectations toward the product are increasing. At the same time, competition on the market is also increasing. The developing nations are increasing the capacity of their textile industries, and the volume of their exports on the world market is increasing; they are producing better quality and, thanks to their potential, they can do this at more favorable prices than the European countries.

Our market research, conducted jointly with the foreign trade enterprise, show that the coming years will see a change from a demand for volume to a demand for quality in textile consumption. The demand for both aesthetic and functional characteristics of the products will increase. Consequently, demand will change from mass products to specialized individual products. It can be stated in summary that the textile and clothing industry must meet the increasing demands under more difficult market conditions.

We Are Still Learning

The new system of producer prices has been thus introduced under these economic circumstances. Its effect on our economic life and individual enterprises is still unclear today. The balance of the first 6 months, which could be suitable for an assessment, comprises too short a time period, and it is thus impossible to draw general consequences. We have taken the initial steps but are still studying the system as a whole and its complex effects. This year's unusual and unexpected change in the forint's value in foreign exchange has caused difficulties for us. Unfortunately, we were not able to pass these effects onto export prices right away.

Also, it has not been established yet in practice, what frequency of price changes (of both domestic and export products) is expedient, and how much in advance must the price changes be announced to--or discuss and come to an agreement with--the buyers.

As I mentioned, the foreign trade association has been established, but it can hardly be said that it functions already and that it fulfills the expectations. The association can be characterized today by saying that the member enterprises are mutually dissatisfied with one another. This dissatisfaction may become the basis and stimulus for its more efficient future operation. The ways of this must be found jointly.

Increase of Willingness for Cooperation

There are more and more contracts of cooperation even between manufacturers of ready-made clothing and textile industrial enterprises. Intentions of such discussions and agreements were especially manifest at the recent Budapest International Fair. These cooperative contracts also mean only the beginning. Hungary has a shortage today of fabrics and accessories. The domestic production of fabrics cannot meet the needs of the ready-made clothing industry, and the same is true of accessories.

Our tasks follow from this. Enterprise price production must be further developed. In accordance with the new regulations, we must improve production technology, must increase the operative activity, and must improve organization and cost management within the enterprise. At the same time, relationships of cooperation must be further strengthened with the associate enterprises in order to become more flexible and efficient on the market.

9414
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DEVELOPMENT OF CONSUMER PRICES EXAMINED

Budapest FIGYELO in Hungarian No 43, 22 Oct 80 pp 1, 7

[Article by Mihaly Zafir: "Configuration of Consumer Prices"*]

[Text] In the first 8 months of 1980 the consumer price level rose by 11.7 percent compared to the identical period of the previous year. This consumer price index refers to the complete period of the year ending with the designated month. It is a so-called cumulative, revolving figure. (Every new monthly report lengthens the time span by one month. The price index covering the first 7 months was 112.7 percent, to which was added the August monthly price index of 105.1 percent.**)

This Year's Changes and Carry-Over Effects

The index for each month measured against the identical month of the previous year may be reduced to two components: the price changes for the designated year and the carry-over effects from the past year. Let us look, for example, at the index for March of this year compared to March of last year (which, as it happens, was 112.4 percent). Within this there operates, on the one hand, the effect of price changes during this year (March 1980/December 1979=101.9), and on the other hand, the effect of price changes in the past year as well, from March to the end of the year (December 1979/March 1979=110.5). This denotes the carry-over effect from 1979. The two influences together shape the consumer price index measured against the identical period of the preceding year.

The following table contains the month by month individual price indices as well as the cumulative figures for January-July and January-August. Both effects may be studied from the table.

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*Prepared with the aid of a report of the Central Statistical Office entitled "Change in consumer prices among the main strata of the population in 1979 and months I-IV of 1980 (September 1980)."

**We can verify by a simple calculation that the January-August index is indeed 111.7 percent, thusly: (7. 112.7+1. 105.1)/(7+1)=111.7. (Naturally, the result is the same if we average the eight-part monthly index.)

Table I. Consumer Price Configuration
[identical period of preceding year=100 percent]

	I.	II.	III.	IV.	V.	VI.	VII.	I-VII.	VIII.	I-VIII.
Consumer price index	117.6	111.9	112.4	113.7	113.5	113.6	112.0	112.7	105.1	111.7
of this:										
effect of the 1980 price change	100.6	100.8	101.9	102.7	102.6	102.9	103.3	102.1	103.1	102.2
carry-over effect from 1979	112.0	111.1	110.5	111.0	110.9	110.7	108.7	110.6	102.0	109.5

As an effect of the 1980 price changes, the August index registers a 3.1 percent price increase: the increase in prices since the beginning of the year contributed by this amount to the fact that in August the consumer price level was 5.1 percent higher than in August of the past year. We should conceive of this in the following way: the price level increased from month to month to a greater or lesser degree--moreover, there were two months when it fell minimally--and thus in the end it was 3.1 percent higher in August than at the beginning of the year (more precisely, than in December of the past year). These monthly indices concluding with August are averaged in the 102.2 percent price index figuring in the preceding table.

As far as the carry-over effect from 1979 is concerned, we see an index in August that differs qualitatively from the preceding months: an index of merely 102 percent as opposed to indices of 110 and even higher for the preceding months. Last year on July 23 the prices of meat, bread and other foodstuffs, and household energy carriers rose markedly. Thus right up until July 23 on the 1979 base the low prices are still in opposition to the high prices operative in 1980, and for this reason the index showing the carry-over effect is understandably high. And since after the 23rd of July these prices are identical in 1979 and 1980, the index of the carry-over effect from 1979 therefore declines from indices of over 110 to 102 percent in August. Why not precisely 100 percent? For the simple reason that last year price increases occurred not only on July 23, but continuously during the year, and the effect of these also carries over.

The actual substance of the table is summarized in the first line: the August price index declined markedly for the reasons already discussed. As a consequence the revolving index also decreased by a full percentage point within one month.

The "Timetable" of the Price Trends

On the basis of a study of the data in the table, several interesting conclusions may be drawn about the price trends of the preceding period, embracing the greater part of the year, about its components, and also about the size of the consumer price index anticipated for the entire year.

1980 has been the year price setting was determined by foreign price developments and when the 1 January price changes based on this were introduced. It is understandable that great interest and expectations surround the consequences of this. It is also understandable that this year they are carefully examining the process determining price developments. We will get an answer to this question when we measure the price level not only against the identical period of the previous

year--as is generally customary--but also note the changes from month to month compared to the previous month.

The origin of the price changes that occurred during 1980 is multi-faceted: wide-ranging producer price changes occurred on 1 January; enterprise starting prices shaped up from calculations made amidst new conditions; these prices were implemented after the temporary price freeze and the process of changing them began in which the consequences of the foreign trade price setting and of the enterprises' own decisions were reflected; and state intervention was put forcefully into operation. The enterprises calculated higher base prices than planned, and budgetary turnover-tax decreases and supplementary consumer price increases to a large extent neutralized the unfavorable impact of this on consumer prices. Besides this, changes in various officially established prices also occurred (for example, a decrease in the price of coffee and stockings, an increase in the price of fuels); the prices of seasonal commodities also increased during the year.

The report of the Central Statistical Office already cited characterizes this process up to May in the following way:

"In January--compared to the beginning of the year [sic]--the consumer price level grew by 0.6 percent, essentially in connection with the January 1 consumer price change related to the wholesale reorganization of producer prices:

--there was a decrease in the price of synthetic knit goods and curtains, worsted wool fabrics and men's suits made from these, black-and-white TV sets, certain toys, household plastic items, etc;

--there was an increase in the price of woven and knitted lingerie products, bed linens, leather jackets, electric household appliances, aluminum pots, metal flatware, paints and other products, and in the price level of repair services and goods transport.

In February a small price change occurred: the price level measured against that of the beginning of the year grew from 100.6 percent in January to 100.8 percent, that is, by a total of 0.2 percent.

In March and April the price level measured against the beginning of the year rose further: from the 100.8 percent in March to 101.9 percent in February, that is by 1.1 percent, while it went from 101.9 percent in April to 102.7 percent in March, that is, by a further 0.8 percent. In both months the price level of seasonal foodstuffs rose. The prices of certain durable consumer items increased, and there were also smaller price increases in other categories of goods. On April 1, the prices of fuels were raised.

In May the price of seasonal foodstuffs rose further, coffee became cheaper by 4-5 percent and stockings by 15-20 percent. The overall price level remained at the April level, and was thus 2.5 percent higher than at the beginning of the year."

In order to make the chronology complete--although, like the preceding, by no means absolutely exhaustive--I will add the other months to this.

From June to August the price of seasonal foodstuffs declined. In June fish became more expensive, catering enterprises raised the prices of alcoholic beverages, and in the area of industrial items small-scale-enterprise price increases occurred. All this raised the consumer price level by 0.3 percent, which was thus 2.9 percent higher overall than at the beginning of the year.

In August, along with various price changes that were not significant in their totality, by nature a decrease in the prices of seasonal foodstuffs dominated. The August consumer price level fell below July's by 0.2 percent; thus the price increase was 3.1 percent compared to that of the beginning of the year.

Table II. Price Changes Between January and August of 1980

		Beginning of the Year (December of previous year) = 100	
	Previous month = 100	monthly	average, from beginning of year
January	100.6	100.6	100.6
February	100.2	100.8	100.7
March	101.1	101.9	101.1
April	100.8	102.7	101.6
May	99.9	102.6	101.7
June	100.3	102.9	101.9
July	100.4	103.3	102.1
August	99.8	103.1	102.2

The data from the table summarize the effect of price changes on price level.

We are in the 10th month of the year, when the price trends for months Jan-Aug are quantitatively known and we have the data for September and October. Should considerable price change occur in the remaining months (which is not likely), this would affect only 2 of the 12 months of the year; its effect on the year 1980 would thus be only one/sixth of that which a full year would have, while five-sixth would carry over to 1981. At this time it is already possible to calculate with a fair amount of accuracy the size of the anticipated consumer price index for the entire year.

The anticipated price index is also important now for two reasons: on the one hand, because the January-August price index was still nearly 112 percent, whereas the 1980 national economic plan projects a price index of only 109 percent; on the other hand, because according to the annual plan the real income of the population must remain at the 1979 level, under the influence of a 9 percent nominal growth and a 9 percent rise in consumer prices. According to observations to date there will be no surprises in the nominal growth, and thus maintaining the level of real income essentially depends on consumer price trends.

We can get a picture of the anticipated price index if we estimate this year's effect and of the carry-over effect on further trends. We have to return to our

first table for this. Starting with the August data we may project the price index anticipated for the remaining months.

The index of the effect of the 1980 price changes will rise further from the 103.9 percent index. The anticipated continuation of the process of price changes noted in months January-August, the recently enacted price increases of certain printing products and wines, the increase in the price of enamel utensils and other items announced for October 1, and similar events will raise the price level. If we project the data for the following months on the line entitled "effect of the 1980 price changes" in the first table, larger numbers will appear there compared to the 103.1 of August. For December even a number close to 105 may be conceivable. On the following line which shows the carry-over effect from 1979, the numbers are continually declining compared to the 102 of August, while in December exactly 100 percent may be found. (This is obvious, for the effect from last December's price changes do not carry over to December of this year; this December's prices can only diverge from those of last December if they changed during the course of this year.)

Considering both effects together, a consumer price index of the order of magnitude of 105 percent (or rather somewhat below this) will be characteristic in the remaining months of the year. Thus in every month the cumulative index will be smaller and smaller. This process receives special emphasis, still, because the population always buys more in the last months of the year than at other times, and thus indices of the lower order of magnitude of 105 percent will operate with greater weight than the time-proportioned ones. Therefore, with regard to the whole year a consumer price index identical with the planned 109 percent or perhaps exceeding this by a few tenths of a percent may be anticipated.

8971
CSO: 2500

COUNTRY RICHER IN NATURAL RESOURCES THAN ASSUMED

Budapest ELET ES IRODALOM in Hungarian 25 Oct 80 p 7

[Interview with Dr Peter Mach, docent at University of Pecs, by Erzsebet Hallama: "A Country Poor in Raw Materials? A Conversation About Our Mineral Wealth"; date and place not given]

> [Text] Dr Peter Mach, docent in the faculty of economics at the University of Pecs, has been concerned with evaluating and perfecting the system of estimating domestic mineral resources for many years. He also wrote his candidate's thesis on this subject. He has supplemented his earlier diploma in geology with a degree in economics as well; he worked in the mining industry for almost half a decade.

[Question] Why are you particularly interested in the mineral question?

[Answer] Our system for estimating domestic mineral resources is a subjective one. One example: between 1960 and 1970 it was shown by this system that domestic coal resources were not worth developing, and then in the 1970's--by the identical method--the opposite was shown. This system does not give objective, or in other words useful, results. The evaluation is based on world market prices, in particular the purchase price of the given raw material at any moment.

[Question] During the years of abundant and inexpensive oil, coal must not have had a very great value.

[Answer] We can come to a very important idea with the example of oil. It is obvious that the price of oil between 1950 and 1970 was very low; it even decreased while the prices of other products on the world market were progressively rising. The reason for this was that market was dominated and supplied by the large multinational firms which owned the exceptionally cheap Middle-East oil fields that were discovered at that time. These large monopolistic organizations acquired oil at depressed monopoly prices, and the depressed prices served to create the impression of abundance that appeared in the market. The oil fields that were harder to work, that is those producing more expensive oil, were not worked. But when the cheap oil began to run out, it was necessary to begin to work them also. Marx's theory of ground-rent, which is a fundamental law in mining economy as well, took effect: The price is determined by the worst place that is still needed.

[Question] But oil prices would in any case have started upwards even without the statement of the Rome Club and, later, the actions of OPEC.

[Answer] At best they might not have risen so explosively. The other side of the phenomenon is that the production of and search for substitute raw materials stopped or at least slowed down because of the low oil prices. Today it is already clear that the rise in oil prices would have been slower if coal production had not lessened in the meantime.

[Question] So do we err by "giving in" to the temptation of world market prices of the moment? Is that what happened when domestic coal production was reduced?

[Answer] In general we did the same thing as other countries, but slower, too late, and in excess. But I see as the reason for this something else. Let's go back for a moment to Marx: The ground-rent rises with the level of technology, so mineral resources are more valuable the greater the level of technology by which they are produced. With us, because of the low level of technology in coal production, the existing coal reserves were objectively devalued. It would have required serious investments and mechanization to make it worthwhile to produce coal at a time of cheap oil prices. There was also the supposed reason that we "are a country poor in mineral resources." This common belief, which still has effects today, arose from the ideology of the Horthy era, and like so many others, it pointed to a false direction that seemed easier, it has kept itself alive for so many decades that even today it still appears, even in specialist circles.

[Question] What would be the proper method of evaluation?

[Answer] The system of evaluation would have to achieve a triple goal. First: to give information to leaders of the economy for decisions at the level of the national economy. Second: to make available correct background information for enterprise decisions. Third: the evaluation must serve to protect mineral resources and to manage them rationally. The mineral resources are available "for free," and we are presently attempting to protect them with just administrative means. Normative economic regulation forces the enterprises to make economic maneuvers and directs them toward the easiest solution, for example, that they leave in the ground the resources that are more difficult to reach. The theoretical basis of the system of evaluation I am recommending is the "mine rent," with which an evaluation system can and must be formulated that will take into account the peculiarities of mining. Raw materials must be purchased from the enterprises at prices that will cover expenses, and the income from mining enterprises must be devoted to geographic research.

[Question] Are resources being evaluated by this method today?

[Answer] In some places concessions have been made. But as with any mixed solution, these also just hinder and delay a resolution of the question.

[Question] So are we a poor or rich nation in natural resources after all?

[Answer] Neither poor nor rich. We are one of the countries with a good, average supply. Even though, of course, there are some items in which we are

deficient, we have a very good supply of some raw materials: some ores, coal, fissionable materials. Our bauxite resource is of European importance. The recently discovered resources of nonferrous ores are outstanding in Europe. We have a significant amount of anthracite coal, which counts as an increasingly important energy resource. But we don't have enough mineral resources that we could influence world traffic in raw materials and energy to any great degree or that we will be able to export for a long period of time. Of course, this does not mean that we cannot export at all, because we are selling raw materials abroad today--bauxite, manganese ore, gemstones, pearlite, etc, but this is not the right long-range solution.

[Question] The last report of the balance of our national wealth was made in 1976; then the known mineral resources constituted 12 percent of the national wealth.

[Answer] But geographical research had stagnated for many years prior to that. In the last 5 years, on the other hand, we have discovered numerous mineral resource sites; we have more than replenished the amounts of hydrocarbons extracted. All of what I have said about our comparative economy relates to quantity. The quality of mineral wealth is relative to economic evaluation and depends on the level of technology.

[Question] We often hear that mining is a branch that requires a lot of investment.

[Answer] This is not the "fault" of the mineral wealth. For example, the anthracite from Mecsek is one of our greatest resources. The technical level of the Mecsek mines has stagnated for over a decade; even today the Zobak shaft is the most "modern" operation. On the average they are 20 years behind. The enterprise has not been able to realize income from production, since the prices have been set arbitrarily, and in the trust system, excess income in various places, which might have been devoted to industrial development, has been systematically recategorized and taken away. The Mecsek mine can only put an end to this situation if it receives a larger framework for investment. It would seem that Mecsek would be asking for something [new], but in reality they would just be asking for a return for value produced. At the same time, in the present situation, the value of the existing anthracite resource is being reduced.

[Question] In such circumstances, is there any reason to press for development of mining? Don't we have time to wait? Wouldn't it be cheaper to import what we need? Shouldn't we rather develop something that will bring a profit sooner?

[Answer] It is easier to develop a manufacturing industry, and it is seemingly cheaper. But we must participate in the international division of labor in a way that is advantageous to us. What can a country bring to the world market? Modern products of a high technological level which presuppose a large scientific-technical background and experience. Or with traditional, average goods, which can be divided into two groups: capital and labor-intensive products. Finally, with raw materials. In the first case, we can base ourselves on

imported raw materials, even with rising raw material prices, because in the marketplace, the prices of these kinds of goods are rising at fast rates. There are few of these kinds of exports in Hungary. It would require a long time and significant efforts to develop them. But in the other cases, the balance tips. It is not worthwhile to export to the world markets obsolete, or below world standard, average goods produced from expensive imported raw materials. Sooner or later it will be seen that only a manufacturing industry based on domestic raw materials can bring about a solution. Development of agriculture is important, but here too it is necessary that the proportion of imported raw materials (which also appear in the form of energy, machinery, etc!) be reduced to a minimum.

[Question] How does the present organization of industry look from the point of view of the domestic mineral raw material basis?

[Answer] Where we have sufficient tradition and culture, the organization of industry is of course critical. But of the industries based on imported raw materials, it is sufficient to mention the textile industry, whose problems are apparently known by many people from Gyorgy Moldova's book, if from nowhere else. Our chemical industry is also based on imports. Our supply of bauxite, however, is significant, and plans to use it more efficiently have already been made. We are also well supplied with manganese ore, which, however, is only a valuable and important item on the world market in the form of ferro-manganese. Without domestic manufacturing, we would lose the real value of this mineral resource. An industry in nonferrous metals could confidently be introduced, based on the ore from Recsek.

[Question] For example, domestic mining does not even supply one-seventh of the coke we use, even though the raw material is present in the form of anthracite coal that can be made into coke.

[Answer] The rest is imported, and this constitutes an increasing share of our capitalist import. The price of coke is continually increasing, and we can expect a shortage of coke on the world market. The Ministry of Refining and Machine Industry is planning to build a coke plant at Dunaujvaros in 1985. But production of anthracite of Mecsek has fallen by about a half over the years, and in present circumstances there is no way to increase it. But the Ministry of Heavy Industry has not yet decided on investment in the Mecsek coal mines, and even if it does soon, we will be able to produce hardly more than half of the coking coal we need by 1990. But even so, our overall domestic mining would become profitable. And this naturally affects the finished products. At the same time, geographical studies have uncovered the so-called Maza-Deli site for coking coal in addition to the previously known Mecsek source. This is a resource of European significance. If we could work this field with today's most modern technology, the amount of coal produced would be about half again as much as we can achieve with our present technology. If a given amount of investment funds is regarded as just being for mining, it may seem like a lot. But if we project it onto the whole manufacturing industry--and this is not only justified but necessary--mining is no longer a branch that requires too much investment.

[Question] Do we have enough raw materials of the kind that will make possible a selective development of domestic manufacturing industry?

[Answer] Taking into account the possibilities offered by CEMA, with appropriate selection, we could eliminate capitalist imports almost entirely. Presently, almost half of our imports are raw materials or semifinished products. In this situation, even our high-level, traditional branches of industry lose in value. I am convinced that the public has not yet become conscious of the fact that development of industry can and should only be done on the basis of our own raw materials.

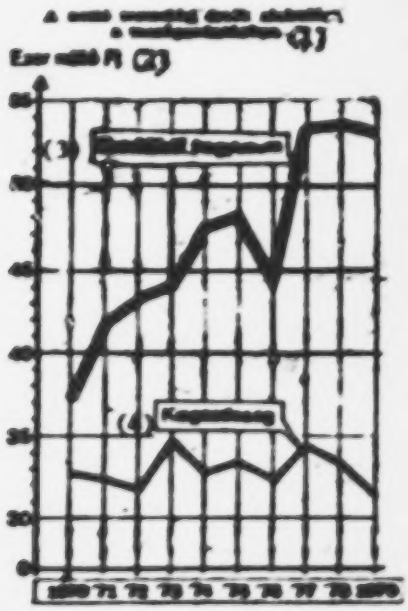
9611
CSO: 2500

COSTLY INPUTS REDUCING PRODUCTION VALUE OF AGRICULTURE

Budapest FIGYELO in Hungarian 29 Oct 80 p 13

[Article by Dr Laszlo Nemeti: "Why Is Production Value not Increasing?"]

[Text] During the Fifth Five-Year Plan agricultural production increases have been achieved through increasingly greater monetary and fixed assets investments. The combined amount of live and passive labor utilized per production unit has increased in the same way. The increase in the material consumption-production ration of agriculture is related to increased chemicalization and energy consumption, as well as to livestock raising's more rapid development than that of crop production, or rather, to the increase in the accompanying fodder consumption.



KEYS:

1. The development of net production value in agriculture
2. Billion forints
3. Large socialist enterprises
4. Small farms

Domestic prices, for the most part attuned to the world market, developed in such a way that the price levels of industrial products and materials utilized in agriculture increased more rapidly than those of agricultural products. This compelled farms and enterprises to be more thrifty and economical in their consumption.

Despite this--as a result of development in production techniques and technology--the proportion of these continued to increase within the total resource consumption. The higher priced, industrial origin products, or rather the increase in the volume and proportion of resource consumption in itself resulted in the net production value's* increasing more slowly than the gross production value.

Increasing Investments

During the Fifth Five-Year Plan, consumption by producers increased by 26 percent. Within this, consumption of industrial origin materials and of energy sources by producers increased by 34 and 36 percent respectively. Moreover, the combined total of fixed assets maintenance and amortization rose by an average of 50 percent during the 50 years.

In 1975, the net content of national production per 100 forints gross was 37.7 forints. In agriculture, the net content was 39.2 forints. By 1979, as a result of shifts in proportions of investments and domestic prices during the last 5 years, the net production value decreased to 35.7 forints in industry, and to 33.6 percent in agriculture.

Agricultural production growth during the Fourth and Fifth Five-Year Plans took place while there were significant decreases in manpower and land under cultivation and large scale increases in resources consumed. The increase in resource consumption exceeded the increases in the quantity and yield of agricultural production (crops, livestock). As a consequence, specific material and resource consumption by producers increased, since the replacement of the cultivated land and the still inexpensive labor can only be realized through expensive implements and industrial materials. For example, a modern sugar beet combine costs more than 4 million forints. This is equivalent to the average annual income of 100 workers. Moreover, the annual amortization cost of the same machine amounts to the average monthly wages of about 200 workers. The costs of modern means of production utilized more and more widely in agriculture are excessively high when compared to the production increases achieved. Thus, during the time period examined, there was a one percent decrease in labor time invested while fixed asset and material investments increased by 1.5 and 1.3 percent respectively. As a result, the combined total of consumed live and passive labor per product unit increased, not decreased.

Also contributing to the deterioration of effectiveness in consumption by producers in agriculture was the fact that during the first half of the seventies, investments and supplementary expenditures increased at a more rapid than the optimum rate. The appropriate production experiences, which can be acquired only through several years of operation, lagged behind the rapidly growing financial-technical basis.

Expensive Substitution

Numerous factors influenced the deterioration of efficiency of resource utilization and material exploitation. For example, while the cultivated area which served as the basis of production was 4.2 percent less in 1977 than in 1975, the expenditure for live labor for agricultural production decreased by 22 percent during the same period. Thus a significant portion of industrial production resources consumed by agriculture replaced the lost cultivated land and manpower.

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*The net production value is the difference between the gross production value and the sum of the resource expenditures and the decrease in the value of fixed assets; in essence, it represents the contribution of national economy branches and sub-branches to the national income, or rather, to the net national production.

The increase in the proportion of higher level industrial origin production instruments in monetary expenditures has increased the resource requirements. The technical-technological development of crop production was accompanied by wholesale technical changes. The traditional large farm implements were replaced by high performance specialized machinery and machine systems. The technology required new, higher level projects and increasingly larger quantities of traditional and new materials, while the new processes required increasing energy consumption. The development and continued spread of the technology gave rise to the steady multiplication of relatively expensive machinery, equipment and materials. The modern machinery and energy sources, a significant portion of which is derived from imports, are considerably more expensive than the traditional instruments they replaced. Thus the increase in their proportion in itself increased the material and resource requirements of production.

The production increase in agriculture--despite 2 years of poor yields--was significant during the Fifth Five-Year Plan. However, because of the more rapid increase of consumption by producers, the efficiency of the materials consumption of agricultural production deteriorated by nearly 8 percent.

As a result of the increase in the resource requirements of production, the total net production value of agriculture increased by an average of 9.1 percent over the 5 years. Within this, the net production value of agricultural products increased by only 1.7 percent over the average of the previous 5 years, while that of non-basic activities increased by 47.7 percent. On the average over the 5 years, the 3 percent annual increase in the gross production value of agriculture was accompanied 0.3 percent average annual increase in net production.

The nearly 30 percent material consumption increase by crop production was equivalent in quantity to the gross production increase. Thus, on the average, net production during the 5 years hardly changed. It is true, however, that the unfavorable years of 1976 and 1979 also played a role. The effectiveness of material consumption in livestock production during the last 5 years was more favorable than that of crop production. While consumption by producers increased by 21.5 percent, the gross production value increased by 20 percent. In fact, in the last 3 years, the rate of gross production increase has exceeded the consumption by producers, thereby improving effectiveness slightly. This is also indicative of the rising level of farming.

Somewhat Less Than Optimum

The production structure has also shifted towards branches which require more raw materials. The development of more material intensive livestock production is more rapid than that of crop production. The change in proportion which resulted from this increased the material requirements of unit agricultural production by nearly one percent.

The fact that the earlier relatively low energy and raw material prices promoted the wider than justified spread of energy and material requiring technologies has also been detrimental to the effectiveness of material consumption. In addition, moral and monetary incentives motivated the farms primarily towards quantity. Profitability was squeezed into the background.

In some groups of agricultural plants in several important branches, the magnitude of expenditures is not proportionate to their resources.

That we have not exceeded the optimum limits of yield development is indicated by the fact that for more important products the profit is most favorable in farms with the highest yields, and is lowest where the yield is the lowest. In certain branches, however, some farms are producing with a higher expenditure level and some with less, compared to their natural and economic resources. In either case, the effectiveness is less favorable than is possible.

In a portion of the farms--and these include a wide range of those with favorable natural resources--material and monetary problems are making the creation of the monetary assets and supplementary expenditures necessary for achieving optimum yields difficult. In the rest of the farms, however, low directive, professional and organizational levels are the reason for the unfavorable development of the "expenditure yield."

During the Sixth Five-Year Plan, the tendencies of the recent years are expected to continue. Because of scarcities in biological and development resources a smaller quantitative production increase can be expected.

Direct Concern

During the coming period, while increasing the environmental protection of the soil and utilizing the augmenting activity of labor, the productive forces--despite smaller investments--are to be kept at the current level. After the 1980 price adjustments, price differences can no longer be increased; in fact, they ought to be decreased, since the reduction in income is making even the possibility of self-sufficient farming, especially by farms near or under the average level, questionable. With the replacement of state subsidies by the price structure, net production value can be increased to a certain extent.

The production structure development will be better balanced, since the growth rate of livestock production is expected to decrease and the crop production branches which yield a better income will grow more rapidly. The continued rapid growth of supplementary activities can also result in stabilization of enterprise operations and growth in net production value.

The main reserves of the coming period, however, can be the continued rapid increase in productivity and improvement in the economy of materials and resource utilization. But to accomplish this, it is necessary to improve the quality of the materials and instruments utilized by the branches.

There are also large reserves in increasing concern and in improving the organization effort in agricultural plants. However, we can achieve this more rapidly only by differentiated wages and by creating direct interest in production results and materials conservation. Within the plant accounting and the direct interest of the workers can be the greatest boosters of the coming plan period.

Improving the effectiveness of production, however, also demands improving the market position of products, increasing enterprise self-reliance and developing integrating relationships. We can also foster the plant and social success of farming by strengthening our mutual interest relationships.

9093
CSO: 2500

SURVEY OF DOMESTIC TRADE, SERVICES IN LIGHT OF ADDITIONAL FREE TIME DISCUSSED

Warsaw POLITYKA in Polish No 42, 18 Oct 80 p 8

[Article by Krystyna Zielinska]

[Text] In their instructions to employees formulated in the 1930's, the firm BRACIA JABLKOWSCY (Jablkowski Brothers), which was one of the first modern department stores in Poland, listed 40 points. The final, telling point was the following: "Remember that domestic trade is one of the most important areas leading to the rapid progress of civilization."

Treating domestic trade as one of the essential tools for the development of the collective culture seems particularly important now, at the threshold of 1981, during which year the realm of free time is to expand substantially. In this light, all of the problems linked to recreation, buying groceries and household goods and using food services take on major significance. Two research organizations are even engaged in studying the organization of domestic trade on free Satrudays in an attempt to learn of our weekend preferences in the area of purchasing. Do we buy because we are so fond of our favorite stores and there is nothing which can discourage us about them? Or do we buy because we must, because of the way the family's time is budgeted, because of the way domestic trade is organized during the usual working day, and because of the way stores are supplied?

Is it the case that now, during a period of threatened "market supply," we have a general problem, as, for example, a change in buying habits (it does not matter whether this is a question of choice or of necessity) relative to making purchases on free Saturdays, as well as on Sundays when this is possible?

The research which has been conducted over the past 2 years demonstrates that we spend 1 half-hour more per day shopping than we did in the 1960's, that we shop in more and more stores to buy basic articles, and that we are standing in line for longer periods. This alarming data was to offer proof that the development of the now filmsy network of our retail stores and domestic trade shops is essential. It has. At the same time, however, it should be noted that despite the total impoverishment of the material base of trade, supply is the major problem. Customers are right to be resentful when they are reproached for not planning out their shopping trips, sending their daughter to the store for five eggs and yeast, their son for oil and their husband for flour. It angers merchants when they are made to stay open on Saturday to sell four eggs for someone's noodles and a loaf of day-old bread. Workers of the Bialystok department store CENTRAL went

on strike recently; one of their principal demands was that the store should be closed on Saturday and Sunday. They argued that the weekly turnover at this store is 2.5 million zlotys per day, with Sunday sales totalling 400,000 zlotys, half of which is in vodka sales!

Zofia and Zdzislaw Swietczak, co-managers of the self-service grocery at the SEZAM shopping complex in the heart of the Warsaw business district, point to receipts and the conflicts arising from the fact that their employees must come to work on free Saturdays. Receipts are from 20 to 30 percent smaller, but the conflicts are much greater. At SEZAM, which is an enterprise with broadened authority, workers are paid an extra 200 zlotys for working on Saturday. Theoretically, they are also entitled to a day off. In practice, of 55 people who worked on Saturday, no one has had a chance to take his day off. People do not want the money. They are overtired from coming back and forth to work (most of the work force lives outside of Warsaw). They note that if the store is open from 6:30 am until late in the evening, i.e., 8:30 pm, 5 days a week, and it is adequately supplied with goods, there will be no need to open it on free Saturdays.

Recently I had an opportunity to be persuaded of the strength of the family ties between domestic trade and the factory. Every third or fourth salesgirl or cashier has a husband who works at a large industrial plant. When I broached the subject once on the air during a radio program, I did not have long to wait before the letters, telephone calls and visits to the station started. Representatives of the highly industrialized working class responded immediately; it is easy to guess what tone they took.

Zofia and Tadeusz Szafranski invited me to their home. She works in a large self-service grocery in Bielany, he works at the Warsaw Steel Mill. When I asked who returns home from work more tired, the husband answered--his wife, without a doubt! He said that his job was to sit and oversee the power situation at the plant by keeping watch over the measuring apparatus. When something goes wrong, he makes a call. His room is air-conditioned. So is his wife's place of work--the door to the store never really closes, because of the never-ending line, and it is hot in the summer and drafty in the winter. When she worked at the cashier's booth she became sick with a kidney ailment and for hours she could not leave her post to take care of her bodily needs. Moreover, the worker always leaves the mill on time; the cashier never leaves the store on time.

So I asked whether the wives of the other mill workers would be happy if there were no domestic trade on free Saturdays. He said no.

She said that this was their egoism. Common egoism. So that the store could be constantly at the customer's service.

Waht are the plans of domestic trade at present and what are the possibilities for tempering our commercial "egoism?" The following possibilities (in the form of proposals, not decisions) were presented to me as solutions at the Ministry of Domestic Trade and Services; Keeping grocery stores open of Fridays 2 or even 3 hours longer; Shifting the major burden of purchasing to the final days of the week will necessitate changes in the operation of warehouses, transport and several divisions of food production, such as bakeries and milk processing plants (the latter being very difficult). On free Saturdays, 4,000 grocery stores operating

within a very transitory system will be open. These are large outlets located centrally within larger complexes. The local authorities will determine which these will be. Grocery stores would be open for 4 hours at most on free Saturdays. In large cities stores now open for 24 hours would remain so. In this way, 25 percent of the network of large grocery stores would be open on free Saturdays, and not 50 percent as is now the case, and these stores would be open 2 hours less than they are now. The ministry emphasizes that "The network of stores selected to be open on Saturdays should not be changed within the course of the year, and society should be informed of the addresses of the outlets which are open by means of notices hung at all outlets of a given sector and via the means of mass communication."

The operation of village trade will necessitate a separate regulation. Department stores, which until recently were open on every free Saturday, are to be open every other Saturday according to this same plan.

And now some information about how this situation is handled abroad: in Czechoslovakia all Saturdays were made work-free starting in 1963.

Initially, 80 percent of all grocery stores and 50 percent of all industrial stores were open on Saturday for 2 hours: from 12:00 noon to 2:00 pm. Now the delicatessens (the so-called "Lachutki") are open both on Saturdays and Sundays. On the other hand, industrial stores are closed. Department stores are open from 9:00 am until the afternoon. The grocery stores which were closed on Saturdays immediately following the reform have been open for 6 hours in recent years: now they are open from 6:00 am until 12:00 noon.

In the GDR, free Saturdays were introduced in 1967. Initially, some grocery and industrial outlets were open for 2 hours on these days (from 11:00 am until 1:00 pm. Now all of the so-called "Kaufhalle" and a group of stores selling baked goods and meat which never changes are open for 4 to 5 hours. In the central shopping districts of large cities, some department stores and industrial stores are open from 8:00 am until 1:00 pm. Every fourth Saturday stores are open for the purpose of "family" purchases on these days furniture stores, television repair shops, building supplies stores and clothing and shoe stores are open for several hours.

In Hungary, with the introduction of two free Saturdays per month in 1974, the whole network of grocery stores was open until 7:00 pm. Now these outlets are open only for 4 or 5 hours. Certain select large self-service stores are open from 6:00 am until 4:00 pm. Department stores are open from 10:00 am until 5:00 pm, and some industrial stores are open until 3:00 pm.

To this account may be added a few words about the operation of trade and services in capitalist countries. In London, Saturdays and Sundays are a time of great prosperity for small delicatessens; but in small towns almost all stores are closed. In some quarters of Paris it is possible to buy anything on even the biggest holiday. In Sweden I surveyed the operations of the firm of OBS. On free Saturdays and Sundays people drive to suburban department stores of this firm for major purchases. This is because the OBS stores are both more pleasant and cheaper than other stores. There are 24 automatic cashiers operating at the same time, and since everything comes in the large size (which is cheaper), customers buy twice as much of everything. Additional employees are needed to staff the stores on Saturday, but the firm tries to see that these are kept to a minimum.

An Ilf and Petrov hero says: There is no limit—the limit is a myth." The same may be said here. None of the examples from the West and from our sister countries fit us. By comparison to Czechoslovakia, for example, we have 300,000 fewer people in domestic trade... In none of our neighboring countries does the cashier ring up a sale of 1,000 or 2,000 zlotys every 3 minutes--but in our CENTRUM stores this does happen. People who work in domestic trade are weary. Comparisons of the strenuousness of their work with the work of a metallurgist or a miner do not take into account the tension under which they are working. Does a miner who is not in a position to supply us at this moment with enough coal for heating our house have to look at the waving arms of 60 or 70 people? That many people stand in queues at meat stores, watching and becoming angry. And at the JUNIOR shop, when corduroy pants are brought in, it is even worse than behind the meat counter.

It is apparent that the reform of "trade and free Saturdays" should be carried out in two stages. In the first months of 1981, a very few grocery stores should be put into operation--as it is there is very little of ANYTHING to sell and hardly ANYONE to work, since everyone wants a free day. Trade should not be squeezed out too much by the leveling of constraints and administrative orders on the part of the governors, because then no one will be willing to work in trade. On the other hand, other paths should be sought, and much more energetically than before. Much is being said about the part-time employment of people. Retirees and mothers on maternity leave who would like to return to work were to come to work and stand behind the counter at peak hours and on days of particular need; students were to help (everywhere on earth weekends offer a chance for them to work in trade and food service). What of it. In 1978, total part-time employment was 7.4 percent, in 1979 it grew to 8.5 percent, and in 1980, 10 percent of all those employed are part-time workers. We have lovely plans for 1985; three times as many people will be standing behind the counter, in order to improve the statistics of the flexible forms of employment in trade; we have always had lovely plans for the distant future, and gaps in our intentions for tomorrow. Now it is essential that we fill in these gaps, in the first place, in a very simple way, by eliminating certain absurdities in our system of wages. An English language graduate who is on pension can make 36,000 zlotys a year. But a veteran employee in domestic trade even one with the best qualifications, can receive, at most, 3,000 zlotys per month.

A representative of the Ministry of Labor, Wages and Social Affairs recently said on television that domestic trade workers should work on free Saturdays and should have the day off on Mondays. But this will not happen. Already with only one free Saturday per month, tremendous backlogs in the area of free days have arisen, and there is no time for these free days to be granted. Salesgirls are always working for someone else anyway, because maternity leaves and sick leaves produce many opportunities for this. And the extra 200 zlotys for Saturday work which I mentioned above may be paid only by a few enterprises; a stiff corset of payment restrains the others. Thus, easing strict regulations, increasing the pay scale for free Saturday work, and increasing the possibilities of additional wages for pensioners and other persons outside the profession—all of these seem to be necessary.

The Institute of Labor and Social Affairs is conducting scientific research on the organization of work in domestic trade outlets on free Saturdays. They ask such questions as: When did you learn that there will be a free Saturday?— Did you

rest on your last free Saturday?--Did you leave your place of residence?--Did you buy bread, milk or other items?--In your opinion, is shopping on free Saturdays essential? To this question number 16, found nearly at the end of the survey, most people responded in the following way: "On the 2 days preceding the free Saturday, stores should be supplied in such a way as to allow customers to make all of their essential purchases. A day off from work should be a day of rest."

A survey conducted jointly by the Office of the Wroclaw Voivodship and the City of Wroclaw, and the Center of Market and Consumer Research in 33 factories and enterprises gave the following results:

Of those taking the survey, 79 percent believe that free Saturday purchases should be restricted to basic food items (dairy products and baked goods above all). Nearly 72 percent of those surveyed were in favor of an extension of hours of operation on weekdays, especially with regard to grocery stores. "The operation of domestic trade on free Saturdays in the proposed area"--we read in the summary of the survey--"is treated as a temporary solution. To the extent that the production potential of the food industry develops, enabling the guarantee of increased deliveries on days preceding free Saturdays; to the extent that habits of taking advantage of free Saturdays for rest and recreation become universal in scope, the gradual limitation of trade activity on free Saturdays is assumed. This will make it possible to implement the demand of store employees concerning the possibility of utilizing powers in this area on an equal level with the other divisions of the national economy."

Despite all of this research and these assertions, there is undoubtedly a conflict between social interest and the habits and interest of domestic trade: of its basic work force, its working class, which, like everyone else, would like to rest on free days. The attempts of market organizers, in turn, to extend the workday on Friday are in conflict with the production capacities of bakeries and milk processing plants which work three shifts as it is, their work hours already extended in relation to the market. A weak transport and storage base does not offer complete guarantees either. Thus we must find reserves, perhaps in the organization of work, to reach a solution which will lead to a reasonable compromise.

8536
CSO: 2600

ROLE OF INCOME, EXPENDITURES BUDGET IN SELF-MANAGEMENT

Bucharest ERA SOCIALISTA in Romanian No 21, 5 Nov 80 pp 5-7

[Article by Dr Radu Ciurileanu, director general in the Ministry of Finance: "The Income and Expense Budget—a Tool for Worker Self-Management"]

> [Text] Nicolae Ceausescu, in a speech at the plenum of the RCP Central Committee on 14-15 October 1980: "It is necessary for us to turn decisively to the steady application of the new economic mechanism in its real sense, setting the whole activity in the economic and social fields on the principle of self-administration and worker self-management. Each unit, of every kind, must know what it produces, what income it has, what it consumes and what it must give to society."

Within the Romanian model of worker self-management, an extremely important role goes to the income and expense budget. The preparation and execution of it have as a goal the more intense use of the economic and financial factors in the activity of the enterprises, the increasing of the responsibility of the staffs of working people and the collective leadership bodies of each socialist unit in the rational management of funds, the raising of economic efficiency, the strengthening of plan and financial discipline, the respecting of socialist legality. "On the basis of the principle of economic and financial self-administration," Comrade Nicolae Ceausescu pointed out at the plenum of the RCP Central Committee in March 1978, "each enterprise and economic unit will have to prepare its own income and expense budget, starting from the necessity of providing, from its own activity, both the financial resources needed and an increase in profitability, in profit."

In our party's view, the income and expense budget is the means which reflects, and by means of which there are applied, the principles of the new economic and financial mechanism, the measures for improvement in management and planning established 2 and $\frac{1}{2}$ years ago. In other words, the role, functions and importance of the income and expense budget of each socialist unit do not come down and are not limited to a document for planning, for analysis and control in the process of executing the plan, that is, to a routine matter in the work of management.

Taking into account the organization of economic and financial activity on the principles of self-management, self-administration and self-financing and the necessity of combining the general interests of society with those of the staffs of working people and of each particular one, the budget is meant to contribute to the

maximization of the economic results through the obtaining of as high profits as possible and high profitability. Occasioning moments of analysis, discussion, choices and decisions, the process of preparing and executing the income and expense budgets mobilizes the staffs of working people to utilize the whole material, financial and human potential, orients the efforts and initiatives in the direction of increasing the economic efficiency, of obtaining a new quality in all economic and social life in our country.

Role and Functions

As it was conceived, the income and expense budget synthesizes, first, the physical structure of the production that the unit will achieve and, at the same time, measures the expenditures that will be made for this production. The entering of incomes and expenses in the budget presupposes the clarification and resolution of a multitude of tasks and problems that involve the entire activity of any socialist unit. If we refer, for example, to the manner of establishing and entering in the budget the receipts from selling the products, this presupposes knowledge of the structure of the physical output and, in correlation, the finding of the ways to use the production capacities as fully as possible, the securing of the contracts on collaboration with the units that participate in achieving the physical output, the matter of completely contracting on schedule for the physical output for the economy's internal needs or for exportation.

Second, the income and expense budget, by its very construction, representing a synthetic picture of the economic activity, offers the possibility of knowing—as early as the phase of conceiving the plan—the level, volume and destination of the profit and thus of establishing the methods of fulfilling the obligations to society and of supplying, within the framework of the self-financing process, one's own funds for development, profit sharing with the working people, various social actions and so on.

Third, the income and expense budget has the mission of offering to the party bodies and organizations, to the collective leadership bodies in the phase of executing the plan a comprehensive picture of the economic activity performed and the results obtained, creating the possibility of channeling the collective efforts of the working people toward the exemplary fulfillment of the plan to all indicators. "We must understand," Comrade Nicolae Ceausescu pointed out at the work conference in the RCP Central Committee in May of this year, "that the income and expense budgets are not something formal, but a means by which the management of each enterprise and the general assembly of the working people can act to obtain maximum economic efficiency, a substantial reduction of material and production expenses, a substantial increase in net output, in profits, in profitability in general—and, on this basis, resources needed both for the development fund and for the consumption fund may be created."

We can conclude that, in conformity with the new economic and financial mechanism, the income and expense budget must be conceived and prepared in such a way as to synthesize, in monetary terms, the entire economic and social activity in each unit, to reflect the manner of management of material and monetary resources, as well as the results obtained, the degree of efficiency and profitability. At the same time, it must constitute a means of analysis and control in the course of executing the plan, continually ensuring the financial stability of the economic units. From this

comes the necessity for all the worker personnel, all the departments in the unit—supply, production, technical, labor organization and so on—and not just the finance and accounting department, to work together closely, under the careful guidance of the working people's councils, on preparing, in terms of high efficiency, the income and expense budgets and to systematically, strictly supervise the way in which they are fulfilled, quickly taking or proposing the steps that are necessary.

Realities and Exigencies

According to law, the income and expense budget is prepared in close connection with the indicators of the financial plan and includes, at the level of the enterprises, the incomes, expenses and results from their activity, the receipts from foreign trade activity, the bank loans, the payments to the state budget, other incomes, resources and expenses.

From a series of actions of analysis, assistance and control performed by the financial and banking bodies in 1980 it resulted that the majority of the enterprises prepared the income and expense budget on the basis of thorough analyses, thus managing to utilize a number of possibilities and reserves for fulfilling the plan targets. So, for example, at the Iasi Wood Processing Enterprise, the preparation and finalization of the 1980 income and expense budget were done by starting from a careful examination of the structure of production. The technical, economic and financial personnel in the enterprise, with the help of those in the tutelary industrial central, established possibilities of producing assortments with high efficiency instead of others with lower efficiency. An increase of 23.6 million lei in exportation on free exchanges, a reduction of 508 cubic meters in lumber consumption and an increase of 5.3 million lei in profits were secured just by replacing the manufacture of 175,000 curved chairs with 175,000 folding chairs. In addition, at the Iasi Metallurgical Enterprise, the close collaboration between the financial bodies and those that are responsible for production, together with the workers and technicians in the sections, made it possible to establish measures for reducing metal consumption by 3 kg per ton of products, this being reflected in an increase of 10.5 million lei in profits. The list of such examples could go on.

Unfortunately, in a number of cases, full attention was not devoted to identifying all sources of income, and the amount of it was not sensibly determined. Thus, from an inspection made recently at nearly 300 enterprises it resulted that at 40 of them all sources of income were not included: 146.2 million lei in income were not taken into calculation because of omissions, and another 242.6 million lei in income were underestimated. For instance, at the Alexandria Enterprise for Electric Panels and Boards, an income of 29 million lei from production was not taken into calculation and an income of 405,000 lei from nonindustrial services and communal and housing administration was omitted. At the Craiova "Electroputere" Enterprise, the incomes in the budget were dimensioned by taking into account just the commodity-output plan, which was nonetheless 88.5 million lei below the physical-output plan. Such states of affairs indicate the necessity of acting steadily in all enterprises to know and utilize all the existing reserves for growth in income, to generally mobilize the possibilities of growth in profits.

Shortcomings are also noted with regard to the manner of formation of the enterprises' own funds. And this either due to not knowing to a sufficient extent the legal provisions in the financial field or purely and simply due to errors or

omissions. So, for example, at the Risnov Tool Enterprise, sums from reclamation and from the dismantling of fixed assets were not included in the volume of the sources needed for the economic development fund. The Tirgoviste Lathe Enterprise provided 11.6 million lei from profits for the repayment of bank loans, although there were no installments falling due in 1980, and the Iasi Knitted Cloth Enterprise established for such a purpose sums too high by 33.3 million lei.

A special problem that is posed along with the adoption of the income and expense budget by the general assembly of the working people in each enterprise is that of the way in which its provisions are divided up according to shops, sections and factories. The importance of this operation is determined by the fact that worker self-management and economic and financial self-administration must be accomplished practically with the participation of all the working people in a socialist unit, through their conscious action for fulfilling the plan targets for physical output, for fulfilling and overfulfilling the value of the net output, the profit and profitability and, hence, the income and expense budget.

Practice has shown that the better the systematic, day-by-day supervision of the manner of fulfillment of the plan indicators and the provisions of the income and expense budgets is organized, the more precisely it is possible to know and pinpoint possible lags or excesses in consumption or expenses, which creates possibilities of intervention by taking prompt corrective steps whenever necessary. So, for example, at the mining units of the Baia Mare Central for Nonferrous Ore and Metallurgy, including also the Sasar mining operation, the fulfillment of the quantitative targets for extracted ore are followed daily, starting from the work formation, shift, mine, sector and the operation as a whole. In order to quickly know the quantities of metal contained in the extracted ore the system of provisional 10-day checks was instituted, an action that facilitated the taking of the corrective steps in advance, such as reassignments of personnel and equipment, thus providing for the month-by-month fulfillment of the plan for all physical assortments of metal and of over 80 percent of the growth in income by improving the quality of the extracted ore. At the Fagaras Chemical Combine, the management analyses daily the production indicators, establishing concrete measures for eliminating the possible technical defects in installations and for regularizing the deliveries. At the same time, the stage of the receipts and the evolution of the stock of finished products are followed. Monthly, the management of the combine, of the sections and departments, together with the secretaries of the party organizations and the trade-union organizers, analyses the fulfillment of the provisions of the income and expense budgets, starting from the situation of the fulfillment of the efficiency indicators.

However, there are also enterprises that do not concern themselves as they should with organizing as quick and efficient an internal information system as possible, which prevents systematic supervision and knowledge of the way in which the economic activity is unfolding and the plan indicators are being fulfilled. Such is the case of the Baia Mare Machine Enterprise for Mining Machinery and Equipment, which confines itself just to simple "signals" that the finance and accounting department puts at the disposal of the other specialized departments, depriving the unit's management of the possibility of knowing the realities in depth and of exercising its decision-making authority as it should. The consequence was that this enterprise found itself in a difficult financial situation, concretized in a lack of solvency, loans not paid back on time and other such negative phenomena. Taking into account some situations of this sort, we believe that it would not be inconsequential, in

each economic unit, to subject to a critical analysis the way in which the fulfillment of the physical and value plan indicators, that is, of the income and expense budget, is organized and carried out, so as to find everywhere a suitable system for closely following--at as short intervals of time as possible and on all levels of the enterprise, from each workplace to its management--the course of the technical, economic and financial activity. Only in this way will it be possible to pinpoint the deficiencies and establish immediate measures for eliminating them, in order to completely fulfill the plan and the budget.

In judging the importance and necessity of exemplarily fulfilling the income and expense budget, it is necessary to start from the fact that each socialist unit can must always contribute more to the growth of national income, a stable foundation for the economic and social progress of socialist Romania. A few data on a macroeconomic scale are quite conclusive. Thus, a reduction of just a single percent in the percentage of material expenses in the national product is equivalent, at the level of 1980, to about 14 billion lei in additional national income. Likewise, an increase of just 1 percent in labor productivity in industry is equivalent to a production increase of over 7 billion lei.

Preparation and Substantiation of the 1981 Budget

The preparation, discussion and adoption of the 1981 income and expense budget in each socialist unit are of special importance, in view of the necessity of a good start in the next five-year period, in fulfilling the tasks and objectives established by the 12th Congress of the Romanian Communist Party. As Comrade Nicolae Ceausescu pointed out at the plenum of the RCP Central Committee on 14-15 October of this year, "Decisive measures for increasing the economic efficiency and continually reducing the material consumptions, which, unfortunately, continue to still be quite high, are necessary. This is the only real way to increase national income, to increase national wealth and raise the general profitability of economic activity, to provide the resources needed for developing society, for increasing the material and spiritual well-being of the people."

From this come a number of special exigencies that must be taken into account in preparing and substantiating the income and expense budget for next year. We want to refer below to some of these exigencies.

First, steady action must be taken to completely contract for the sale of the commodity output in 1981 on the domestic market and through exportation and to achieve the technical-material supply, along with concretizing the programs for cooperation in production among the various enterprises, on the basis of complete itemization, according to assortments of physical output. In dimensioning the income from foreign trade activity, for example, it is necessary to have in view the providing of the commodity supply earmarked for exportation, a field in which the targets must be considered minimums, the raising of the percentage of assortments that highly utilize raw materials and manpower, in order to obtain better foreign prices. Such measures are indispensable for achieving the planned equilibrium of the balances of trade and payments.

Second, the entering of each expense in the budget must be done after a rigorous critical analysis, which would permit the elimination, postponement or reduction of everything that is not justified or is not absolutely necessary and expedient, with

a strict policy of economy being observed. A special accent must be put on reducing all administrative, management and maintenance expenses and, in general, any expense with an unproductive character. From this viewpoint, the 1981 income and expense budget must reflect strikingly the concern and responsibility of each staff of working people for doing everything to economise on material and financial resources, for not allowing the wasting of any gram of resource or the unjustified spending of any leu, regardless of from what funds or for what purposes. It is necessary for the dominant trend to be the reduction of any expense, the elimination of imports, the economization of raw materials and energy, the recovery and reuse of materials, subassemblies, spare parts and other available resources.

Finally, the income and expense budget for next year must be based on a series of special programs, above all on the programs for growth in labor productivity and reduction of material production expenses, firmly setting any activity on the economic principles of high efficiency.

In fulfilling these tasks, a special role and a great responsibility devolve, of course, upon the financial personnel in the enterprises, centrals and ministries, called upon to act with all possible determination to prepare and execute the income and expense budget as well as possible, to apply the new economic financial mechanism with greater efficiency in all fields of social life in our country.

12105
CSO: 2700

INCREASED SAVINGS VIEWED AS REFLECTION OF INCOME GROWTH

Bucharest REVISTA ECONOMICA in Romanian No 44, 31 Oct 80 p 13

/Article by Prof Dr Mircea Popovici, chairman of the Administration Council of the Savings and Loan Bank/

/Text/ The year 1980 marks the conclusion of the current five-year plan with notable progress in Romania's socioeconomic development as well as the beginning of a new five-year plan wherein we shall enter upon a new stage of construction of the fully developed socialist society and Romania's advance toward communism, which stage will place us on a par with the medium developed countries.

The results obtained in fulfilling the plan of socioeconomic development for 1976-1980 provided for intensive development of the productive forces and sustained growth of the national wealth and led to radical changes in society as a whole and continued improvement in the entire people's material and cultural living standard. Net wages are up 30 percent in the current five-year plan compared with the planned 20 percent increase, and the public's total incomes have increased from 247 billion lei in 1975 to 363 billion lei in 1980, not including the 40 percent gain in the public's incomes out of the social consumption fund.

All these major gains in workers' incomes have resulted in a steady increase in savings at the CEC /Savings and Loan Bank/, a banking institution authorized to organize reception and maintenance of the public's savings deposits.

Compared with other economic indicators affecting the public's savings, deposits in the CEC and the balance of credits it granted for the 1976-1979 period increased annually (See table).

The progress made in enhancing the public's material and cultural welfare has created a permanent basis for greater savings opportunities and faster growth of the total amount deposited by the public in the CEC and of the volume of credits granted the public to build and purchase privately owned housing, as indicated by the economic indicators presented below.

At the close of this year the total amount deposited by the public in the CEC will be 2.2 times greater than that at the end of 1975 and about 12 times greater than it was 15 years ago at the end of 1965. The average annual growth rate of the sum total in 1965-1980 was very high, amounting to 17.8 percent.

	1976	1977	1978	1979	1979/1976
1 Venitul național	114,5	107,8	107,5	107,7	125,6
2 Veniturile bănești ale populației	109,8	108,5	112,0	109,7	128,5
3 Desfacerile cu amănuntul prin comerț socialist	108,8	106,8	111,9	107,1	128,6
4 Soldul general al depunerilor populației la C.E.C.	116,0	118,1	125,2	112,2	165,9
5 Soldul creditelor acordate populației pentru construirea și cumpărarea de locuințe	114,0	108,2	114,5	108,7	136,0

1. National income
2. Public's cash incomes
3. Retail sales through socialist trade
4. Public's total deposits in the CEC
5. Total credits granted the public to build and purchase housing

The high level of the public's savings in the CEC has also been maintained in the last part of the current five-year plan: As of 1 September 1980 the total public's savings was up 20.7 percent from the start of 1979.

The Romanian workers' ability to save in order to meet future needs (especially to buy expensive and more durable commodities) is also reflected by the proportion of the total savings in the public's total available cash resources, which now amounts to 72.7 percent.

Expansion of the savings effort was also encouraged by making an increasing volume of expensive commodities available to the public through socialist trade that are usually purchased out of savings accumulated over a certain period of time. Savings not only limit consumption but also expand and diversify it, so that the process of saving is constantly expanding and spreading among the public. While at the beginning of 1976 Romania's population was holding 11.3 million savings passbooks and private accounts in the CEC, as of 1 September 1980 they numbered 17.5 million, or 6.2 million more than at the start of the five-year plan and averaging one active passbook to 1.3 inhabitants. Note also that there has been a great increase in the number of depositors in villages, where the number of passbooks has reached 4.4 million compared with 3.2 million at the start of the five-year plan and averaging one passbook per 2.5 inhabitants.

Savings organized by the CEC have also been encouraged by the benefits and advantages accorded depositors, especially use of the deposits to obtain major sums in the form of interest and prizes granted by the CEC, which have amounted to about 20 billion lei in the last 10 years. As of 1 September 1980 the public was holding over 4.3 million savings passbooks with interest and prizes of passenger cars, which won 5,877 prizes of passenger cars in 1979 in quarterly lotteries and 3,207 passenger cars in the first half of 1980, to the total value of more than 635 million lei.

Alongside the effort to attract the public's cash savings and other activities, the CEC is carrying out the party's and state's policy of aiding citizens with credits who wish to build their privately owned dwellings or to purchase out of the state fund dwellings that they occupy as tenants.

To this end the CEC took over from the Investments Bank the function of crediting the public for construction or purchase of privately owned dwellings as of 1 January

1970. Since then 923,263 loans have been granted out of the funds of the CEC to build or purchase privately owned dwellings to the value of 39,799,700,000 lei, the balance of the credits granted being 27,529,700,000 lei as of 30 September 1980.

The sums deposited in the CEC are returned to economic circulation either by way of state financing or crediting of socioeconomic capacities or by way of the CEC's crediting of the public, the savings forming the organized framework wherein the public's individual interests are harmoniously combined with those of society, namely the financial requirements for expanded socialist reproduction. This gives rise to one of the distinctive features of the process of organized saving, namely its twofold character as a process of temporary redistribution on the microeconomic level and one of permanent redistribution on the macroeconomic level.

The prospects of growth of the public's incomes and especially of workers' wages are particularly important to future development of the savings effort. In accordance with the Directive-Program for Raising the Living Standard, the public's total real incomes will be up 23-25 percent from 1980 in 1985, and the average real wage will be increased by 16-18 percent. The minimum wage will be raised from 1,425 lei a month in 1980 to 1,630 lei in 1985, in addition to the allowance for children and the other incomes coming out of the social consumption funds. Peasants' real incomes will be up 20-25 percent and nominal state social insurance pensions will be increased by an average of 23 percent.

The role of the savings effort grows steadily under these circumstances. The CEC is expected to contribute increasingly to consolidation of Romania's monetary system and of the purchasing power of the national currency and to implementation of the party's and state's policy on finance and credit.

5186
CSO: 2700

DATA ON INCREASED PENSION COSTS, NUMBER OF PENSIONERS

Zagreb DELEGATSKI VJESNIK (supplement to VJESNIK) in Serbo-Croatian
29 Oct 80 pp 21-22

[Text] The Federal Executive Council has submitted to the SFRY Assembly the Report on Administration of the Old-Age and Disability Insurance System in 1979. Since this is an area which has an important place in the system of personal and community expenditure. The report is to be used by the delegates in their quite comprehensive examination of this problem area and in proposing solutions in the new pension system which is now being prepared. At the same time it will contribute to the undertaking of steps and efforts to implement the policy of economic stabilization in this area.

Self-Management in Old-Age Insurance

The report states that constitutional organization of self-managed special-interest communities for old-age and disability insurance has by and large been performed successfully, but it is not regarded as completed, but is viewed as an ongoing process. Particular attention is paid to creation of conditions for teamwork and group decisionmaking in accordance with the initiative of President Tito. Changes have already been made in the term of office of the chairman of the collective body in Bosnia-Hercegovina and Croatia.

The workers and their delegations and delegates have been afforded more direct influence in the preparation and adoption of self-management acts. In the field of planning development, however, satisfactory results have not been achieved. Only in certain communities has it been provided that self-management accords be concluded on funds for old-age and disability insurance. There are also shortcomings in the procedure for internal self-management organizations. Though the interests of the workers and pensioners are represented more and more within the communities, the scope of the rights, obligations and responsibilities of the communities is narrow, and their material base is not adequate for fuller development of self-management relations.

Protection of Pensioners With Low Income

Vocational rehabilitation and the hiring of victims of work accidents were the subject of self-management regulation in 1979. In conformity with the Law on Associated Labor, emphasis was on strengthening the role and responsibility of organizations of associated labor in guaranteeing worker rights.

Matters related to protection of pensioners with low incomes (the lowest pension benefit, the welfare pension supplement, etc.) have also been regulated more favorably. Also, broader opportunities now exist for extended insurance coverage of spouses of personnel in diplomatic and other missions. Along these lines the possibility of purchasing qualifying lengths of service has been envisaged in Bosnia-Hercegovina, Serbia and Kosovo.

Regulation and conformity with self-management has been manifested most markedly in the domain of bringing pensions into line with economic trends. Average benefits of pension recipients have increased slightly more than personal incomes. That is, whereas the average nominal growth rate of personal incomes was 21.1 percent, the growth rate of pensions was 21.8 percent. However, the report points out that the real dimensions of the faster growth of pensions have not been ascertained. At the beginning of each calendar year pensions are raised according to data on the trend of the cost of living and personal incomes in the previous year. Then during the year they are raised on an ad hoc basis by approximately one-fourth of the rise of the cost of living in that year on the average. This tends to give the impression that the growth of pensions is more favorable than that of personal incomes.

The report also states that the process of extending old-age and disability insurance coverage to farmers has gone forward satisfactorily and that the associated farmers are treated the same as workers in associated labor. A significant step has also been taken in the old-age and disability insurance of private farmers. This has gone furthest in Croatia, where compulsory insurance against all types of perils has been established. In Macedonia and Slovenia compulsory old-age insurance has been introduced, but in the other republics and provinces preparations are being made for optional insurance of farmers.

Problems

Problems have arisen in administration of old-age and disability insurance, especially in implementing Article 63 of the present law concerning pensionable service which insureds have completed in the territories of two or more communities. That is, the provisions of that article have not been implemented up to now, since a certain number of communities have contested rulings pertaining to existing pensions and to pensionable service performed before 1973, and the mutual agreement of the republics and provinces would have to be obtained on this issue.

There also exist difficulties and delays in discharging the obligations of the Federation concerning the pensions of veterans, which is having an adverse effect on the business operation of the self-managed special-interest communities.

The Growing Number of Pensioners

The report states that in 1979 there were 1,540,683 pensioners in our country. This means that their number increased 4.9 percent over 1978. After several years of mild growth, since 1977 there has again been a faster influx of new pensioners. The highest growth rate, 7.6 percent, was recorded in Serbia proper, which was followed by Bosnia-Hercegovina and Kosovo.

These results nevertheless are in line with forecasts based on demographic surveys, which show that elderly workers with long pensionable service will comprise an ever greater proportion every year. This must be taken into account, then, in setting the age limit and other qualifying conditions for pensions.

This section of the report especially emphasizes that in 1979 and this year there has been an appreciable increase in the number of disability pensioners in certain republics and provinces. The largest growth, 12.4 percent, was recorded last year in Serbia proper, which was followed by Bosnia-Hercegovina and Macedonia. This points up the need to establish and consistently enforce uniform and objective criteria in evaluation of disability.

It is felt that the faster increase in the number of disability pensioners has in part been caused by momentary economic difficulties. Certain organizations of associated labor are trying to free themselves of workers with reduced work abilities and to exert pressure on commissions for expert evaluation of disability.

Results of Financial Operations

The revenues of self-managed special-interest communities for old-age and disability insurance amounted to 90.5 billion dinars in 1979 and were up 23.2 percent over 1978. The largest growth was recorded in Macedonia, and the lowest in Kosovo.

Expenditures increased more than 20 percent because of the rise in average nominal personal incomes and a 4-percent increase in the number of employees. However, there were no essential changes in the structure of gross revenues. The contribution from the personal income of workers is still the predominant source of revenue. The share of this source increased from 64 percent in 1978 to 64.8 percent in 1979.

It is significant that the share of contributions from income of basic organizations of associated labor dropped 1.6 percent last year. Only in Serbia proper did this contribution have a share of 46 percent in gross

revenues and represent the predominant source of revenue. The share of this income, incidentally, ranges from 1.2 percent in Macedonia to 15.6 percent in Croatia.

Old-age and disability insurance payments increased from 70 billion dinars in 1978 to 88.6 billion dinars in 1979. This 26.6-percent growth of payments is in line with the average annual growth rate of payments in the period from 1973 to 1978. It was mostly influenced by the increase in the number of pensioners, by the adjustment of pensions to economic trends and by the ad hoc adjustment during last year.

Expenditures for Special Purposes Are Also Increasing

Expenditures to pay pension benefits had a share of 77.5 percent in total expenditures. A certain decline in the share of these expenditures from the previous year indicated an increase in the share for various types of contributions for special purposes and for the expenses of the service. The largest item recorded was expenditures for health care of pensioners, representing 9.7 percent of total expenditures, or 8.6 billion dinars.

In this connection the issue was raised of whether it is justified to provide funds for health care and similar needs of pensioners through the self-managed special-interest communities, which then distribute them. It is felt that the community's role as a middleman does not conform to the principle of free exchange of labor, nor to the character of the community.

The reserve funds of the community decreased from 9.8 billion dinars in 1978 to 6.8 billion dinars in 1979. The predominant share of this was held in communities in Croatia and Serbia. Reserves are being exhausted because revenues are growing more slowly than expenditures. This is having an adverse effect on the possibility of balancing revenues and expenditures and is hampering financial operation.

7045
CSO: 2800

DATA ON 1980 GRAIN, OTHER CROPS IN CROATIA

Zagreb DELEGATSKI VJESNIK (supplement to VJESNIK) in Serbo-Croatian
29 Oct 80 p 18

[Text] Final figures on the harvest of early crops and early fruits for 1980 have been collected and collated in the republic bureau of statistics. Along with a comparison of data on production this year with last year and with the average over the last 10 years for the most important early crops, we give separately the production results for wheat, which unquestionably is our most important grain.

Comparative Figures

This year's harvest of all early grains is larger than the 1979 harvest largely because the yield per hectare is considerably higher than in 1979, particularly for rye, barley and oats.

The area planted to wheat was 2 percent greater and that planted to barley about 10 percent greater than last year. The areas planted to oats and rye have been dropping steadily for quite a few years now.

By contrast with grain, rapeseed production dropped considerably--only about 70 percent of the 1979 area was planted, that is, the area planted was 7,460 hectares smaller than last year. The yield per hectare was also down 6.5 percent, or 1.6 quintals per hectare, from last year, which had an additional adverse effect on the total harvest of this industrial crop.

Figures comparing 1980 with the 10-year average (1969-1978) show that less area was planted to wheat, rye and oats, the area planted to barley was 6.3 percent greater, and the area planted to rape was up 105.6 percent. The percentage by which the area planted to rape increased appears very impressive. Yet had the area planned actually been planted to this crop in 1980, that percentage would have been considerably higher--190 percent.

More detailed figures on all this are given in Tables 1-3.

Table 1. Production of the Most Important Early Crops

	Harvest, in cars			Indices	
	ø 1969-1978	1979	1980	1980/1979	ø 1980/1969-1978
Wheat	111,169	103,918	112,008	107.8	100.7
Rye	1,774	1,064	1,147	107.8	64.7
Barley	10,847	12,168	15,176	124.7	139.9
Oats	5,940	5,577	6,079	109.0	102.3
Rape	1,736	6,123	4,018	65.6	231.4

Table 2. Area Harvested

	Area Harvested, in hectares			Indices	
	ø 1969-1978	1979	1980	1980/1979	ø 1980/1969-1978
Wheat	373,155	335,263	342,015	102.0	91.7
Rye	11,776	6,808	6,216	91.3	52.8
Barley	57,038	55,262	60,605	109.7	106.3
Oats	39,368	35,837	33,409	93.2	84.9
Rape	8,445	24,823	17,363	69.9	205.6

Table 3. Average Yield Per Hectare

	Yield, in quintals per hectare			Indices	
	ø 1969-1978	1979	1980	1980/1979	ø 1980/1969-1978
Wheat	29.8	31.0	32.8	105.8	110.1
Rye	15.0	15.6	18.5	118.6	123.3
Barley	19.0	22.0	25.0	113.6	131.6
Oats	15.1	15.6	18.2	116.7	120.5
Rape	20.5	24.7	23.1	93.5	112.7

Wheat

Because of the great importance of the wheat harvest, Table 4 gives a more detailed survey of the results achieved in 1980 by communities of opstinas, with the socialized sector given separately from the private sector.

This year's wheat harvest was up 7.8 percent over 1979 and 0.7 percent over the 1969-1978 period. Here we should mention that this largest harvest is the result of the higher yield per unit area achieved almost exclusively on the land of private farms. In the socialized sector the yield of 46.3 quintals per hectare, that is, is at the level of the average over that 10-year period. However, when we realize that this year's wheat production had to deal with various difficulties virtually from planting to harvest, this production can confidently be called satisfactory.

Table 4. Area Harvested, Average Yield and Total Production of Wheat

	Area Harvested, in hectares	Quintals Per Hectare	Total Harvest, in cars
	Total		
ZO Bjelovar	69,434.0	29.7	20,624.0
ZO Gospic	2,757.0	17.9	493.0
ZO Karlovac	18,290.0	17.4	3,175.0
ZO Osijek	147,551.0	41.4	61,088.0
ZO Rijeka	14,191.0	24.6	3,487.0
ZO Sisak	21,787.0	21.1	4,607.0
ZO Split	15,468.0	19.4	3,008.0
ZO Varazdin	19,620.0	29.5	5,788.0
GZO Zagreb	5,494.0	30.4	1,669.0
ZO Zagreb	27,423.0	29.4	8,069.0
Republic of Croatia	342,015.0	32.8	112,008.0
1969-1978 average	373,155.0	29.8	111,189.0
1979	335,263.0	31.0	103,918.0
Index numbers:			
1980/1979	102.0	105.8	107.8
1980/1969-1978 average	91.7	110.1	100.7
	Organizations of Associated Labor		
ZO Bjelovar	11,057.0	40.8	4,514.0
ZO Gospic	—	--	--
ZO Karlovac	5.0	23.0	1.0
ZO Osijek	78,079.0	47.9	37,399.0
ZO Rijeka	660.0	36.9	243.0
ZO Sisak	1,108.0	33.2	368.0
ZO Split	893.0	37.7	337.0
ZO Varazdin	1,570.0	43.6	685.0
GZO Zagreb	538.0	34.6	186.0
ZO Zagreb	2,110.0	32.6	688.0
Republic of Croatia	96,020.0	46.3	44,421.0
1969-1978 average	92,699.0	46.1	42,750.0
1979	96,469.0	48.8	47,070.0
Index numbers:			
1980/1979	99.5	94.9	94.4
1980/1969-1978 average	103.6	100.4	103.9

Table 4 (continued)

	Area Harvested, in hectares	Quintals Per Hectare	Total Harvest, in cars
	Private Farmers		
ZO Bjelovar	58,377.0	27.6	16,110.0
ZO Gospic	2,757.0	17.9	493.0
ZO Karlovac	18,285.0	17.4	3,174.0
ZO Osijek	69,472.0	34.1	23,689.0
ZO Rijeka	13,531.0	24.0	3,244.0
ZO Sisak	20,679.0	20.5	4,239.0
ZO Split	14,575.0	18.3	2,671.0
ZO Varazdin	18,050.0	28.3	5,103.0
GZO Zagreb	4,956.0	29.9	1,483.0
ZO Zagreb	25,313.0	29.2	7,381.0
Republic of Croatia	245,995.0	27.5	67,587.0
1969-1978 average	280,456.0	24.0	68,439.0
1979	238,794.0	23.8	56,848.0
Index numbers:			
1980/1979	103.0	115.5	118.9
1980/1969-1978 average	87.7	114.6	98.8

ZO = Community of Opstinas; GZO = Community of City Opstinas.

Along with the unfavorable weather conditions during the growing season, there was also a shortage of manufactured fertilizers at planting time and later when the wheat should have been dressed. All of this had to have an effect on average yields per hectare and on the total harvest.

Harvesting took an unusually long time because of the frequent rains. The difficult harvesting conditions caused several breakdowns on combines, and there were not always enough spare parts, especially for Yugoslav-made combines. Because of the high moisture content of the grain almost the entire harvest from the socialized sector had to go through driers.

The difference between the socialized and private sectors, amounting to about 20 quintals of wheat per hectare, shows that there still exists a considerable potential for increasing production on the land of private farmers.

Early Fruit

It can be said of this year's harvest of sweet and sour cherries (Table 5) that it was smaller than last year's and smaller than the 10-year average.

Table 5. Harvest of Early Fruit

	Harvest, in cars			Indices	
	∅ 1969-1978	1979	1980	1980/1979	∅ 1980/1969-1978
Sweet cherries	747	829	683	82.4	91.4
Sour cherries	1,074	1,151	915	79.5	85.2
Apricots	163	127	142	111.8	87.1

The apricot harvest was somewhat better. In general the production of these fruits has not undergone significant changes over the last 10 years. The years 1971 and 1974, which were unusually abundant years, made an exception (Table 5).

7045
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BRIEFS

JAPANESE LICENSED X-RAY FILM--By the middle of next year the "Alkaloid" Chemical, Pharmaceutical and Cosmetic Industry [in Macedonia] will begin to produce x-ray film, which to date can be acquired only through import. The production will be carried out according to a license from the Japanese company "Fujifilm." It is planned that the first phase will include putting the x-ray film into rolls and final packaging, and the second phase will introduce the spreading of the light sensitive halogen emulsion on the polyester support. The capacity of the plant will be one million square meters of film annually, in one shift. According to the agreement between the two companies, all the equipment is due to arrive from Japan between 6 December and the end of the month. The specialists who will manage this operation are already in Japan for 3 months of specialization at one of "Fujifilm's" plants. They include 12 engineer-technicians and 6 trained workers. In March of next year these people, along with specialists from Japan, will begin the installation of the machinery (both imported and domestically produced) and will carry out tests of the technical production and technological capabilities of the machines. By the middle of the year the operation will be in test production and by June it will be operating as an organizational unit of the "Gotovi lekovi" OOZT [Basic Organization of Associated Work] of "Alkaloid" and will begin regular production. The site for the x-ray film plant has been prepared and is located in the western industrial zone where the facilities of the "Khemikalii" and "Dijazofotomaterijali" OOZT's are also located. (B.M.) [Text] [Skopje NOVA MAKEDONIJA in Macedonian 22 Nov 80 p 5]

MACEDONIAN TELEPHONE SERVICE--By the end of 1985, it is anticipated that there will be 254,000 telephones in Macedonia. This number will increase the ratio of telephones from the current 8.1 per 100 inhabitants to 12.33 per 100. However, this is poor in comparison with the Yugoslav average, which is planned to be 17.77 per 100 inhabitants by the end of the same period. The accelerated development of this branch will enable every other household in the urban areas to have a telephone. The president of the PTT told the delegates to the assembly of the League of Communists of Macedonia that the major portion of the Republic Fund will be used for building of the PTT network in the undeveloped and hilly and mountainous areas. The total number of telephones [in these areas] will increase from the current 4,500 to more than 30,000. In the undeveloped areas there are now 0.4 telephones per 100 inhabitants, and by the end of the coming medium-term plan it is anticipated there will be 3.5. There will also be telephones in the villages, but it will be necessary to ensure individual participation of 5,000 dinars in order to obtain a telephone. [Excerpt] [Skopje NOVA MAKEDONIJA in Macedonian 18 Oct 80 p 2]
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END

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17 December 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2073

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EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

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CONTENTS

ALBANIA

Schedule of International Flights for November-March Period
(BASHKIMI, 1 Nov 80) 1

Poor Planning, Design of Buildings Criticized
(Sokrat Mosko; BASHKIMI, 5 Nov 80) 2

BULGARIA

Violation of Technological, Labor Discipline Causes Losses in Agriculture
(Marko Markov; KOOPERATIVNO SELO, 5 Nov 80) 4

CZECHOSLOVAKIA

Pomposity, Obfuscation in Report Writing Derided
(Josef Mervari; HOSPODARSKE NOVINY, 3 Oct 80) 10

HUNGARY

East-West Economic Cooperation in Third Markets Discussed
(Istvan Garamvolgyi; FIGYELO, 5 Nov 80) 12

Prerequisites for Optimal Industrial Development Discussed
(Laszlo Tuu; NEPSZABADSAG, 8 Oct 80) 18

Changes in Agricultural Financing: Economy, Efficiency Stressed
(Rezso Kostyal; FIGYELO, 5 Nov 80) 22

MAV's Future Utilization of Diesel Traction Described
(Istvan Mezai; VASUT, Aug 80) 27

ROMANIA

Role of Self-Management in Improving Functioning of Socioeconomic Systems
(Haralambie Ene; REVISTA DE FILOZOFIE, Jul-Aug 80)..... 29

Contributions To Study of Future Global Problems
(Mihail Florescu; ERA SOCIALISTA, 5 Nov 80)..... 38

YUGOSLAVIA

Slovenian Employment Plans to 1985
(Ljubomir Krasojevic; PRIVREDNI PREGLED, 6 Nov 80)..... 43

Private Sector Crucial to Food Production
(Tomislav Kapetanic; PRIVREDNI PREGLED, 6 Nov 80)..... 46

SCHEDULE OF INTERNATIONAL FLIGHTS FOR NOVEMBER-MARCH PERIOD

Tirana BASHKIMI in Albanian 1 Nov 80 p 4

[Announcement from Albtransport]

[Text] From 1 November 1980 to 31 March 1981, the schedule for airplanes of international airlines will be as follows:

1. Interflug—(IF-390/391)--civil air transport enterprise of the GDR will fly on Monday, once every 2 weeks, on the Berlin-Budapest-Tirana route and return arriving at Rinas airport at 1000 hours and departing from Rinas at 1110 hours.

2. JAT-(JU-480/481)--Yugoslav air transport enterprise, will fly on Monday, every week, on the Belgrade-Tirana route and return, arriving at Rinas airport at 1410 hours and departing from Rinas at 1510 hours.

3. Olympic-(OA-115/116)--national air company of Greece, will fly on Tuesday, every week, on the Athens-Ioannina-Tirana route and return, arriving at Rinas airport at 1210 hours and departing from Rinas at 1310 hours.

4. TAROM-(RO-251/252)--civil air transport enterprise of the Socialist Republic of Romania, will fly on Wednesday, every week, on the Bucharest-Tirana-Rome route and return, arriving in Rinas airport from Bucharest at 0900 hours and leaving for Rome at 0950 hours; it will return to Rinas from Rome at 1400 hours and will depart from Rinas for Bucharest at 1500 hours.

5. MALEV-(MA-430/431)--civil air transport enterprise of the Hungarian People's Republic, will fly on Thursday, every week, on the Budapest-Belgrade-Tirana route and return, arriving at Rinas airport at 1110 hours and departing from Rinas at 1210 hours.

Note: Passengers must be at Rinas airport 1-1/2 hours before the departure of the airplane, otherwise Albtransport is not responsible if they miss the flight.

Tirana, 29 October 1980.

CSO: 2100

POOR PLANNING, DESIGN OF BUILDINGS CRITICIZED

Tirana BASHKIMI in Albanian 5 Nov 80 pp 1, 2

[Article by Sokrat Mosko, director of the Institute for City Planning Studies and Designs and Architecture]

[Excerpts] Successes in city planning studies and design do not conceal the shortcomings and deficiencies for which we have attempted to find the causes and to determine the measures which must be taken to improve the situation. Such defects have appeared in the design for the Tepelene hospital and the Shkoder railroad station, cases in which the buildings were not organically related to the real conditions of the climate and the terrain. This deficiency is a result of failure to achieve the necessary depth in scientific work, insufficient effort to learn the situation in detail, to know factors such as the climate conditions of the zone and the microclimate of the construction site, the material base and the mechanization capacities and abilities of the enterprise constructing the work, the results of similar projects executed by the enterprise and many other factors whose scientific analysis would have resulted in a high level solution.

Deficiencies also appeared in the coordination of the design work among the various elements, in the erroneous practices of fragmented work, when the project is not considered in all its aspects but it begins with the architect and the construction or installation activities become mechanical processes, which results in serious consequences. This has happened in the case of some housing units in Vlore, in the railroad station in Mjede, etc. Such situations have also occurred in city planning studies, such as the study of the hill in Sarande, which was executed without the necessary knowledge of the situation of the city, its climate conditions, the microclimate of the hill and its connection with the city.

In general, efforts have been made and are being made in city planning to abandon completely the erroneous practice of many years past where the city plan is thought to be and is drawn up as simply a system of roads where a few buildings are placed. This has been inadequate. Therefore, more attention should be concentrated in this area so that the city plan will be preceded by accurate scientific work, for the study of the situation, for comparison with the past, discovering what life, development, the future and many other topogeological,

climate, and traditional factors dictate, thus arriving at a solution for the harmonious development of the city or of the residential center.

In architectural designs the shortcomings which are obvious and which have resulted in negative consequences are, in particular, the failure to examine analytically the design task and the lack of comprehensive studies on what has been done so far and what must be done.

In regard to design tasks, we must say that, in general, they are on a low level. The investors do not demonstrate sufficient concern; they allow them to be prepared by individuals who do not use scientific criteria.

CSO: 2100

VIOLATION OF TECHNOLOGICAL, LABOR DISCIPLINE CAUSES LOSSES IN AGRICULTURE

Sofia KOOPERATIVNO SELO in Bulgarian 5 Nov 80 pp 1, 2

[Article by Marko Markov, chairman of the Control Council of the National Agroindustrial Union: "Discipline and Responsibility--Everywhere and From Everybody"]

[Text] The labor collectives in the National Agroindustrial Union launched a nationwide socialist competition this year and greeted the 36th anniversary of the Ninth of September revolution in our country with new successes and fulfillment of the 1980 plan and the Seventh Five-Year Plan.

As a result of the introduction of the economic approach and the new economic mechanism, most of the units of the National Agroindustrial Union during the first nine months of 1980 successfully fulfilled their counterplans in respect of a number of indicators. But the results would have been better still if throughout the National Agroindustrial Union there had been strict observance of technological, labor, contractual and financial discipline and if speedy and effective measures had been taken by the managements of its units to prevent certain violations.

By the decision of the Executive Committee of the Central Council of the National Agroindustrial Union and measures taken on 18 August the managements of economic organizations and units within the National Agroindustrial Union were charged within the period prior to 15 September 1980 to look into the state of technological, labor, contractual and financial discipline and take concrete measures for strict observance thereof. A recommendation was also given to the Control Council of the National Agroindustrial Union to make independent checks in economic organizations and units on the measures taken and to inform the Executive Committee of the results.

The Control Council checked the state of technological, labor, contractual and financial discipline in the OAPS [okrug agroindustrial unions] at Burgas, Vidin, Veliko Turnovo, Varna, Stara Zagora and Turgovishte, the Bulgarian Tobacco TPO [Trade and Industrial Trust], the Bulgarian Sugar Industrial-Agrarian Trust, the Bulgarian Fruit State Economic Trust, the Wine

Industry State Economic Trust, the Dairy Industry State Economic Trust, the Rhodope State Economic Trust, the Cattle and Sheep-raising NPO [Scientific Production Trust] and the Poultry-farming NPO and analysed certain data of the accounting, statistical and operational reports for the National Agroindustrial Union system.

The checks and analysis of discipline in all its different forms show that the violations of technological discipline boil down mainly to nonperformance of certain important agrotechnical and zootechnical measures for the raising of crops and livestock as envisaged in current technological and engineering plans. Thus, for example, the corn for grain, soybeans, sunflowers and other crops were not earthed up for the first and second time on all croplands or at the specified time. The requirements set for the quality of soil tillage were lessened. Irrigated croplands were not used efficiently. Timely and high-standard plant protection and weed control were not carried out.

Engineering projects for corn for grain and for certain other basic crops were not backed up with the necessary fertilizers, herbicides, high-efficiency machinery, spare parts etc.

This (in addition to adverse climatic conditions) contributed to the non-achievement of the targeted 1980 yields and output of corn for grain, sunflowers, soybeans, sugar beets, common beans and other crops.

Now when the foundations for next year's grain production are being laid, in some okrugs (Turgovishte, Mikhaylovgrad, Lovets etc.) there have been occurrences of planting with substandard and inadequately treated seeds, inadequate fertilization and other violations of the technology for the raising of wheat, barley and other fall crops.

There are also violations of pork production technology, for which reason a lower average daily gain was obtained, the finishing period was lengthened, and overconsumption of concentrated feed and high swine mortality were permitted.

Due to violations of technological discipline during the first eight months of 1980 substandard output was produced, and some of it rejected, at the Rhodope State Economic Trust, the Poultry-farming NPO, the Bulgarian Fruit State Economic Trust, the Fishing Resources State Economic Trust etc.

Technological control is also inadequate at the Wine Production State Economic Trust in the preparation of output for export, for which reason claims have been filed over tons of wine for Japan and Poland.

Many problems still remain unsolved in respect of the quality, bagging, packaging and artistic design of some products of the food, wine and tobacco industries.

The nonobservance of labor discipline is alarming. The checkup and analysis established that the participation of workers in agricultural activities is erratic. In the second quarter of 1980 alone, 43,102 fewer workers than planned were working and 11,910,817 fewer man-days than planned were worked. The average monthly time worked by workers permanently participating in production was 10-15 man-days at some agroindustrial complexes instead of the 25 man-days targeted in the plan. Optimal use was not made of working time in plant-growing due to late arrival at work and early leaving of the sites.

The labor of office and manual worker brigades is not utilized with adequate efficiency. Thus, at the Turgovishte agroindustrial complex 494 office and manual workers from different enterprises and departments picked 9104 kilograms of berries as against the norm of 24,300 kilograms; another 399 office and manual workers picked 29,860 kilograms of red tomatoes as against the norm of 109,850 kilograms. At the Ugurchin agroindustrial complex brigade members worked 20,062 man-days, fulfilling 10,318 labor norms (54 percent fulfillment), while at the agroindustrial complex in the village of Dermantsi brigade members worked 4575 man-days, fulfilling 1923 labor norms (42 percent fulfillment). Similar cases were found in other agroindustrial complexes and okrugs. In other words, the time worked hardly covered transportation costs for the brigade members.

Analysis showed that in the food, wine and tobacco industries during the same period 117,051 man-days were not worked due to absences approved by management and due to absences without leave, while 238,000 man-days (reduced to 8-hour working days) of overtime and 109,000 man-days of idle time and unnormed work due to lack of raw materials were worked and paid for. Thus at the Bulgarian Tobacco TPO 25,918 man-days were not worked, but 47,545 man-days of overtime were paid for; at the Rhodope State Economic Trust 17,469 man-days were not worked, but 24,445 man-days of overtime were paid for; at the Bulgarian Fruit State Economic Trust the figures are respectively 17,575 and 20,812 man-days, at the Dairy Industry State Economic Trust 6341 and 29,630 man-days respectively, etc.

A number of violations of contractual discipline were found, too. Contracts are still not being made at the same time that counterplans and engineering projects are worked out. Contracts are made very late and for amounts less than the authorized control figures, as was the case with tomatoes and grapes in Pleven and Sliven okrugs in 1980, ready-to-serve frozen foods in the unit of the Bulgarian Fruit State Economic Trust in Ruse etc., while the plan for the sale of 35 million liters of beer of the Bulgarian Beer State Economic Trust in 1980 was not covered by contracts despite the serious warnings given during the year by the leadership of the National Agroindustrial Union.

Contracting under the 1981 plan lags behind, too. Out of the envisaged 17,465 contracts involving 6,337,049,000 leva, by 31 August 1980 only 4864 contracts involving 1,645,571,000 leva had been entered into. The measures that have been taken in this matter do not suffice.

Contracts are still not being used as an economic lever in the activity of economic organizations and their units. The practice of "forgiveness" in the event of nonperformance has not been halted. In this regard there are violations by even some bodies such as the Okrug Agroindustrial Union in Yambol (it made the unlawful decision to exculpate the livestock purveyors who failed to perform their contractual obligations this year), the Okrug Agroindustrial Union in Pleven (it instructed a unit of the Dairy Industry State Economic Trust not to pay penalties for the nonperformance of a contract by farms to supply raw milk), the ONS [okrug people's council] in Sliven (it instructed a unit of the Dairy Industry State Economic Trust to hold back on the payment of penalties by a trade organization for unperformed contractual obligations to sell finished output) etc.

The managements of agroindustrial complexes do not seek a penalty from other economic organizations inside and out of the National Agroindustrial Union for nonperformance of contractual obligations plus damages, for nonfulfillment of plan etc. The agroindustrial complexes in Mikhaylovgrad Okrug during the first half collected only 7000 leva in penalties but paid out 584,000 leva; the agroindustrial complexes in Razgrad Okrug collected 15,000 leva but paid out 180,000 leva; the agroindustrial complexes in Vratsa Okrug collected 7000 leva but paid out 322,000 leva etc.

Despite the measures taken by governing body of the National Agroindustrial Union, of the economic organizations and units, of the control agencies of the National Agroindustrial Union control system and agencies of the Ministry of Finance there are still serious violations of financial discipline.

Normative working capital as of 30 September was overstated due mainly to unfinished production. For unsold assets in the form of physical commodities as of 15 September agroindustrial complexes in Vidin, Burgas, Turgovishte, Vratsa and other okrugs were in default and were unwarrantably paying interest and fines. Working capital was 4,369,000 leva in excess of the normative. Overdue loans increased by 55,522,000 leva, the total amount thereof being 135,244,000 leva. As of 30 September 1980, working capital in the amount of 16,468,000 leva had been diverted into investment, including 12,990,000 leva for agroindustrial complexes, which it will be hard to pay back at the end of the year and which will be a burden on the resources for the formation of a results-based Wage Fund.

During the nine-month period of 1980, 86,771,000 leva less than the targeted installments for farmed land, and 38,905,000 leva less than the targeted installments from the revenue of agricultural organizations was paid in, which is an obstacle to meeting the expenditures they envisaged within the National Agroindustrial Union.

Out of the 638 financial audits conducted during the first nine months, culpably caused losses amounting to 61,049,000 leva were discovered; at 449 agricultural facilities culpably caused losses amounting to

44,151,000 leva were discovered; at 131 industrial facilities, 33,383,000 leva; at 14 commercial facilities, 982,000 leva; and at 15 construction projects, 2,354,000 leva. The losses were greatest in the agroindustrial complexes--33,315,000 leva (the Dairy Industry State Economic Trust, 3,927,000 leva; the Rhodope State Economic Trust, 3,770,000 leva; the Agrokomplekt [Agricultural Equipment] ISI [Engineering Construction Institute], 1,850,000 leva etc.). The losses were due mainly to overexpenditure of materials, fuel, energy, seed and feed, to partially and completely spoiled output, illegally paid remuneration for labor and bonuses, penalties, interest and other property sanctions for unfulfilled contracts and overdue loans, above-normative working capital and diversion of the same, and direct encroachments upon socialist property.

From the analysis of the report data on plan fulfillment by the economic organizations within the National Agroindustrial Union, alarming facts were discovered regarding the first nine months of 1980 and the implementation of internal profit and loss accounting.

A number of managements of the economic organizations still are not observing the instructions of the Central Council of the National Agroindustrial Union regarding "The Organization of Internal Profit and Loss Accounting." In these organizations the normative production-cost Wage Fund, flow charts, norms and piecework rates have not been brought into line with the results-based Wage Fund. This group of economic organizations used up the anticipated annual Wage Fund before the end of the nine-month period. Nonfulfillment of the nine-month plan is excused in these organizations by the so-called failure of the plan to "dovetail;" manifestations of idleness and the lack of a good steward's elementary concern are tolerated; violations of discipline in all its different forms are tolerated; overexpenditures of materials, labor and funds are tolerated.

Not only planning agencies and financial and accounting personnel, but also control agencies at all levels must realize their part in the alarming financial condition of many economic organizations within the National Agroindustrial Union. They and they alone can and must take effective measures to cut short violations of and deviations from fixed standards, to properly implement internal profit and loss accounting and to ensure the necessary results-based Wage Fund.

Action to determine disciplinary liability was taken against 16,219 managers, specialists and workers for violations of technological, labor, contractual and financial discipline they committed during the first nine months of 1980; action to determine liability for property in the amount of 1,062,000 leva was taken against 18,782 officials, and action to determine criminal liability in the amount of 732,000 leva against 612 officials.

By decision of 20 October 1980 the executive committee punished the general directors of several trusts and the chairmen of okrug agroindustrial

unions who did not, within the specific time, look into the status of discipline. It again obliged all managers to take resolute measures for the sharp improvement of discipline in the units under their direction. It charged the Labor and Social Development Directorate with analyzing the results of brigade labor in helping agriculture and the food industry in 1980 and with suggesting measures for more effective use thereof in 1981. It obliged the legal section and court of arbitration to redirect their activity and to inform the Executive Committee of the Central Council of the National Agroindustrial Union every quarter about the state of contractual discipline; it obliged all governing bodies of sectors in the National Agroindustrial Union to include specific measures for the implementation of discipline in all their units during the adoption of the 1981 plan.

In conclusion, we must say that what has been achieved by managements and control agencies of economic organizations in the National Agroindustrial Union in respect of technological, labor, contractual and financial discipline and the implementation of internal profit and loss accounting is not satisfactory. It is not in keeping with fixed standards or capabilities, and the desired and possible final economic result has not been achieved. Ultimately, all the violations adversely affected fulfillment of the plan and provision of the results-based Wage Fund.

The analysis of the checkup shows that despite the measures that have been taken and the punishments that have been imposed the weaknesses and violations in the observance of technological, labor, contractual and financial discipline continue and arouse alarm. This makes it imperative that managements at all levels of administration and control take effective measures for a sharp improvement of discipline and for a worthy marking of our 12th Party Congress.

6474
CSO: 2200

POMPOSITY, OBFUSCATION IN REPORT WRITING DERIDED

Prague HOSPODARSKE NOVINY in Czech 3 Oct 80 p 16

[Article by Josef Mervari: "Instructions for Writing and Reading Reports on Task Fulfillment"; passages enclosed in slantlines printed in boldface]

[Text] The last year of the 5-year plan is usually decisive for final evaluation of the fulfillment of tasks in various areas of research, development and economy. We must pay particular attention to the compilation of reports about the fulfillment of these tasks augmenting their value by the use of routine expressions which generally have a very specific and deeper meaning. To ease the work of the compilers and readers of these reports, we made a list of some of these expressions indicating their true and full meaning.

/The methodological side of the matter is somewhat more complicated and in the interest of clarity is not being expounded on in this text/--the author did not understand the report at all.

/First we will explain the theory of problem solving/--it contains everything that the author had opportunity to copy from a basic textbook on the eve of the report due date.

/It is generally known/--our deputy director said that.

/It is commonly valid/--it is applicable in about 20 percent of cases.

/We have achieved these results by a direct method/--that is, by doing subtraction and addition.

/From the 20 experimental castings we have selected 3 examples for further processing/--the other 17 were completely unusable.

/Newly developed equipment:/

--/Has shown to be very resistant under operational conditions/--we dropped it and only part of it broke

--/Is automated/--it has a switch

--/Is semiportable/--it has a handle

--/Is transportable/--it has two handles.

/Some of the typical results stated in the report/--contradictory results were eliminated.

/The agreement of theoretical basis with the actual results of the experiment/:

--/Is irrefutable/--nobody checked on it

--/Can be proven only through complicated procedures/--there was no applicable theoretical solution

--/Is satisfactory/--the theoretical basis had to be changed during the process.

/Detailed reports will be published later/--even the authors agree that the reports are unpublishable.

/There is a complete agreement on the usefulness of the proposed solution/--both authors agree on it.

/The proposed solution could give rise to only one objection/--e.g. the only one which the author can answer.

/Latest results prove the future potential of the process used/--it will not show any results for a long time to come.

/Indisputable usefulness arising from the application/--nobody expressed interest in its use.

/Data provided by Engr Zika and Engr Mika made a partial contribution to the solution of the problem/--Zika made the necessary investigations and wrote chapters 1 and 2, Mika made all the necessary calculations and wrote the remaining chapters 3 and 4, the author of the report assigned a report number, prepared the table of contents and the award recommendations.

CSO: 2400

EAST-WEST ECONOMIC COOPERATION IN THIRD MARKETS DISCUSSED

Budapest FIGYELO in Hungarian No 45, 5 Nov 80 pp 1-2

[Article by Istvan Garamvolgyi: "East-West Cooperation. Extending to Third Markets"]

[Text] News item: Nikex and the Danish firm Schanwater jointly won a public tender in Iraq in the beginning of July. The tender was held to build a waste water treatment plan for a city of 100,000 inhabitants. The value of the project is 45 million dollars of which the Hungarian share is 37 million.

Such news and facts occur rather infrequently in accounts describing the latest foreign market activities of Hungarian enterprises. The role of third market cooperation in East-West trade is as yet quite modest: in fact, it is not possible to estimate it precisely. For example, we know that the number of East-West cooperative projects increased during the past decade from 400 to several thousand and some of these also envisage cooperation in third markets. The European Economic Commission and UNCTAD publish regular surveys and studies dealing with the situation of East-West cooperation and third market cooperation. Reports on the latter subject deal mainly with the obstacles causing the slow expansion of this form of cooperation. In this connection, some useful work was performed recently at the third international symposium on third market cooperation held in the Hungarian capital under the auspices of the Vienna-based Donaueuropaisches Institut which has supported the cause of East-West trade for decades.

'Full' Signs

What are the reasons behind the interest and attention toward this topic shown by various international economic organizations and, let us add, individual states and governments? Third market cooperation is not a new form of international trade: capitalist firms, including the largest ones, have been regularly cooperating in third markets for decades. This is so mainly because the requirements and needs of the customer, especially in the case of large projects, does not always match the ability of the firm interested in the business to deliver; thus, they are forced to call in a subcontracting firm. Quite frequently, an attempt to share risks and, not least, financial problems associated with big-ticket deliveries are behind cooperation in third markets. Both ad hoc and long range cooperation in third markets are well-tried and

accepted methods in world trade. (Let us mention an example with a Hungarian angle: six West European firms, each quite important in its own right (Siemens, AEG, Brown Boveri, Alsthom, Schneider-Westinghouse and ACEC), formed an ad hoc association to design and produce prototypes for a silicon semiconductor electric locomotive made by the Ganz Electric Works and redesigned since then.)

In a wider sense, this interest and attention is based on the desire of socialist countries to use more widely and frequently a form of cooperation created by the objective facts and phenomena of the world economy and world trade. If they were not working toward this goal, they would be depriving themselves, knowingly or not, of possibilities of foreign market sales which lie within their engineering and technological capabilities.

The need and demand for cooperation in third markets is especially timely in East-West trade. East-West cooperation between socialist and capitalist firms developed at a rapid rate at the end of the preceding decade and the beginning of the 1970's, but it slowed down around the middle years of the 1970's. Its role in East-West trade and bilateral trade between socialist and capitalist countries is still quite low. (The percentage of cooperative projects within the non-ruble trade of Hungary is 6 percent while in ruble trade it is 28 percent.)

The 'Full' sign has been posted, symbolically speaking, in the markets of a number of advanced industrial countries during the recession. Willingness to engage in bilateral production cooperation has undoubtedly declined. Socialist countries are proposing third market cooperation not as an either/or option but as a both/and alternative. This means strengthening of third market cooperation while bilateral production cooperation is preserved and developed. The reason behind this slogan, wish or proposal, or whatever we call it, is rooted in realities. Third market cooperation (in the markets of another capitalist or developing country) may reduce the tensions arising in bilateral trade while helping trade development.

The First Attempts

Hungary is considered as one of the countries that can boast of relatively good results in one of the areas of third market cooperation: trilateral cooperation. This has been noted at the Budapest symposium of the Donaueuropaisches Institut. This evaluation is open to debate but the past cooperation of between Hungarian and capitalist enterprises in third markets is suitable for highlighting this topic in more concrete terms.

The first attempts toward cooperation in third markets have preceded production cooperation in our country. Komplex and the Ganz Electric Works cooperated with the Austrian firm of Simmering-Graz-Pauker at the end of the 1950's and the beginning of the 1960's to sell power station equipment in third markets (India). The cooperation between Hungarian and capitalist firms to ship power station equipment to third markets has continued. We will quote from the aftermath those events that constitute a case study of the emergence of third market cooperation.

The order to supply gas turbine units to the Kelenfold steam power plant was awarded to Fiat Grandi Motori in cooperation with the Ganz Electric Works. This one-time cooperative project was developed by Transelectro into third market cooperation between the two firms lasting over a number of years. The number of gas turbine and diesel-fired power plant units delivered between 1971 and 1976 was 19 in Turkey, 6 in Finland, 2 in Dubai, 3 in Libya and 17 in Greece. Generators supplied by Ganz Electric Works represented 20 percent of joint deliveries, i.e., more than 10 million dollars. The cooperation among Transelectro, Ganz Electric Works and Fiat Grandi Motori reflects one of the typical features of third market cooperation, namely that getting to know one another through bilateral cooperation is one of the essential preconditions for third market cooperation. This also means that third market cooperation may correctly be called a more advanced form of cooperation. (It encompasses not only the production phase but also the preparation of proposals, joint marketing, joint venture, assumption of risks, financing, etc.)

Third market cooperation is interpreted differently in socialist and capitalist countries: capitalist firms in general consider joint tendering and joint venture as the only forms of third market cooperation. International economic organizations recognize many more types of cooperation in third markets, all of them justified. The experience of third market cooperation between Hungarian and capitalist firms also points to a wider range of forms.

The simplest and most frequent form is the purchase of marketing rights in third markets for cooperation or licence products. In the past we paid little attention to this but now we are increasingly taking care to ensure that production cooperation and licence agreements allow for sales in third markets. (And not just in CEMA countries.) For example, the Budapest Leather Industry Enterprise is producing upholstery materials based on know-how purchased from the West German firm Lingens and exporting them to third markets in advanced capitalist countries. The Telecommunications Materials Factory purchased ferrite production equipment and know-how from Krupp which has stopped ferrite production. The Hungarian enterprise is allowed to export to West Germany and third markets.

Subcontracting and Joint Proposals

A common form of market cooperation is the participation of capitalist firms as suppliers in the export of complete plant equipment. This does not simply mean that Hungarian foreign trade enterprises purchase and deliver the missing special machinery: they are already included in the proposal in cooperation with the capitalist firms. There are hardly any exports of complete plant equipment that do not involve such cooperation.

The reverse also occurs: capitalist firms may use Hungarian supplies or services (e.g., assembly work) in their exports to third markets. There is no denying that the examples of such types of third market cooperation are few and far between. Third market cooperation is usually suggested by Hungarian enterprises (this, in itself, presents no problem) and there are not many cases when capitalist firms suggest third market cooperation to them. There are few Hungarian enterprises with enough goodwill to make them desirable business partners. (The industrial background of Transelektro seems to be one: recently, a Dutch firm asked it to take part in the export of power plant equipment to Turkey.)

Joint tendering as a form of third market cooperation is not unknown in Hungarian experience. Hungarian foreign trade and productive enterprises involved in the export of complete and big-ticket plant equipment (Komplex, Transelektro, Ganz-MAVAG) are participating in public tenders with proposals formulated jointly with cooperating capitalist firms. To mention some recent examples: Chemolimpex and the Energy Management Institute are cooperating with a Dutch enterprise to sell desalination equipment in third markets and participate jointly in public tenders in Iraq and Algeria, while Chemolimpex, the Hungarian Aluminum Industry Trust and the French Kestner-Creusot-Loire are presenting a joint proposal for an alumina factory project in Jamaica.

The third market may be an advanced capitalist or a developing country. In practice, the third market is mostly a developing country. (In part because the need for complete plant equipment, turn-key factory or extensive infrastructural development project requiring cooperation among several cuppliers most often arises in developing countries. Furthermore, capitalist firms are more willing to cooperate with enterprises of socialist countries in developing countries than in markets that are already saturated.)

Trilateral Cooperation

For a number of reasons, developing countries consider cooperation between capitalist and socialist enterprises in their markets in a positive light. They think it is in line with their non-alignment policy. Socialist countries in general are willing to accept payment in kind; therefore, their participation improves the chances of development of large scale projects on a compensation basis. Nevertheless, developing countries do have some concrete expectations. They expect third market cooperation to be trilateral in one form or another. Since the majority of developing countries are not yet prepared to become suppliers or subcontractors, in most cases they merely require the employment of abundant local manpower in construction work. There also exist some full-fledged trilateral cooperative projects where the three partners are involved in joint production and marketing. With respect to Hungary, one might mention the bus assembly plant in Iraq where Ikarus bodies are assembled using Swedish Scania and French Saviem chassis. A similar kind of trilateral cooperative venture is envisaged in the Malagasy Republic where the Ikarus factory delivered 150 body kits so far in cooperation with the French Saviem; this was followed by the design of a midsize bus with Berliet engine and chassis based on a requirement of 900 buses. If the Hungarian and French companies can get the order then the assembly plant to be set up will turn this third market cooperative project into a trilateral arrangement. Hungarian enterprises are also participating in trilateral cooperative projects in other fields. (According to data compiled by EGB [European Economic Commission] and UNCTAD, 25 percent of the trilateral cooperative projects established in the course of third market cooperation in East-West trade involve Hungarian enterprises.)

The examples used to illustrate the various forms of cooperation in third markets provide only an indirect indication of the mutual advantages of this type of East-West cooperation: it provides marketing opportunities when the chances of either partner acting on its own would be less good. (In third market cooperation Hungarian enterprises are not only able to utilize the more

thorough market knowledge and better business relationships of their capitalist partners (often due to historical reasons); smaller capitalist companies are eager to participate in supplying our larger orders in developing countries. This also applies to other countries besides those that have less regular or developed economic and trade relations with their country than with Hungary.)

Intergovernmental Agreements

The principal and practical importance of third market cooperation between socialist and capitalist firms no longer lacks recognition on the intergovernmental level. The long range intergovernmental agreements between socialist and advanced capitalist countries include among their goals the development of cooperation in third markets. We also know, mainly from Hungarian experience, that joint committees are dealing with this problem every year. (In the Hungarian-Italian joint committee, a subcommittee has been established to investigate and initiate cooperation in third markets.)

Thus, the willingness for market cooperation is there on the intergovernmental, administrative and trade policy level. Yet, there are a number of obstacles slowing progress over a wider range of issues. On our side it is obvious that there are too few (and always the same few) enterprises able to take part ef ectively in third market cooperation. This indicates inadequate competitiveness and preparedness on the part of Hungarian enterprises in this regard.

To avoid all misunderstanding: it is not engineering or construction ability that is lacking. Let us note that the same kind of thing happened 10 to 15 years ago in the initial period of production and engineering cooperation. Enterprises, even the large ones, were slow or reluctant to enter into production cooperation with capitalist firms. The main reason was that this form of the international division of labor and international marketing is much more labor intensive in the preparatory and execution phase than plain exports. Most forms of third market cooperation are more complex and labor intensive than production cooperation. Concrete, not general, knowledge of the international field is needed. Business and possibly engineering and production relationships need to be developed with potential partners. Willingness to participate in third market cooperation must be explored. Proposals for joint participation in public tenders must be presented. It is even better when they are offering participation in business that has already been secured, etc. From the standpoint of foreign trade performance, third market cooperation is regarded as a form of export, but it is also a venture: an internationalventure which requires special aptitude and knowledge in the legal area.

The essence of the task arising from the foregoing discussion is that third market cooperation with capitalist firms must be incorporated into our foreign trade policy and, more importantly, practice, just as production and technical cooperation with capitalist firms on a bilateral basis has been incorporated earlier. This process may be accelerated on the level of economic direction. (It is already clear which third markets are most suitable for us and which sectors—product and development areas—are most promising for third market cooperation.)

Problems of Financing

The fundamental problem and limiting factor in third market cooperation with capitalist firms is that of financing. High priced plant equipment demands credit in every case. A substantial number of developing countries are using funds provided by bilateral credit and aid agreements fo finance development projects in progress. From the standpoint of third market cooperation with capitalist firms, such credits and aid funds can hardly be taken into consideration at all, because they increasingly exclude shipments from socialist countries or set a ceiling of 10 to 20 percent participation. The situation is similar when financing is obtained from private banks in Western Europe. Methods of financing by consortium can only cover their credit requirements associated with our own deliveries, in the best of cases. The Budapest international symposium also discussed the financing problems associated with third market cooperation. One proposal suggested the unification of credits and aid provided by various countries in a super-regional finance institution.

It would be difficult to assert that the present situation of and future outlook for third market cooperation with capitalist firms is promising or satisfactory. Even under such conditions, however, our goal must be to develop and expand such cooperation. There are many substantial reasons for this. Third market cooperation is an accepted and widely used method and form of international trade. A certain portion of our export potential (complete plant equipment and various systems incorporating engineering and intellectual creativity) cannot be marketed in any other way. It could also lead to a slight relaxation in the bilateral character of our foreign trade relations as a whole and the emergence of a rudimentary form of a multilaterality which characterizes the bulk of world trade. And there is one more practical argument: cooperation with capitalist firms in third markets increases export receipts in convertible currency.

9164
CSO: 2500

PREREQUISITES FOR OPTIMAL INDUSTRIAL DEVELOPMENT DISCUSSED

AU181425 Budapest NEPSZABADSAG in Hungarian 8 Oct 80 p 10

[Article in economic column by Dr Mrs Laszlo Tuu, head of a department of the Central Statistics Office: "Large Enterprise, Small Enterprise: On Industry's Organizational Composition"]

[Text] The transition to intensive economic management and the requirement to improve the equilibrium of foreign trade and intensify efficiency, make it particularly timely to analyze the function of enterprise organizations and the system of their relations. Taking the experiences of the changes in the organizational structure to date and the conclusions that can be drawn from international practice, we are seeking an answer to the question of what composition and proportional size of productive organizations can create optimal development in various industrial areas.

Centralization Measures

Developing a modern domestic large-scale industry that is competitive even with that of the industrially more advanced countries has been a fundamental industrial-political goal of over 3 decades of our planned economy. Following the nationalization of industry, liquidating a broad array of fragmentary plants operating with low productivity was a most essential initial step toward this. Regrouping their machinery and productive equipment fostered a more rapid development of the more viable economic units. Also, the division of enterprises that used to produce a variety of goods into more homogeneous economic units, was a characteristic feature of the organizational modifications implemented at the beginning of the fifties.

In the first half of the sixties, the industrial enterprise organization was considerably modified in order to create, relatively rapidly, organizational prerequisites for large-scale production. As a consequence of amalgamations carried out in several phases, the number of state industrial enterprises decreased by approximately 40 percent. (In 1960 still 1,368, while in 1965 a total of 840 industrial enterprises operated as independent economic units.) A process of amalgamation of a similar dimension took place in cooperative industry as well, where the number of industrial cooperatives decreased from 1,251 in 1960 to 811 by the end of 1965.

Centralization measures were based on the--theoretically well-founded--notion that organizations possessing a larger intellectual and material base have a better

overview of the development tasks of the given industrial activity; with the knowledge of technical problems on a more extensive scale, can more clearly perceive the requirements of technical development; and in possession of more concentrated means, can more efficiently also resolve the research-development tasks connected with them. As masters of a given production sector, they can more accurately assess producer and consumer requirements and, in satisfying them, can act as equal agents vis-a-vis both foreign customers and domestic--also centralized--trade partners. In addition, the relatively small number of units pursuing economic activity also made direction easier based on direct instructions concerning the plan.

Experiences Abroad

As a result of the centralization that affected all industrial areas, our industrial organization acquired a characteristic composition that deviated from the internationally universal one. In quite a few branches, the entire activity of the branch was concentrated at one enterprise. In the overwhelming majority of branches, the number of enterprises decreased in such a way that the stratum of small and medium enterprises was greatly reduced or, in some cases, completely ceased to exist. Thus, in 1965, hardly 10 percent of state industry workers were employed at industrial enterprises with personnel of under 500 employees, and almost 35 percent of them belonged to the complement of enterprises employing more than 5,000 people. (By way of an informative comparison: at the same time, almost one-quarter of the Soviet Union's industrial workers, and more than 40 percent in the GDR worked at small and medium enterprises where the number of workers was under 500. The rate of enterprises with a staff exceeding 5,000 people was below 30 percent even in the Soviet Union, while it barely exceeded 10 percent of the overall complement in the GDR.)

The organizational composition of the capitalist countries' industry also differs considerably from the proportions that have developed in our country. Comparison results show that not even in countries with an advanced industry does one come across a withering away of the small and medium enterprises strata. In their entirety, these constitute a considerable portion of the industrial organizations of the reviewed countries. It is obvious that the sphere of small capitalist enterprises and their area of activity are more variable than the average, because, owing to being less endowed with capital, they are less able to fend off individually the effects of a recession. However, their relatively stable proportion within industry indicates that their activity is required by economic life and those that are discontinued are continuously replaced by new small enterprises.

Enterprises With Many Separate Plants

In the years immediately following the 1968 reform of the system of economic direction, the decrease in the number of state industrial enterprises did not continue in our country, and the area of cooperative industry even expanded (mainly the number of joint industrial ventures established by agricultural organizations increased). Then the process of organizational changes in the industry picked up in the seventies. The new reorganizations were based overwhelmingly on enterprise initiative: for the main part, large-scale enterprises absorbed into their own organization smaller enterprises (most of which used to be directed by councils) with which they had cooperative relations before. In 1979, as a

result of these changes, 702 enterprises belonged to state industry and 670 organizations pursuing economic activity operated in the cooperative industry. Approximately 230 of the above state enterprises conducted their economic activity under trust direction.

Many of our large-scale industrial enterprises conform well to the requirements imposed on their operation. They have successfully accomplished the preferential development programs serving the transformation of the production structure. They actively participate in cooperation with regard to specialization and joint ventures among the CEMA countries and, through their direct linkage with foreign trade activity, they can react more rapidly to foreign market requirements and are thus--as a result of intensifying their exports and conserving imported materials--effectively contributing to improving foreign trade accounts.

However, in another respect, negative economic effects also arise from the present structural composition of our industry. These manifest themselves mainly in diminished possibilities for cooperation, the supply of products and joint ventures among productive enterprises; the undeveloped nature of back-up industry engaged in specialized activity; and an increase in the number of components and consumer goods that are in short supply temporarily or constantly.

In my opinion, a large portion of these problems can be traced back to the fact that the process of centralization has extended also to areas where adapting to demand by users or consumers and ensuring a broad structure of supply in a flexible manner justify the existence of small and medium enterprise organizational forms. As a result of the fact that new large-scale industrial organizations came about, in general, through absorption of small enterprises, the "many-plant" enterprise form has become predominant in our industry. (In 1979, taking state industry as a whole, there were on the average seven industrial plants per enterprise. Regional dismemberment has increased most in the machine industry, where, as compared with 1960, the number of industrial plants per enterprise has more than trebled and their present rate is higher than the industrial average.) The direction of a large number of productive units, which are sometimes regionally fairly far from each other, inevitably slow down enterprise reaction and diminish local initiative ability as well.

What Changes Are Required?

Consistent with worldwide industrial development, the large-scale enterprise pattern must constitute the basis of our economic development also in the future. However, to complement the activity of large-scale enterprises, greater scope than at present should be extended to small and medium enterprises capable of fairly flexible economic activity.

It is useful to retain the large-scale enterprise organizational form or regard it as a goal of development primarily in areas and with regard to economic activities where:

--Great fixed asset intensiveness characterizes production,

--Profitability of production is subject to a large volume, and

--There is a rapid technical development on a world scale, as a result of which a great concentration of research and development resources are required.

On the basis of these criteria, obviously the large-scale enterprise form can be continued to be considered in the case of exploiting (mining) and raw material producing activities. In these areas, the need for considerable investments makes the utilization of the advantages of centralized enterprise direction on the one hand, and a more coordinated surveyance and satisfaction of the requirements of customers on the other hand, indispensable as well as possible by virture of production processes that change only to a small extent in the long term and a relatively stable product structure.

However, what can be regarded as desirable in the processing industrial branches is that various forms of enterprise organizations, large-scale as well as small and medium enterprises, pursue their activity in cooperation, and at the same time in a sound competitive spirit. Here also, satisfying mass requirements (production in large series) has to fall to the competence of large-scale enterprises in general. However, smaller organizations able to undertake economically a more flexible changing of the range of products and production in small series, will have to be assigned a greater role in areas that require prompt adaption to special demands and consumer requirements (for instance, fashion).

The economic self-sufficiency of units of enterprises with many plants that are operating without suitable efficiency, units separated regionally and also with regard to their sphere of activity, is only one means for strengthening the small and medium enterprise stratum. In addition--as was noted also at the latest session of the National Assembly--the government intends to encourage the proliferation of organizational forms that will provide the means for establishing new industrial productive units, primarily within the framework of cooperative associations. Overcoming problems of financing connected with this and creating more flexible conditions for accepting work could thus considerably ease the task of making good the present production shortages and the development of a more proportional organizational composition of industry enterprises.

CSO: 2500

CHANGES IN AGRICULTURAL FINANCING: ECONOMY, EFFICIENCY STRESSED

Budapest FIGYELO in Hungarian 5 Nov 80 p 13

[Article by Rezso Kostyal: "Revenue and Incentive"]

[Text] In the nearly 1 year period since the operation of the price and financial regulators which were established in 1980, determined efforts have been made on the large farms to use less energy-intensive technologies and modify the production structure in a way aimed at countering the factoring-in costs. Manpower and wage management experiences have also been favorable. In the elapsed time, however, it has not as yet been possible to filter out the experiences which basically characterize the entire operation of the regulatory system since the large farms have not as yet prepared their midyear balance reports, and data characteristic for the whole year are not yet available.

Instead of Special Supports

On the basis of all these things, we needed only minor corrections and changes, as justified by experience thus far, in establishing revenue regulations for 1981, excepting supports for construction investments. In respect primarily to its system of measures, the latter cannot fit into the estimates for the Sixth Five-Year Plan, and its operational system cannot be maintained under the altered conditions.

In the first half of the Fifth Five-Year Plan period the support system for agricultural investments appropriately helped in the coordination of farm and national economic goals. But as early as 1976-1978 they exceeded the plan investment targets of the large farms by about 15 percent, and the structure of construction investments gradually shifted toward those goals which specifically shared in higher supports. At the end of 1978 this process made it necessary to limit the publication of investment support documents. Bu this time, however, the stock of investments underway had significantly increased, and their investment requirements, together with the newly started investments, exceeded the sum targeted in the plan. Despite the partially limiting measures still in effect in 1980 about half as many again of planned supports will be negotiated this year. Thus as of June of this year it was not possible to grant further supports. Expressly, cost-saving quarters for pigs, milking cows and sheep could be built by means of supports only within definitely limited sums, and these too only on the basis of competitions announced under special conditions.

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In harmony with the changes in certain elements of the price and regulatory system, the modifications which were put into effect this year significantly reduced the variations in the supports extended to construction and new planting investments. The intent was that the development activities of the large farms should be influenced not by special supports but primarily by efficiency, more rapid clearing costs, and in general operational advantages in harmony with the interests of the economy. This goal was served by the order according to which a broad-scale basic support was realized for investments, and the large farms were able to ask for special supports to attain economically important production goals.

In harmony with our possibilities, the financing system can promote the realization of our goals if there is an increase in the ratio of the more selective and flexible credits instead of supports than can be used automatically. By this means it is possible to avoid the development of investment peaks, and in the knowledge of the conditions of their planned development the farms can decide on the use of the development monies available to them. Beginning in 1981, construction investments in agriculture also will be realized mostly from the farms' own financial sources and from credits. Thus in new construction investments the credit worthiness of the farms, the profitability attainable in planned investments, and generally the cost recovery time will play a greater role.

What the Large Farms Must Make Up

The interest on credits for construction investments is identical with those fixed in the guidelines. Because of the termination of supports for construction investments, the budget extends interest reimbursement for interest costs that are generally increasing on large farms. In harmony with the special development goals of the plan, the interest reimbursement may be of different (varying) degrees on the extended credit but at most on 70 percent of the qualifying investments.

State supports for pig-breeding and dairy facilities will be maintained to a lesser extent than before. This is necessary on one hand for basic material supplies on behalf of pork-processing facilities that have been built or are on the way, and on the other hand because the level of milk and dairy supplies can be maintained only if the large farms make up for the reduction of cow stocks which has taken place on the small farms in a way at variance with our intention, but something that is inevitable with the change in village lifestyle. These supports can be requested

not only for new buildings but also for modernizing existing ones. An essential difference from previous practice, however, is that the farms do not receive the supports in advance but only after the investments have been put into operation. If a large farm receives credits for the above-mentioned investments, the repayments on the credits for investments used afterwards must be proportionally reduced. This order gives incentive to the large farms to reduce the implementation time of the investments, and the unjustifiably large stock of unfinished investments may also be moderated.

The rules for investment support on behalf of new planting areas remain unchanged. This is justified by the fact that the implementation time for new planting areas is long, it is extremely capital intensive, and because there are important national economic interests linked to the continuous modernization of planting areas.

Amortization on Gross Value

In harmony with the modification of the financing system, there is a change in the regulation of depreciation write-off and the use of the development funds. The system of depreciation white-offs for buildings remains unchanged, while for fixed assets created according to the new financing system, excepting pig-breeding and milk production facilities, the amortization must be calculated according to the full cost, that is, on gross value. In the use of the development fund the obligations in effect up to now for producer cooperatives will be terminated; that is, in accordance with the farm decisions the amortization may be used both to replenish the circulating fund and repay credits as is the case with state enterprises.

The effect of the new price formation introduced in 1980 is significantly influencing the price and financial conditions of food production, although in this area competitive price formation has not been realized. In most of the purchasing price changes, the automatic realization of midyear price changes for materials of import and industrial origin used in agriculture does not seem justified given the present economic conditions. The biological factors which determine production in crop raising generally mean a production process of 1 year, and in the most important branches of animal breeding a production process of several years. Therefore, frequent midyear changes in producer prices would influence management disadvantageously and cause uncertainty in incentive relations.

The 1980 producer price increases for the most important materials of industrial origin used in agriculture (fertilizers, herbicides, fodder) and machinery were countered in midyear by budgetary supports. The rise in energy prices, on the other hand, increased farm costs, and gave incentive to energy savings. On most of the farms the significant rise in energy prices could be countered over a year only partly by a rational reduction in consumption, and a midyear modification in the official purchasing prices did not take place; therefore, the large farms can request budgetary subsidies to the end of the year for a greater portion of the cost increase.

The already announced 1981 agricultural producer price increases cover temporarily extended budgetary supports, taking also into account the realistically attainable improvement in efficiency. In connection with the above, the support indexes are changing, generally declining, for machinery, fertilizers and herbicides, and the withheld import and industrial producer price increases for 1980 are already being realized in the agricultural purchase prices.

The farms must prepare themselves for more frequent price changes in this sector than has been the case in the past by adjusting to the above-mentioned agricultural characteristics. Obviously, the cause is the fact that the import or industrial producer prices of basic means and materials used in industry are following the constant price changes on the world market, and it is justifiable to realize these changes on the world market, and it is justifiable to realize these changes also in farm costs, naturally in harmony with purchasing price increases. Import and industrial producer prices may change more than once a year, while it is purposeful to change the official producer prices for agriculture only once a year. Depending on the revenue situation in agriculture, it becomes the task of the financial system to assist in the smooth financing of production up to the settling of purchasing prices by moderating the cost of increasing price hikes for basic materials and means with midyear and temporary supports.

The effect of producer price increases varies on farms with different endowments: the price increase for materials and means of industrial origin is countered to a smaller extent by the price receipt increase attainable with lower yields on poorer productive soils than on favorably endowed farms. In view of the fact that in the differentiation process among farms the efficiency differences are determining, we must strive to develop, together with the differentiation effect of central measures, such economic conditions as will make the economic development of this group of farms possible from their own resources. With a greater degree of purchasing price increases in 1980, such measures were undertaken with the land tax, revenue tax, and production tax. The 1981 average purchasing price increase of 5 percent has to a lesser extent justified changes in two areas; on farms where the average cadasteral net income of the arable area is between 14 to 19 gold crowns, the land tax payment requirement is eliminated. The exemptions that existed up to now will remain. The subsidy for withholding the production tax--over and above the farms listed as being unfavorably endowed--can be used up to 30 percent for farms with an arable area below 19 gold crowns in value.

Household Farm Assistance

Experience shows that an increase in slaughter beef production is primarily a function of economic export possibilities. Economic analyses clearly establish that this can be attained with well selected, meat enriched types or hybrids, minimal fodder-intensive technologies, and the use of grass areas, economic by-products and rough fodders. In the case of such development, the greatest burdens for the farms are represented by the acquisition and raising of cow stocks, or its circulating fund demand. For this, the large farms receive 20,000 forints per head support in event of a constant increase in the meat cow stocks, independently of quarters expansion. Experience shows that supports for establishing and renewing fields and pastures have not been accompanied by the expected results, and therefore these supports are being gradually eliminated.

The state is continuing financial assistance to household and small-farm production, and in certain branches to increased production as well. To promote mechanization, the scope of small machines that share in supports is being expanded, and farms that have a number of cows receive a 1,000 forint greater support for the second and every additional cow.

The system of earnings regulations for large farms changed significantly on 1 January 1980. The effect of the new rules cannot as yet be comprehensively evaluated, but the available money data show that the fee and wage management on large farms has become more considered. The sum of midyear wage payments rose to a lesser extent than a year ago, and therefore apparently even in case of an increase in year-end premiums and shares, revenues will remain within the planned limits. Thus basic changes are not justified in the system of fee and share taxes, the changes occur with the measuring system.

Farm Incentive

The unfavorable effect of average wage regulation was not solved by the subsidy which in management within a work-fee bill made possible a more than 1 percent rise in the work-fee level. It did not provide enough incentive to the farms to employ the relased manpower by the use of more modern technologies or work organization in work areas of similar efficiency, or to cut back personnel. Therefore, the above-mentioned 1 percent subsidy rises to 3 percent in management within the work-fee bill. It is a minor but not insubstantial correction which makes it possible for all profitable large farms to pay at least 1 percent of the work-fee bill, tax free, as a year-end share, if the money cover is available.

In construction-fitting work and in services a problem existed, besides the varying consumption, in that the basis of profit formation and the production tax was different. The change, therefore, is directed at requiring that the production task be paid on material-free price receipts, instead of the price receipts, according to indexes changed by activity. A further modification is represented in the production tax system by the fact that the large farms, with the 1980 rise in specific production prices, will pay the differential producer sales tax in the future as a production tax. Thus this withholding is built into the producer tax system.

The development of industrial activity by the farms and the improvement in industrial cooperation conditions is served by an order which provides that in the future when making use of the production tax withholding subsidy large farm payment of an agglomerate separate tax will not be an excluding cause.

The agricultural regulator changes which will be valid in 1981 take into account the development circumstances of our economic development, and raise requirements particularly in the investment field. As a whole, on the other hand, they promote development of the rational initiatives which by improving the quality indexes of production adjust to the internal and external economic conditions.

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MAV'S FUTURE UTILIZATION OF DIESEL TRACTION DESCRIBED

Budapest VASUT in Hungarian No 8, Aug 80 p 7

[Article by Istvan Mezei: "The Future of Diesel Traction"]

[Excerpt] The modernization of traction will continue at MAV [Hungarian State Railways] during the coming period, but the development will not be as visible as was characteristic of the 1960's.

The future of diesel traction will be determined by the rate of electrification and the planned elimination of steam traction in 1985.

At the end of the Fifth Five-Year Plan, the length of the electrified rail network will be some 1,500 kilometers, and about half of the transportation performed by MAV will take place over this network.

The length of electrified track in the Sixth Five-Year Plan is about 3,000 kilometers. At the end of this plan period, in 1985, some 20 percent of the network will be electrified, and the share of transportation using electric traction will be about 60 percent.

According to MAV's long-range development plans, by 1990--the end of the Seventh Five-Year Plan--out of the 3,000 kilometers in the main network, about 2,400 kilometers will be electrified, which is between 32 and 34 percent of the present total network.

It is worth noting that according to plans three fourths of total transportation performed will take place over the electrified network.

The tasks of pulling and switching now performed by steam locomotives will be taken over by diesel or electric locomotives. The tasks of diesel traction will be determined by electrification of the lines and cessation of steam traction, but there will be no change in their nature, since diesel traction is presently suitable for performing all the pulling and switching tasks.

The amount of work done by the steam locomotives is less than the increase in work done by the electric locomotives; hence the share of diesel traction in transportation over the main lines will continue to decrease.

With the cessation of steam traction, complete modernization of the switching operation will be completed. In 1979, 13.2 percent of the switching was done by diesel locomotives. According to preliminary plans, 95 percent of the switching will be done by diesel locomotives in 1985 and 90 percent in 1990. The decrease is the result of the fact that under the Seventh Five-Year Plan electrification of the switching locomotives is expected to begin.

According to domestic calculations, the economic life of diesel locomotives is estimated at 25 years. Because of the limited funds available for investment, however, this cannot always be realized. One result of this is that costs for maintenance increase. Presently there are 12 kinds of diesel engines and 4 kinds of motorized cars in operations on the standard gauge lines. According to plans, the M.28-series locomotives will be phased out by 1985 as well as some of the M.31-series locomotives and the AB, ABny, ABb, and Eb motor cars.

Dur[illegible] the period of the Sixth Five-Year Plan, only M.41-series diesel locomo[illegible] will continue to be acquired. Among diesel locomotives for switching, acqu[illegible]on of M.43 and M.47 series locomotives will continue; it is expected to be completed by 1985. In addition to performing light and medium switching tasks, these locomotives are also suitable for carrying trucks.

Diesel traction in MAV during the past 5 years has been an important means of modernization. Because of the energy situation and the many other advantages of electric traction, beginning in the middle of the 1980's--the work performed by diesel locomotives will decrease. On the branch lines and in switching service, however, diesel traction will continue to be critically important.

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ROLE OF SELF-MANAGEMENT IN IMPROVING FUNCTIONING OF SOCIOECONOMIC SYSTEMS

Bucharest REVISTA DE FILOZOFIE in Romanian No 4, Jul-Aug 80 pp 395-400

[Article by Haralambie Ene: "Self-Management as a Principle for Increasing the Functionality of the Economic and Social Systems"]

[Text] In the Romanian Communist Party's view, self-management expresses a basic principle in the management of society, a consequence of the objective tendencies of continual development of worker democracy, in the prospect of turning--as it is pointed out in the RCP program--to "...the achievement of the higher, communist form of the management of society by the masses, to the forging of history by the people, in accordance with their own will."* The whole activity of direct participation by all the working people in the practical management of the economic and social units, in the concrete preparation of the decisions and strategies on development that they must carry out, is based on this principle.

A thorough analysis of its content shows that self-management is not confined to the mere expansion of the participation in management, to the numerical growth of those who take part in the act of decisionmaking within the economic and social units. Its aspects are many and have consequences on very different planes of social practice.

Thus, as a principle of the scientific management of socialist society, self-management is seen, firstly, as a political principle, directly involving the basic values of the new order, the affirmation of the class interests of the working people. From this viewpoint, the application of the concrete forms that give life to the principle of worker self-management has in view:

The growth of the role of the working class in the whole process of management of society and its subsystems;

The strengthening of the role of the Communist Party and its organizations in the management of all aspects of economic and social life;

* "The Program of the Romanian Communist Party for Forging the Multilaterally Developed Socialist Society and Advancing Romania Toward Communism," "Congresul al XI-lea al Partidului Comunist Roman" [The 11th Congress of the Romanian Communist Party], Bucharest, Politica Publishing House, 1975, p 720.

The continual development of worker democracy, by expanding the collective character of management in all fields of activity;

The fuller and fuller manifestation of the personality of the working people, by directly involving them as participants in the management of social life;

The releasing of all the creative energies of the masses of working people, as a basis for increasing the efficiency of their social activity;

The raising of the degree of responsibility of the working people through their direct participation in making the decisions, which they are called upon to carry out as their own decisions.

All these things demonstrate the primarily political character of self-management, with profound implications for the revolutionary role of the working class and its party, for the personality of the working people as future builders of communism, and for all ideological and educational activity.

At the same time, the analysis of the content of worker self-management and self-administration also makes evident, besides its political, class essence, a factor of an economic nature, which has been the basis for promoting this principle--namely the one referring to the necessity of increasing the level of efficiency of management as such.

By means of its polyvalent character, this principle is also constituted as a factor for optimizing all social activity,* having as well a pronounced functional content, manifest--due to the economic and social mechanism that operationalizes it--on the plane of the activity of all the economic and social units. While its political aspect emphasizes its revolutionary, class character in the development of our society, its economic aspect involves the growth of the functional character of all economic and social activity, lays the foundations for new levels of efficiency, constitutes an important step toward a new quality of labor in all fields. The following relations are involved here:

a) The bringing of the decision nearer to the level of production, by increasing the autonomy of the basic units and widening the powers of decisionmaking on their own problems. Management by petty surveillance is thus avoided and the capacity to give suitable answers to the particular problems with which the unit is confronted is developed, with all the positive consequences that arise on the plane of functionality;

b) The stimulation of one's own effort, which permits the matter of utilizing to a greater extent, in the spirit of efficiency, all the internal reserves, all the technical and human capacities that sometimes remained in a dormant state;

c) The growth of the level of "operationality" of management, of the decision, and of guidance of the activity in itself, the growth of the system's speed of reaction to the stimului exerted by the requirements of the other systems as beneficiaries,

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* See: Aneta Nutu-Busuioc, "Self-Management, a Method of Optimization of Social and Human Activity," REVISTA DE FILOZOFIE, No 5, 1978.

which constitutes the basis for increasing the functionality of the units and eradicating inertial and bureaucratic phenomena;

d) The accenting of the dependence of the managed systems on the requirements of the social needs and not on the hierarchical factors, by reducing the possibilities of making the unit autonomous with respect to the social function that devolves upon it;

e) The institution of full agreement between activities and results, between effort and effects, the latter being much more clearly individualized and put in relation to the achievement of the social function with regard to which efficiency is now measured.

In fact, the principle of worker self-management and self-administration includes both the strictly political, ideological, class aspect and the functional and operational aspect that offers to all the economic and social systems the means needed for performing their activity in terms of much higher efficiency. Moreover, it is known that, in the process of putting this principle into practice, there has been taken into account precisely its great capacity to conduct our society toward a new, revolutionary stage on the way to the construction of communism and, at the same time, toward a new level of efficiency in management by increasing the functionality of the activities in all fields of social life. "By means of the measures established," it is pointed out in the Decision of the RCP Central Committee on the Improvement of Economic and Social Management and Planning, "there has been created a widely democratic framework for the participation of those who work in the management of the national economy and all social life, so that each work staff may fulfill its role in the proper running of the unit in which it works, in order to increase economic efficiency, to raise the standard of living of the masses, and the general development of society."*

At the same time, there has also been devised and put into practice the concrete mode of objective connection between the requirements for satisfying the social needs, on the one hand, and the intrinsic capacity of the managed subsystems to develop a sufficiently high speed of reaction in the process of distinguishing these requirements, in adjusting their own structures in relation to the content of the requirements and then in the actual response that the system must give to these needs, on the other hand. Practically, as Comrade Nicolae Ceausescu pointed out, it is a question "...of raising the economic and financial mechanism to the level of the development of the new forms of collective leadership...,"** of imposing on the activity of managing all fields of economic and social life a unified system based on the principle of self-management and operationalized by an economic and financial mechanism capable of utilizing all the potentialities of efficiency that the

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* "Decision of the RCP Central Committee on the Improvement of Economic and Social Management and Planning, March 1978," SCINTEIA, 28, III, 1978.

**Nicolae Ceausescu, "A Speech at the General Assembly of Working People at the Bucharest Heavy Machinery Enterprise, 16 February 1978," "Romania pe Drumul Construirii Societatii Socialiste Multilateral Dezvoltate" [Romania on the Way to Constructing the Multilaterally Developed Socialist Society], Vol 15, Bucharest, Politica Publishing House, 1978, p 524.

principle in itself entails. In this way, the theory and practice of scientific management in our country have found themselves the most efficient tool by means of which it is possible to arrive at the growth of the functionality of the economic and social systems, at the eradication of the forms of seclusion and inertia in the activity of economic and social units, concomitant with achieving the highest precepts of the development of democracy, the participation of the working people in management, the as full manifestation as possible of their personality and creativity.

In this perspective, the affirmation of the principle of self-management and self-administration and the application of the economic and financial mechanism do not involve just a mere increase in degree in the autonomy of the units, an "autonomization" in the sense of weakening the imperatives of unitary management, nor is it a question of the weakening of the planned character of the activity or, eventually, of the creation of premises for the affirmation of the narrowminded local interests to the detriment of those of a general order, but of a revolutionary change that, emphasizing the role of the internal forces of organization and decisionmaking, seeks to more closely connect the activity in the managed subsystems with society's real requirements, to cause an increase in their speed of reaction. Self-management seeks to lay the foundations for high functionality on the economic and social plane and to achieve the performances of efficiency to which the structural superiority of the socialist order entitles us.

For this, the principle of self-management modifies the relations of responsibility, in the sense that it accentuates to a greater extent the direct responsibility of the unit and the staff of working people for the concrete economic and social necessities that society affirms. The feedback that connects the system of action with its social function is now constructed better and can mediate relatively rapid corrections in the structures of action in the system, the blocking of the tendencies to shift the objective, of the formalistic proliferations in records and in the organizational structures, and of the old-fashioned mentalities. Responsibility, too, appears even more clearly shaped and individualized and can no longer be masked by means of discussions, justifications, exceptions coming from the higher bodies, but is expressed directly in the means that are the basis of the continuation of the unit's activity, of its financial capacities.

Seen from the angle of the functionality of the economic and social units, the principle of self-management also involves another important aspect—namely the raising of the level of conscious action of the working people. The documents of the Romanian Communist Party and the entire analysis in the specialized literature show that, for example, the obstacles that the various concrete forms of manifestation of bureaucracy produce are not due exclusively just to the structures that determine more or less objectively a certain behavior, but to the type of action that is developed as a result of individual models of thought, of understanding and of political and professional consciousness. Consequently, the eradication of these inertial forms does not refer just to the perfecting of organizational structures (for example, those that refer to normativeness, authority and control), but also to the aspects that refer to the own behavioral models of the people integrated into these systems of action. The attack on the poorly functional phenomena is successful if there is also an emphasis in the direction of changing the mentalities, of stimulating a means of more directly relating to the requirements of management, to its objectives, which also follows the principle of worker self-management and

self-administration. The transition from "the administration of the unit" to the unformalistic cooperation of all the working people on the basis of a unitary understanding of society's requirements, the transition from formal relations of subordination to the participation of all on the basis of high professionalism, from conformist control to an operative spirit, to self-control and the understanding by each working person of the necessity and purpose of his activity, at bottom, of the social values that he must embrace—these are the ways that this principle makes evident for increasing the efficiency of management.

Self-management thus proposes extremely important objectives on the very plane of transforming the people themselves, the political, professional and social consciousnesses in general. As a solution for eradicating the inertial forms in time, this principle involves, in the future, the elimination of the inertial and conservative mentality, of the tendencies of disinterest and minimization of one's own effort, all these things also being so many possible causes of dysfunctionality. The whole process of improvement in economic and social activity through the affirmation of self-management and self-administration involves the stimulation of one's own effort, of the efficiency of one's own action, on the basis of continually developing the political and professional consciousness of all the working people.

By means of this there are created conditions for the process of management in the economic and social systems to no longer be confined to the strictly administrative plane, to no longer seek possibilities of minimizing the effort and yield easily to dysfunctional tendencies, but, on the contrary, to seek a permanent alignment with society's requirements on the plane of efficiency and functionality.

In this sense, as an operational tool, the possibility of personally preparing the plan, starting at the bottom, from the directly productive systems, as a basis for planning all economic and social life, makes a significant contribution. Thus, the unit in question is subordinated—from a functional viewpoint—to the social needs to a greater extent, which it was called upon even before to satisfy, but with evasion by changing the objectives or minimizing them being impossible for it. As Comrade Nicolae Ceausescu pointed out, it is necessary for "the plan for economic and social development to be drawn up by each enterprise and unit, starting from the production capacities that it has,"* which means that—under the conditions in which the unit's activity is evaluated according to the indicator of the volume of net output and physical output—each managed system should be interested in utilizing as fully as possible these capacities, the human and material production forces with which it is equipped.

Another specific relation in which the economic and social systems are put under the conditions of self-management and self-administration and which can create to a greater extent conditions for growth in functionality is the contractual relation. The contract, as a legal expression of the relations between units, now imposes the the closer connection of the activity in the managed systems with society's needs from a physical viewpoint and no longer permits the changing of the purposes, disinterest in the real requirements of the beneficiaries, at bottom, of society. The contractual relation existed even before, but under the new conditions it is strengthened in the sense that, as Comrade Nicolae Ceausescu pointed out, all

* Ibidem, p 525.

productive activity must now be done "...only in relation to the consumption necessities of the population, to the requirements of the domestic and foreign markets. Consequently, I have also said," the secretary general of the party pointed out, "that an enterprise can produce only what responds to the real necessities of the people, decisively combating any waste. It is necessary for us to take into account the demand and to offer the products that society and the people really need. Let us not allow any kind of production that is not wanted by society, just for the sake of producing."*

Self-management, from the viewpoint of its operational and functional aspect, could not be put into practice without another attribute that devolves upon all the economic and social systems—namely the preparation of one's own income and expense budget, a factor by means of which self-administration takes place, mediating the creation of the financial capacities for supporting the unit's activity in the future. The budget continually offers the picture of the content of efficiency of the activity of the managed system, constitutes the result of the feedback between this activity and the way in which a response has been made to the concrete requirements of society. The budget, as a tool for measurement, creates at the same time the possibility of controlling with greater efficiency the perturbations that can derive from the entropic tendencies of the structures of action, is a factor that stimulates the more efficient utilization of the units' own capacities, the growth of the level of functionality of the units.

All these things are the basis for the appearance of a new tool of management—namely the self-financing of the activity performed, which constitutes another specific relation into which the unit enters in the process of self-management. Self-financing contributes essentially so that the system in question frees itself from the dependence on the hierarchical structures in themselves (that of control and unitary coordination will still remain, of course) and enters into a very close dependence in relation to the social function that it must satisfy, because only as a result of this satisfaction can the resources needed for continuing the activity also be obtained. On the plane of concrete activity, self-financing presupposes a number of elements that strengthen the objective tendencies of the managed economic and social systems toward functionality, in the sense that:**

a) It involves the meeting of the production and circulation expenses from one's own accounts;

b) It obliges the repayment to society of the funds received for the supplying of means of production;

c) It involves the unit in participating in the formation of the centralized funds, then redistributed in the process of the multilateral development of the whole society;

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* Idem, "A Speech at the Plenum of the National Council of Working People, 26 April 1978," op. cit., Vol 16, Bucharest, Politica Publishing House, 1979, pp 131-132.

**See: A. Sesan, "An Efficient Framework for the Affirmation of Self-Administration," REVISTA ECONOMICA, No 2, 1979, pp 9-10.

d) It induces the unit to form its own development funds;

e) It permits material incentives for the staff of working people through the formation of funds corresponding to this purpose.

The whole activity of the units is thus supported to a greater extent by the results of their own effort, and the management is induced objectively to maximize these results, to seek the means of increasing this effort, in the last analysis, to take all the steps to raise the level of functionality of the system, to eradicate its inertia and routine, bureaucratic and formalistic tendencies.

Finally, the promotion of the indicators for measuring efficiency by means of net output and physical output, and profit sharing, constitute, together with the factors analyzed above, a framework of new powers and relations with a role of stimulation for economic and social activity in the direction of more fully satisfying the social needs, bringing the real capacities of the system into agreement with its social function.

As a result of putting the principle of self-management into practice, a response is made at the same time to important objectives that are pursued by any process of managing a socialist unit that tends toward economic and social optimality, namely:

a) The concentration of manifold capacities of creativity, of different experiences, which means that, right from the start, a decision's chances of attaining the desired level of optimality and thus of functionality increase. In fact, society thus utilizes in a much more economical way its resources of intelligence, creativity and initiative, which would otherwise remain in a dormant state, unactivated;

b) The wide and effective participation in decisionmaking helps to raise the level of general responsibility of the working people, to involve them more deeply in the process of attaining the objectives provided by the decision whose makers they feel themselves to be, reducing, on this basis, the possibilities of manifestation of bureaucratic practices. A stronger motivational system for their actions is thus created. In this way, there are avoided the difficulties that appear as a result of communicating and transmitting within a staff of working people a decision whose sense it hardly has to grasp and whose objectives hardly have to be explained;

c) At the same time, the act of participation also involves the attainment of an objective of a social nature, in the prospect of which participation appears as one of the most effective means by which there occurs the process of multilateral development of the personality of the one who participates and who can thus express himself more completely and efficiently, as a producer, of course, but also as a decider, an owner, therefore, able not only to carry out orders, but also, on the basis of a personal act of choosing, to propose new structures and actions, new solutions.

These structural improvements in the management process start from the basic idea that efficient activity is determined, firstly, by the possibility of manifesting one's own internal capacities for analysis of the problems that one must overcome, by the manifestation of the working people's potentialities of creativity, by the behavior of the managed system as a self-regulating system. In this sense, the main efforts of the system will be concentrated not in the direction of devising

responses that the tutelary relations imply under the conditions of the excessively centralized decision (therefore, of simple feedback of a hierarchical sort), but in the direction of satisfying the requirements that society presents to the system in question, determining objectively the tendency toward effective functionality and not toward formalism. The activity of management, far from still being tempted to try justifications, postponements, the prevailing of formal aspects, possible in the case of the preponderant existence of hierarchical feedback, must now concern itself especially with the way in which it is necessary and possible "to solve in the last analysis the problems regarding the deciphering and summation of the social needs, the defining of the relations between needs and interests, the selection of a set of methods for attaining the objectives"* and, therefore, with the way in which the system can be made more functional.

The element on which the basis will have to be put is the initiative of the respective management body, under the conditions in which the unit is now equipped with all the means, from the material ones to the decisional ones, needed for achieving the objectives desired by society. The principle of self-management and the new mechanism of action and decisionmaking permit a more correct evaluation of the results according to the actual contribution that each staff makes, according to the personal effort that the unit makes.

Through the measures for perfecting the mechanism of management, through the irresistible affirmation of the creativity of the masses of working people called upon to participate in the whole decisional process, through the devising of the bases of worker self-management and self-administration, our party has again turned out to be the most revolutionary factor in social and political life in our country, capable of analyzing, in their dialectical evolution, the structures of action existing at a given time and of devising the most suitable forms for turning to a new stage of efficiency.

Of course, in our party's view, the putting of all economic and social life on the basis of self-management and self-administration, the putting of the economic and financial mechanism into practice, is an evolutionary process, in the sense that it did not end along with the devising of this mechanism, but, in fact, began then. Equally, the growth of the level of functionality of our economic and social systems and the disappearance of inertial phenomena, too, have a processual character. We cannot say that through the theoretical devising itself of these measures and their introduction into practice we have already solved all the problems that are posed on the plane of the functionality of our units, but these measures, surely, are bringing about the objective conditions for developing tendencies of growth in the interest in increasing the own effort, the initiative of the wide masses of working people. Of course, as Comrade Nicolae Ceausescu stated, these measures "...for improvement in economic and financial management, for achievement of a better economic and financial mechanism, have a special importance. However, I point out," the secretary general of the party specified, "that they constitute merely the suitable legal, economic and financial framework. No one should expect miracles just through the very adoption of these decisions. In order for them to give the results that we desire, we must act with all possible steadiness to implement them rapidly and in

* Ion Mitran, "Democratic Centralism and Worker Self-Management," ERA SOCIALISTA, No 7, 1979, p 11.

the best way...."* It is important that these complex measures, by developing the forms for involving the masses in management, by increasing the direct responsibility of the units and the working people for meeting the requirements of society, can effectively lay the foundations for much more functional and much more efficient economic and social activity, creating the objective framework for attaining those performances that the structural, organizational superiority of socialist society imposes. The processual character of the introduction of the principle of self-management into practice consists precisely of this, in the sense that it operates as a tendency of growth, starting of course from simpler forms and evolving toward the highest levels of efficiency and functionality, toward the forms specific to communist self-management.

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* Nicolae Ceausescu, "A Speech at the Plenum of the Central Committee of the Romanian Communist Party, 23 March 1978," "Romania pe Drumul Construirii Societatii Socialiste Multilateral Dezvoltate," Vol 15, p 601.

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CONTRIBUTIONS TO STUDY OF FUTURE GLOBAL PROBLEMS

Bucharest ERA SOCIALISTA in Romanian No 21, 5 Nov 80 pp 35-38, 52

[Article by Engineer Mihail Florescu]

[Excerpts] The Society of Waste

Research on a global model and limits of growth has continued. In 1976 the fourth Report to the Club of Rome was worked out with the title of "The Way Out of the Era of Waste." The report researched the problems in the three main areas: energy, raw materials and food production. The authors point out in the introduction that "science and technology are inestimable tools for confronting and solving the grave problems posed by the limited resources. At the same time, we must recognize that the current structure of the economic system does not permit a rapid solution to be made to some of the serious and urgent problems."[1]

Really, the current economic system cannot solve the crisis brought on by the difference between the rich and the poor countries, economic, financial and monetary crises which occur in rapid succession and which cause powerful economic imbalances with more serious consequences for the developing countries. Underdevelopment and undernourishment are deepening in a zone which comprises two-thirds of the world's population, while the oil and raw material crisis and the energy and fuel crisis have become chronic, breaking down the world's entire economic system.

In closing the report, which contains valuable economic analyses, the authors conclude: It is difficult to perfect a global policy and even more difficult for it to be accepted. Thus, we conclude by reasserting that the real limits of growth are more political, social and administrative than scientific and technological."[2] With this, the report leaves open the basic problem: the need to put an end to the consumer society, a society rightfully felt to be a "society of waste," a name which expresses more flexibly and more objectively one of the characteristics of modern capitalism.

An analysis of the models worked out until 1974 was made by Sam Cole of the University of Sussex, England. In the conclusions to his work, Sam Cole asks: "In which

1. Dennis Gabor and Umberto Colombo, "Sortir de [word illegible] du Gaspillage," Dunod Publishers, Paris, 1978, p 4.

2. Ibidem, p 226.

direction is mankind heading?" and he himself answers: "Any conclusion about global models for the long-term future will depend on the way in which the modeling is carried out further."[1]

Romanian Contributions To Working Out a Global Model

Romanian men of science have participated actively in the discussions and works which have enriched forecasting research in recent years. Romanian science has a critical and scientific attitude toward the models worked out and our country's researchers participate directly in international discussions, bringing their own viewpoints and valuable contribution to modern thinking about man's current and future development.

Mircea Malita has made an important contribution; besides the critical presentation of the models of the Club of Rome, he has set forth the scientific bases for working out a global model. In a valuable article published in VIATA ROMANEASCA in December 1974, he wrote: "A model is a mental or written qualitative or mathematical representation of a portion of reality which constitutes a system (that is, a whole, also having interconnecting parts). The model selects the most representative components of the system and describes the relations linking it. The creation of a model does not serve only knowledge but it also has practical goals. The model serves as a base for experimentation: We change a variable and look at the effects on the entire system."[2]

In order to work out such a global, objective and scientific model for the world economic system under today's historical conditions, when many economic systems exist and within them there are clear differences for each system separately from one country to another, it is practically impossible to achieve a global model for the world economy. Merely a global model for the economic relations among countries can be worked out, as it is conceived of under conditions of a new international economic order. This trend also is found in the recent models of the Club of Rome and, in particular, the global models worked out under United Nations sponsorship.

In the article mentioned, Mircea Malita poses a problem of great scientific integrity which deserves to be noted and remembered. "Someone may express his fear that together with Meadows' model the idea of the model will also be thrown out. Really, the scientific bo ness of creating global models must be retained. The attempt is fully justifiable if we take into account that we cannot dispense with the global models manufactured in our minds. We can find only a small number of factors in them."[3]

A global model can represent scientifically a unified system or relations which must be established among systems.

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1. Sam Cole, "Global Models and the International Economic Order," Pergamon Press, 1977, p 74.

2. Mircea Malita, "Global Models" in VIATA ROMANEASCA No 12, December 1974, p 41.

3. Ibidem, p 44.

The differences between countries are clear, even in a unified social-economic system, so that in working out a model a very restricted number of general factors, which would be valid for the entire system, must be taken into consideration in working out a model. It is urgently necessary for the model world to work out a global model for the new international order, which would be a code for equitable and peaceful relations among countries, large or small, developed or developing.

"The trend of scientific concern in our times, which generically comes under the name of global models," Mircea Malita showed in the article quoted, may, through the quality of the work, sincerity of intention and efficienty of calculation, aid the effort to qualify the big options and to define a new world order, both in the economic as well as social area, to which it is inseparably linked."[1]

A broad critical and scientific analysis was achieved by Pavel Apostol in his work entitled "The Future," which appeared in 1977. The work proceeds from the methods for studying the future and, logically, it analyzes in a broad way the global models referring to man's future. In the preface the author notes: "With this conceptual and methodological apparatus I have attacked the problem of "global models," in this regard, too, stating new directions for improving them from a viewpoint which I have made valid and in direct or written confrontation with the authors of some of these constructions regarding human problems."[2] The natural and social sciences, mathematics and information systems, logic and dialectics contribute to the same extent to working out models for man's future. Thus, it is a scientific mission of very great dimension.

Making critical inroads in models of the world, Pavel Apostol scientifically characterizes Meadows' work in this way: "The limits of growth signaled the irrational nature of economic growth in the very industrially advanced capitalist countries and have shown that it creates insoluble problems if the very principles of the particular economic system are not questioned, and the contradictions caused in several capitalist countries by this growth, on the basis of economic interdependencies, can bring a break in the world balance in the foreseeable future."[3] Proceeding from this broad analysis, Pavel Apostol presents some of the most important critical conclusions, from which I repeat the following: Global models are clearly simplifications and approximations of a possible or really original(here we have the future of the world); models, as we know, are aggregates of variables obtained through disintegration of the original; the disintegration of the "world" quasisystem has been achieved and is being achieved according to heterogenous criteria (even within one and the same model), although all the decisions associated with the model or included in decisionmaking models are political, current models make an abstraction of relations of force at the national, "regional" and international level and of their probable evolution and as such—like it or not--create the dangerous illusion that the future depends only on decisions regarding techaical rationality, the models of the world quasisystem do not conceive of this or of its partial systems as learnable systems (through their program, experience, through scientific information and so forth).[4]

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1. Ibidem, p 46.

2. Pavel Apostol, "The Future," Scientific and Encyclopaedic Publishers,1977, pp 10-11.

3. Ibidem, p 221.

4. Ibidem, pp 246-269.

Formulation of these critical elements of models of the world, as worked out in the developed capitalist countries, is accompanied in the work published by Pavel Apostol by an presentation of the dialectical methods for studying the future, on which base the global models of the world are to be worked out. The studies of methodology in these areas are more and more numerous and will permit multidisciplinary and interdisciplinary paths to be chosen for working out models on which base the social-economic organization of the world can be deciphered in the near future and further in the future.

Under sponsorship of the Central Institute of Economic Research and Institute of Socialist Economics, the work entitled "World Economy: The Horizon of 2000,"[1] which groups a number of economic studies, going from the general problems of the world economy up to development of the main economic branches, was published. The studies presented are of a forecasting nature and attempt to determine what the main directions of development will be up to the end of the century.

The problems of forecasting development by short or long-range periods have generated the interest of men of science, governments of all countries as well as international organizations, particularly the UN.

Single-Subject Models

Along with the works which treat the global model of the world, it has been felt useful to publish some studies whose subject was an analysis of a single subject, which permitted a deepening and broadening of the vast problems of the global model of the world.

In this framework, the forecasting collectives of the Academy of the Socialist Republic of Romania organized broad discussions, which were published in the series entitled "Man's Global Problems." In the preface to the first work published, Mircea Malita, coordinator of the series, points out that the developed subjects are agriculture and nourishment, solar energy, electronics and information systems, resources of the seas and oceans, human settlements and systematization of territory, with discussions to be organized on the subjects of materials and chemistry, science and technology, intra-atmospheric space, biology as well as human resources.

Publication of the first works stirred the interest of specialists and the public at large. The work entited "Energy in the Next Three Decades" was written under the leadership of Dr Engineer Calin Mihaileanu, director of the Institute for Research and Energy Modernization. In the preface, Mircea Malita points out what the role will be of publishing many chapters in each work as approached by a large number of scientists and specialists: "By definition, the decision is a choice between more than one alternative but, in order for them to be able to be weighed and the good strategies of development to be worked out, any version and any option must be presented with all its implications."[2]

1. Coordinators: Mihail Florescu, Mircea Malita and Marcel Horowitz.

2. "Energy in the Next Three Decades," Publishers of the Academy of the Socialist Republic of Romania, 1979, p 8.

Stressing the need to work out a strategy for providing the energy base for the country's economic development in the long range, Dr Calin Mihaileanu, at the same time, points out that "together with the stress on the interdependence between nations, it is becoming more and more clear that national energy policies must be based on experience and knowledge of a horizon at the world level and for the long range, with which the national programs should be coherent and compatible."[1]

The 12th party congress approved such a national model through the Program Directive for Development of Energy Resources for the 1990-2000 Period, establishing the directions which will assure the energy base for our country's entire development.

In the work entitled "The Future of Electronics and Information Systems," coordinated by Prof Mihail Draganescu, the main problems resulting from the revolution of information systems and its implications for the entire development of society are treated. The revolution in information systems was possible due to the electronic revolution and, more recently, microelectronics, which caused radical changes in the automatic management of production processes and in automatic data processing, basic aspects which must be taken into account in the strategy of development and in working out models by branches or global models.

The appearance of the work entitled "Nourishment and Agriculture in the Next Three Decades," coordinated by Academician Nicolae Giosan, has great importance in knowing the problem and working out solutions to eliminate undernourishment for one-third of the world's population. The discoveries in biology are becoming an important component of the scientific-technical revolution not only in the process of knowledge; broad opportunities are opened for providing nourishment through the rapid development of biochemistry and bioengineering and by moving to the broad-scale use of enzymatic processes and microorganisms, while current agricultural techniques and practices will be revolutionized due to genetic engineering.

In one of the studies in the work, Academician Nicolae Giosan stresses that "food production is being confronted more and more not only with the energy crisis but also with the entire series of problems of economic growth and elimination of the differences between levels of development of various regions and countries. Failure to resolve the problems of nourishment as one of the basic problems of human existence can have serious implications for thecourse of world evolution."[2]

For these reasons, all the global models worked out approach the problem of nourishment as one without which human civilization cannot be thought of.

We await the continuing publication of the works announced, with the wish that they represent an important contribution of science in our country to clarifying the global problems of mankind and to working out models with a solid sc entific base and real solutions.

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1. Ibidem, p 11.

2. "Nourishment and Agriculture in the Next Three Decades," Publishers of the Academy of the Socialist Republic of Romania, 1979, p 13.

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SLOVENIAN EMPLOYMENT PLANS TO 1985

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 6 Nov 80 p 8

[Article by Ljubomir Krasojevic: "Slower Growth in the Future"]

[Text] The growth rate of employment in the coming medium-term plan in Slovenia is brought into closer relationship with the tighter conditions for economic activity and stabilization trends, which require optimum employment of manpower and thereby a faster growth of income per employee. The draft of the social development plan of Slovenia up to the year 1985 provided that employment in the economy and social services would increase considerably slower than up to now.

That is, as set forth in that document, the economic capabilities allow employment to increase at an average annual rate of 2 percent in associated labor over the coming 5 years. Of that employment in the economy would increase at a rate of 1.8 percent and employment in the social services about 2.2 percent and employment in public organizations and communities a maximum of 1.9 percent annually. The growth rate of employment in the less developed regions would be slightly higher, and in the more advanced regions it would be below this republic average.

On the basis of these predictions it is assumed that in the coming period new jobs could be opened in the republic for 80,000 workers, one-fifth of them in noneconomic activities, above all in the social services. There are also realistic prospects for opening up another 7,000 new jobs in the self-employment sector. Toward the end of the next medium-term period, it is being planned, there would be a total of 880,000 persons employed in associated labor and self-employed in Slovenia. That would keep the share of the work force in the total population at the same level of about 45 percent.

Obligations of Associated Labor

The conceptions of development state that advantage in hiring must be given in coming years to young trained personnel. However, it is well known even now that difficulties will arise because of the discrepancies between the

training of the new personnel coming from the schools and the particular occupations which associated labor really needs. In the first years of the medium-term plan the share of unemployment in the republic, it is now estimated, will range between 2.5 and 3 percent.

Though the republic's medium-term development plan foresees a considerably slower growth of employment than has been the case up to now, it is felt that even the low rates foreseen impose substantial obligations on associated labor. That is, the self-management accords signed by all the opstinas in the republic commit organizations of associated labor to make provision for total social costs of every new job so as to ensure what is called the minimum standard of living and working conditions.

Moreover, the restructuring of the economy, which is one of the republic's strategic lines of development, necessitates a higher level of knowledge and professional competence on the part of workers, and thereby an increased share of the appropriate skills in the total work force. The changes envisaged in the pattern of work, the introduction of automation into production processes, and then the better organization of work and reduction of the share of office and staff personnel, will necessitate effective resolution of the problems of manpower surpluses in a considerable number of organizations of associated labor. These work organizations, and it is believed that their number is not small, will have to be prepared even now for timely adoption of programs to equip and train personnel for new specialized knowledge, which would be accomplished in collaboration with opstina employment security communities.

Maximum optimality in hiring is becoming one of the essential prerequisites in Slovenia for stabilization, for more efficient conduct of economic activity, and thereby for the rise of labor productivity. The growth rate of employment in the current medium-term period has been considerably above the projection. That is, the most recent studies show that only in the first year of the current medium-term plan, 1976, did the growth rate of employment in Slovenia remain within the limits of the projection, when it showed a growth of 2.9 percent. The very next year the growth of employment was 3.1 percent, in 1978 it was 4.1 percent, and last year that percentage dropped to 3.3. On that basis it has been calculated that employment in the current medium-term plan has so far shown an average annual growth of 3.5 percent.

Productivity Below the Projection

It is true, and current analyses so demonstrate, that the growth rate of employment has been considerably more modest since the end of last year and up to the present time because of the effect of the stabilization measures which were adopted. Though the slower growth rate of employment is typical of all organizations of associated labor in the economy, so that by all appearances the growth this year will be about 0.5 percent, it has been especially marked in organizations of associated labor in physical production,

which account for 57.3 percent of the workers in the economy. That is, in this domain of associated labor the number of employees has hardly changed at all since last December.

Though the stabilization measures will undoubtedly tend to bring the markedly dynamic growth rate of employment over the past 4 years into the somewhat more realistic limits of the original predictions by virtue of the results expected in 1980, this is one of a number of reasons for the slower rise of productivity in this republic.

The following comparative figures best illustrate the kind of growth of productivity we are talking about. The most recent analyses of progress in fulfilling the current medium-term plan show that the share of the rise of productivity in the growth of total output of associated labor has been 42 percent over the past 4 years, which is 15 percent less than was planned. In the industrial sector, however, the contribution of the rise of productivity to the total growth of output was 63 percent, or 3 percent less than was envisaged. If the estimates which have been made are borne out this year in the context of the quite appreciable moderation of the growth of output, productivity could increase as much as 2 percent. Then its share in the growth of the social product would be 50 percent, which is still 7 percent less than was planned.

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PRIVATE SECTOR CRUCIAL TO FOOD PRODUCTION

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 6 Nov 80 p 4

[Article by Tomislav Kapetanic: "The Private Farmer (Un)reliable as a Partner"]

[Text] Deagrarianization in Yugoslavia means above all the abandonment of agriculture as a principal occupation. Under the altered conditions it is becoming a secondary or supplemental occupation based on retained ownership of land. Deagrarianization has not been followed at the same time by deruralization. It is this fact that is continuously renewing the urgency of the question of the possible level and manner of production to meet society's ever greater needs. This kind of peasant, or more precisely half-peasant, is objectively an unreliable partner as a commodity producer of food, since at best he realizes only a third of his total income from farming, but obtains the major portion by working at other jobs.

The total number of private farms has held at 600,000 for quite a lengthy period now. Some, it is true, disappear, but new ones, most of them tiny, are also springing up through inheritance and division, through purchase and similar ways. The small size of landholdings, their dispersion and the fact that they consist of tiny detached pieces (in Croatia there are even now 18 million cadastre parcels) objectively hampers the more extensive and effective use of machinery and the pooling of labor and capital with the socialized sector of agricultural production. These are the limiting factors in private agriculture, where there are fewer and fewer "pure" farmers. Let us add to that the datum that in Croatia at the present time, aside from the 600,000 farmers, there are also another 300,000 persons, persons who are not engaged in agriculture, paying taxes on the basis of possession of land. Certainly this trend is not contributing to the needs for a major growth of agricultural production.

It is evident from this brief sketch of our "peasant question" that the present structure of agricultural production is by virtue of many of its characteristics and tendencies holding back the development of up-to-date production, but at the same time in many of its tendencies and manifestations it leaves room for action and for faster progress in a more extensive

process of socialization and development of socioeconomic relations. Up to now, however, the adverse aspects have manifested themselves more markedly. The new law on farmland, which was prepared last year and has already been thoroughly debated, takes the agrarian structure of this republic into account. It therefore contains solutions which could considerably mitigate the adverse tendencies and make it possible to implement the general principle that the land is a resource of general importance, with all the consequences which follow from that principle.

It is unrealistic to expect, however, that the law alone, without the broadest social campaign, can guide the very problematical movements and processes in this sensitive field of food production. It is obvious that the private sector of agriculture, with its tendencies and contradictions, has not yet reached the center of public attention and study with a view toward its guidance and planned inclusion in the lines of society's development. There is no doubt that this is the portion of our economy which is developing most spontaneously and to the greatest extent without an appropriate program.

Paper Cooperatives

When we speak about "aggressive programs" in food production it is natural that reliance should be put first of all on public farms and socially organized production, which must not bypass the present. In many places, however, the private farmer is left to himself and has no basic link to the socialized sector of agriculture, and often he has lost even his cooperative, which was the only point of support and collaborator in a production which would ensure satisfaction of broader needs.

In the country as a whole about 400 agricultural cooperatives have disappeared over the last 4 years, and their property has been taken over by agricultural combines and institutions in the distribution sector. The paradox is that a considerable number of the cooperatives went out of existence in the period when the flood tide of farmers joining cooperatives, basic organizations of cooperators and other forms of association would occur. What occurred was a low tide with immeasurable consequences. Regardless of its rapid development trend, the public sector is a weakling when it comes to producing food when one compares its capacities with the capabilities of the private sector. The crop planting plan in Croatia for the 1980-1981 farming year, for example, assumed 405,000 hectares of peasant plowland would be planted to corn (the socialized sector's share is only 85,000 hectares). Private farmers will grow potatoes on 82,000 hectares and the socialized farms on 200 hectares. These are just two figures which even alone are sufficiently eloquent.

But what could be done by the economically disorganized peasant who has been left to the haphazard play of the market and to partners who are looking mostly to their own interest? The reasons for the present situation are many, ranging from the one-sidedness, half-heartedness, formalism and

inconsistency in applying the principle of self-management to the organization of farmers' associations, to the inherited conception of the farmer as a kind of private entrepreneur, one which in the past led to a drastic neglect of his rights to self-management, one of which is the right to form associations.

Certain cooperative organizations in Croatia have understood that they could not operate by earning income on the purchase-sale conception of relations with rural areas, and they developed authentic relations based on shared income. Business books are kept for each private farm in the area they serve, and they jointly plan and provide for the conditions of production and adopt production and sales strategies.

The End of Planning Done Behind Closed Doors

It is particularly important to carrying out a more extensive program of food production in socially organized production in the private sector that the formation of farmers' associations assume more massive proportions and attain a higher quality. Many of the present number of associated farmers in Croatia (38,672), farmers involved in lasting forms of cooperation (184,930) and those who occasionally collaborate with cooperative and other organizations of associated labor (109,201) will probably move into higher categories in the coming period, since they are counted on as significant producers of food, and it is expected that toward the end of 1985 this republic would have about 50,000 specialized commodity producers (for milk, meat, vegetables, fruit and grain). Since today there are only 15,000 of them, this increase would signify a new qualitative attribute not only for planning, but also for the total volume of production of products for the market.

The socialized sector of agriculture, which in 1979 had a share of 19.5 percent in total arable land and 45.3 percent in total production of the most important field crops (wheat, corn and sugar beets) as well as 34 percent in total meat production, has been expanding slowly for quite a long time now--as compared to the rate of growth of the needs of centers of consumption and export, and socially organized production cannot make up for the consequences of deagrarianization to the necessary extent. The length of the new leap in production will probably depend mostly on the size of funds invested in socialized production and on this sector's organizational capability to tie private farmers more firmly to its plans for food production in the new planning period up to 1985.

Cheap Solutions Are Not the Best

This commitment has also been made imperative by the fact that the agroindustrial complex has become a more significant factor in the stabilization and coordinated development of the entire economy than it was in the past and by the fact that it will be so in the future to a greater and more decisive extent as the material and social linkage and also interdependence

between that complex and the rest of the economy necessarily becomes greater and greater during future economic development. Cheap solutions such as importing food when domestic resources fall short are not socially justified. Actually they did not fall short in fulfilling the production program, since the output was larger. Nevertheless, in spite of all that, though it sounds paradoxical, the overall development of food production, which on the whole was favorable, did not keep up with the exceptionally large and steadily growing needs of society.

It is also obvious that total demand considerably exceeded the planning predictions. We are examining in the overall context all the implications of the profound changes in the socioeconomic composition of the population for the production and consumption of agricultural products. The advanced process of deagrarianization has reduced the farm population to 20 percent of the total population. At the same time the growth of the farm income from farming and especially the nonfarm income of the farm population—and indeed the income of the rest of the population—has enormously increased the consumption of finished farm products and processed foods and in a relatively short time has increased the pressure on society's food stocks many times over.

In the overall view primary production, with its average annual growth rate of 3.8 percent and tendency to slow down, is not keeping up with demand. In future it must therefore have a considerably faster and more stable growth trend. In the coming medium-term period conditions for production are being essentially improved on 220,000 hectares of arable land in the private sector, and the basis is being created thereby to set up a portion of the private farmers as producers for the market thanks to association and higher income. The area to be planted in the socialized sector is also increasing by 110,000 hectares through various forms (between 70,000 and 80,000 hectares of grain, 10,000 grains of sugar beets, 20,000 hectares of livestock feed and vegetable crops, and 6,000 hectares of large new fruit and grape plantings).

Physical production in the period 1981-1985 ensures among other things about 5 million tons of grain, nearly 2 million tons of sugar beets, 1.9 million tons of vegetables, 154,000 tons of oilseed, 368,000 tons of meat and 1,180 million liters of milk. The plan for development of primary production is much more ambitious than previous first projections, especially in comparison to the fulfillment of previous plans in Croatian agriculture.

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EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2074

CONTENTS

BULGARIA

Party Official Calls for Better Management of Economy
(Krustyu Trichkov Interview; IKONOMICHESKI ZHIVOT, 29 Oct 80) 1

Ordinance Regulates Customs Inspections, Duties on Parcels
(DURZHAVEN VESTNIK, 17 Oct 80) 7

Development of Agrarian Economy Since 1944 Reviewed
(Nikola Palagachev; SPISANIE NA BULGARSKATA AKADEMIYA NA NAUKITE, No 4, 1980) 31

Results of Coal Reserves Studies Discussed
(Yovcho S. Yovchev; SPISANIE NA BULGARSKATA AKADEMIYA NA NAUKITE, No 4, 1980) 42

CZECHOSLOVAKIA

September 1980 Economic Results Summarized
(HOSPODARSKE NOVINY, 31 Oct 80) 59

CSSR Official Sees Uranium as Prime Energy Source
(Milan Povolny, Vladislav Novy; HOSPODARSKE NOVINY, 31 Oct 80) 64

GERMAN DEMOCRATIC REPUBLIC

Energy Seminar Urges Greater Conservation Measures
(PRESSE-INFORMATIONEN, 21 Oct 80) 70

Energy Conservation Achievements Reviewed, Prospects Outlined
(Wolfgang Rauchfuss; EINHEIT, Oct 80) 87

POLAND

Economic Reform on Hungarian Model Considered Inadvisable
(Jan Mujsel Interview; KURIER POLSKI, 19-21 Sep 80) 91

Long-Range Fertilizer Production, Utilization Outlined
(Lech Froelich; ZYCIE GOSPODARCZE, 26 Oct 80) 98

PARTY OFFICIAL CALLS FOR BETTER MANAGEMENT OF ECONOMY

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 29 Oct 80 pp 1, 6-7

[Interview with Krustyu Trichkov, candidate member of the BCP Central Committee Politburo, deputy chairman of the Council of Ministers and chairman of the Committee for State and People's Control: "For Active and Aggressive Control Activities"]

> [Text] The forthcoming 12th Party Congress is an important event in the life of the party, the people, and the country. On this occasion Comrade Krustyu Trichkov was asked by the editors some questions related to the work of the control organs and economic cadres in the period preceding the 12th BCP Congress.

Question: Comrade Trichkov, how do you assess the role of the forthcoming highest party forum in terms of the further development of our economy?

Answer: Each party congress is a new step in the building of a developed socialist society in our country. Unquestionably, the 12th Party Congress will play an exceptionally important role in the development of our socialist economy. Comrade Todor Zhivkov himself has emphasized that, "It would be no exaggeration to say that the 12th Congress will mark a period of deep quality changes in the development of the Bulgarian socialist economy."

First, the congress will supply a decisive impetus to the practical implementation of our course for high effectiveness and quality.

Second, ripe and major problems of our development will be formulated and resolved, such as the systematic application of the new economic approach and new economic mechanism in the organization and management of the national economy, and a decisive upgrading of social labor productivity; the rapid and energetic application of the highest modern achievements of the scientific and technical revolution and of global experience; and raising agriculture to a new level of development.

It is on this solid foundation that the 12th Congress will confirm the party's course of further enhancement of the living standard of the people and the ever fuller satisfaction of their material and spiritual needs. The congress will earmark important practical measures for the implementation of the December

party program, particularly in the production of more consumer goods, trade improvements, self-satisfaction of settlement systems, and others.

Question: Recently the July BCP Central Committee Plenum reviewed the implementation of the basic indicators of the Seventh Five-Year Plan in the economic and social policy areas. What are the positive and negative sides of this balance?

Answer: The results achieved by our people under the party's guidance in the Seventh Five-Year Plan indicate that a new major forward step was taken in the socioeconomic development of the country. Thanks to the selfless work of all working people in our country a stable rate of increase of the national income and of the overall development of the country was achieved. This was accomplished despite the rather complex circumstances created by the energy-raw material and monetary crisis of capitalism.

The results achieved in the Seventh Five-Year Plan make us legitimately proud not only of our economic accomplishments, which created a solid foundation for the further implementation of the December program for upgrading the living standard of the people, but in the areas of foreign economic relations, stabilization of our foreign exchange balances, and others.

At the same time, dissatisfaction with current results and with new creative searches was expressed at the July plenum. It was pointed out that these achievements did not constitute the limit of our economy and our socialist economic system, and that the possibilities were far greater. We must acknowledge that in virtually all national economic sectors the contradiction between the possibilities of the developed material and technical base, tremendous in terms of our scale, and its insufficiently efficient utilization by the subjective factor, determined at the 11th Congress and analyzed at the July 1976 BCP Central Committee Plenum, has not been surmounted yet.

The problem is easy to understand. We still have a number of economic units whose managements allow in their work substantial weaknesses of a most different nature: unjustified idling of machines and equipment, poor organization of the work, violations of technological and labor discipline, and many other reasons, all of them subjective. This situation is intolerable and, naturally, being conscientious creative workers, we cannot tolerate it.

Question: On what aspects of the nationwide pre-congress competition should we focus our greatest attention?

Answer: The 12th Party Congress will offer broad scope for the initiative and energy of the party organizations, party members, cadres, public, economic and cultural organizations, and working people in their competition which is already covering all areas of material production and all activities in the country.

Comrade Todor Zhivkov pointed out two particularly important aspects of this pre-congress competition:

First, the struggle for the fulfillment and overfulfillment of the 1980 counterplan. Those who resolve this problem most successfully will welcome the congress in the best possible and most worthy manner.

Second, on this basis, insure the ever fuller satisfaction of the material and spiritual needs of the common people, of all working people. Concern for man will remain the basis of the party's policy and the most immediate concern of party, state and economic managements. We must decisively implement the tasks we have set ourselves.

Something else which was particularly emphasized by Comrade Todor Zhivkov is that in the struggle for properly welcoming the congress, "Action is the main thing! Not noise but action, not big words but specific practical results! Actions, actions and actions again!"

The reason I am voicing these considerations in particular is because they are profoundly meaningful and fully apply to all economic cadres.

Question: Comrade Trichkov, it is common knowledge that one of the factors for the successful functioning of the entire economic mechanism and the implementation of the plans is control, socialist control in particular. What is the place assigned to the control system in the preparations for worthily welcoming the 12th Party Congress?

Answer: The organs in charge of overall socialist control are among the most typical traits of the democratic nature of our society. They are the offspring of socialism and the attribute of the socialist state. The state and people's control organs are one of the effective means for exercising daily control over all aspects of the work of state and economic organs, enterprises and organizations by workers, peasants, and the intelligentsia, and of their right to do so. Over 220,000 people's controllers, members of public organizations, men of science and culture, workers, peasants, and employees are working on a voluntary basis within the effective system of the state-public organization of state and people's control organs.

The people's control commissions and groups have become the basic mass support of the state and people's control organs.

The people's controllers are fighting violations with an unerring inner sense of justice. The activities of the people's control commissions are so comprehensive that they have grown into a self-control system, into an individual and mass self-imposed obligation. Their comprehensive activities which are currently particularly actively manifested in the pre-congress competition are an expression of experience directly based on reality. It proves the inexhaustible possibility of the people's masses to be creative even in an area such as control. That is why the dedicated work of the people's controllers is deservedly highly rated by our party. Ninety-four active and properly working people's control commissions in economic organizations, large enterprises, and establishments were reorganized into state and people's control committees based on production activities. This considerably broadened the right of control and of holding accountable control organs immediately responsible for the work of labor collectives.

Naturally, this alone does not cover the entire democratic and voluntary principle of control work. The close interaction between the Committee for State

and People's Control and the people's controllers, on the one hand, and the public organizations, the Fatherland Front, the Bulgarian Trade Unions, the Komsomol, the women's councils, and others, on the other, is a powerful factor in the manifestation of the broadly democratic principle governing control activities.

Question: Comrade Trichkov, the Law on State and People's Control offers real possibilities for the exercise of the citizens' right to control the work of the state apparatus and the socialist organizations. How are such opportunities used?

Answer: Let me clearly state that not all possibilities are used. For example, the law grants substantial rights to the people's control commissions to check, suggest to and demand of the administrative and economic managers to explain to the collectives the specific measures they have taken to eliminate some shortcomings and weaknesses. This is not implemented always and everywhere. The role of the people's control commissions has been lowered in some ministries and economic organizations. Far from everything possible has been done to make use of the potential of this mass support of people's control and to enhance the role and prestige of such commissions.

The Law on Suggestions, Reports, Complaints, and Petitions submitted by the working people was passed also for purposes of improving and democratizing social management. It assigns tasks to all control organs and all departments. The implementation of this law must be considered a legal act of great political importance. According to the law all work related to suggestions, reports, complaints and petitions to be the direct responsibility of ministers and managers. This is properly understood in many places. However, in a number of areas this is not being understood and this work is assigned mainly to the heads of the respective services. Work with letters sent by citizens is still being underestimated.

Another basic stipulation of the law is violated as well according to which all managers must set aside specific receiving days and hours. We are pained to admit that some managers find no time to see citizens and settle their problems.

We believe that the Committee for state and people's control and the other control organs are still not making use of their great potential for improving the state apparatus and its work--for reducing its size, eliminating callousness, bureaucracy and formalism, and improving work style and methods.

Today, in the active pre-congress efforts of all working people in our country, the control organs must find their proper place and role in the struggle against bureaucracy, formalism and callousness. We must not forget that the July 1980 Party Committee Plenum pointed out once again that we must openly confront the carriers of such phenomena and the violators of state discipline regardless of rank and position.

We have always ascribed great importance to the educational function of control based on the understanding that the main aspect of control is not to punish but

to play an educational and preventive role. Today, in the stage of building a developed socialist society, this becomes even more necessary. In this spirit I believe that with a view to intensifying the educational functions of control the results of each investigation and of established violations must be made available to the corresponding collectives. Weaknesses and their carriers must be exposed promptly. On the other hand, all the opportunities offered by the public organizations and mass information media extensively to publicize investigation results must be used. Publicity could greatly enhance the preventive aspect of control. In this spirit the leadership of the Committee for State and People's Control highly values the role and significance of the joint initiative sponsored by the committee and by IKONOMICHESKI ZHIVOT of publishing materials under the heading of "Under the Control of the People."

Nothing undermines the foundations of what is base and immoral better than their public exposure and shaming. Frequently a violation, a crime is committed behind the people, stealthily, secretly. Publicity exposes it to the light. It becomes known by the masses, public intolerance develops, and a moral educational reaction is triggered. That is why an investigation and its results must be made public at all levels in posters, exhibits, displays, letters, wall newspapers, pamphlets, flash announcements, enterprise newspapers and radio broadcasts, and the local and central press. The violators must be publicly exposed at every step. This will greatly contribute to the enhancement of moral norms and to better behavior. It would enable us to eliminate negative features such as lies, thefts, egotism, greed, consumerism, gross selfishness, and careerism. In the final account, these are the sources of actions with adverse consequences in terms of public property.

Finally, allow me through IKONOMICHESKI ZHIVOT to mention some of the most topical problems which are being resolved by the control system now, in the period preceding the 12th Party Congress. Above all, the state and people's control organs and the entire control system must focus their efforts and attention on the implementation of the 1980 counterplan in all sectors, for all quality indicators, and in physical terms. In this area we will continue to pay particular attention to the timely harvesting and most efficient utilization of agricultural commodities.

Another exceptionally important problem requiring investigation is that of the proper utilization of raw materials, materials, energy and fuels, manpower resources, and equipment. This mass investigation would enable us to hold accountable anyone who has adopted a formalistic attitude toward this problem of exceptional importance to our economy and development.

The task set by the July plenum of producing additional consumer goods worth 550 million leva, whose implementation is being investigated, is very important from the economic viewpoint.

Major problems must be resolved in the field of transportation with a view to the development of a most efficient organization for the utilization of the rail, road, and water transport systems.

In the field of construction an extensive investigation must be made on the accelerated commissioning of productive capital planned for the Seventh Five-Year Plan and reduce the volume of unfinished construction by 20 percent.

The investigation underway, involving the entire control system, of the application of new technologies and of the requirements of the new economic approach in the formulation of the 1981-1982 plan for the socioeconomic development of the country--years within the new five-year plan, the five-year plan of technical progress, production intellectualization, and comprehensive and full application of the new economic approach, a five-year plan of sharply increasing labor productivity and raising the living standards of the Bulgarian people--is of exceptional importance.

As you may see, those are merely some of the major and responsible tasks facing the control system. Unquestionably, more than at any other time, today we need a militant, an aggressive control activity and an open confrontation with all violators of discipline and all manifestations of disorganization and slackness, regardless of their origin or their agents.

As always, the control organs today are responding to the party's call for worthily welcoming the 12th BCP Congress. Unquestionably, they will remain in the leading ranks of the struggle for its worthy welcoming, in the struggle for building developed socialism in our country--the Bulgarian People's Republic.

5003
CSO: 2200

ORDINANCE REGULATES CUSTOMS INSPECTIONS, DUTIES ON PARCELS

Sofia DURZHAVEN VESTNIK in Bulgarian 17 Oct 80 pp 997-1007

[Ministry of Finance Ordinance No 5 on customs control of international parcels]

[Text] Chapter 1

General Stipulations

Article 1. (1) The present ordinance regulates customs control of mail parcels sent abroad or received from foreign countries by local residents and foreigners residing in our country with the exception of the ones stipulated in the following paragraph.

(2) Customs control of parcels received or sent by foreigners enjoying diplomatic immunity on the territory of the Bulgarian People's Republic shall be based on the stipulations of the Ordinance On Customs Handling of Baggages and Parcels Imported or Exported by Foreign Missions and Their Personnel (DV, No 71, 1970; amended, No 58, 1971 and No 69, 1978).

(3) Parcels containing mail alone shall not be subjected to customs control.

Article 2. (1) The postal administration shall deliver to the addressees parcels received from abroad and shall accept parcels to foreign countries only by permission of the customs office, insuring the necessary conditions for customs control.

(2) The permission of the customs office shall not be required in the case of mail correspondence and whenever the postal administration has been assigned by the minister of finance to perform customs duties with the agreement of the minister of communications.

(3) All activities related to the handling, transportation and storage of international mail parcels shall be carried out by the postal administration in accordance with Ordinance No 4 on postal communications (NPS) (DV No 97, 1979), and in accordance with the present ordinance.

(4) Postal employees shall open the parcels under the supervision of customs officials and submit for checking by customs of the objects they contain. They shall measure, count and replace the objects in the parcels.

Article 3. (1) Customs control of international parcels shall be provided by the customs offices in the country in their individual areas (Appendix No 1) through a customs investigation of the content of the parcel and control of the documents accompanying it.

(2) Customs officials shall set the customs fees for international parcels unless such activities have been assigned to postal workers as per the Regulation On the Application of the Law on Customs (PPZM) (DV, No 12, 1975; amended and supplemented, No 49, 1978).

An official document shall be drawn up in accordance with the stipulations of the NPS in the following cases: discrepancy between the objects included in the international parcel and their description in the customs declaration; a parcel not accompanied by a customs declaration; damaged wrapping; or spoiled or damaged objects in the parcel.

(4) Should it be determined that the parcel contains objects whose import or export is forbidden and which are not listed in the accompanying documents, or else that the parcel contains objects placed in such a way as to avoid customs control, a document is drawn in accordance with the stipulation of the Law on Customs (ZM).

Article 4. (1) Objects for individual or family use may be sent or received with international parcels in accordance with the stipulations of the ZM, the PPZM and the present ordinance, and in accordance with the requirements of the border veterinary-sanitary and phytosanitary control.

(2) The export or import from and to the Bulgarian People's Republic of items listed in Section I of Appendix No 2 is prohibited.

(3) Items listed in Section II, Appendix No 2, may not be exported duty-free with the exception of the stipulated cases.

(4) The systematic sending and receiving of international postal parcels by the same individual is prohibited. Receiving (sending) more than one parcel quarterly shall be considered systematic.

Article 5. (1) The stipulations of the NPS and the Universal Postal Convention shall be observed in terms of the type, packaging, size, weight, addressing and franking of international postal parcels.

(2) The postal administration shall bear material responsibility for the loss, theft or damaging of international postal parcels in accordance with the cases and stipulations of the NPS.

Chapter 2

Customs Control and Fees Levied on International Postal Parcels

Section I

Importation

Article 6. (1) International postal parcels arriving from abroad to border exchange points shall be sent to the exchange postal station of the Sofia customs office with a transportation sheet issued at the border customs office on the basis of a description drawn up by the postal service.

(2) The transportation sheet shall be drawn up in two copies. One copy shall be kept by the customs office while the second shall accompany the parcel to the exchange postal station of the receiving customs office which shall initial it and return it to the issuing customs office.

Article 7. (1) The exchange postal station at the Sofia customs office shall distribute the international postal parcels for the levying of customs fees among the customs offices of the rayons listed in Appendix No 1 and ship them to the corresponding post offices of the settlements where such customs offices are located.

(2) Customs control over small parcels bearing a rhombic-shaped seal on the packaging, arriving from countries signatories of the 30 May 1963 protocol on one-sided customs control of small packages (GDR, Poland, USSR, Hungary, Czechoslovakia) shall be provided by the Sofia customs office of the Sofia Central Post Office, after which they shall be sent directly to the post offices of their destination to be delivered to the addressees in accordance with the NPS.

(3) Small packages with a rombic seal are not subject to customs control. The customs office may control such parcels for sanitary, veterinary, or other non-customs security control reasons or should small parcels be systematically received by the same individual.

Article 8. (1) The postal services shall submit to customs offices arrived international postal parcels with a description of the contents in two copies in accordance with NPS procedures, together with shipping receipts and customs declarations accompanying the parcels.

(1) One copy of the description shall be kept by the customs office while the other with the shipping receipts and customs declarations shall be returned to the postal service.

Article 9. (1) In the case of international parcels containing items subject to custom fees the following documents shall be issued in duplicate: import receipt, when the fee is collected by the customs office, or a postal customs duty document, when it is collected by the post office.

(2) The receipts (post office documents) shall contain a description of the items by type, quantity and value; they shall indicate shipment stipulations and the duty to be charged.

(3) One copy of the import receipts or postal document shall be sent by the postal administration to the addressee who must appear and pay the customs fee either directly at the customs office should it be located in the same building as the exchange post office or at the post office in all remaining cases.

Article 10. (1) Should the international postal parcels contain duty-free items the shipment report must be processed by the customs office.

(2) Following the delivery of the parcels to the addressees the reports shall be submitted to the customs office for filing as customs documents.

Article 11. (1) The actions of customs officials related to the levying of customs fees on international postal parcels may be appealed to the head of the corresponding customs office prior to the delivery of the parcel to the addressee.

(2) The petition shall be presented directly to the customs office or through the post office where the parcel is located. The addressee shall be given the possibility to check the content and customs fees in the presence of a post office official. Should the complaint be filed at the post office, it should be sent, together with the parcel and the post office document to the customs office which levied the customs duty.

(3) The customs office chief shall appoint a review commission as per Article 81 of the PPZM, after which the parcel and the customs duty document on whose reverse side the results of the second review has been entered, shall be returned to the corresponding post office for collection of the duty owed and for delivery of the parcel to the addressee as per the NPS.

(4) Customs fees may be appealed to the Customs and Customs Control Directorate of the Ministry of Finance. The appeal must be submitted to the customs office no later than seven days following receipt of the announcement of the fee charged and before delivery of the parcel to the addressee.

Article 12. Undelivered international postal parcels shall be delivered to the customs offices as per Article 69 of the PPZM and treated in accordance with Articles 101 and 102 of the PPZM.

Section II

Exportation

Article 13. (1) Customs processing of international postal parcels shipped out of the country shall be carried out with customs declaration form S2/SR3 for mail parcels (Appendix No 3) or label S1 for small parcels (Appendix No 4).

(2) The declaration and the label must be filled by the senders, indicating precisely the type, quantity, and value of exported items on the basis of Bulgarian retail prices.

Article 14. (1) Citizens may send parcels abroad through all postal stations with an export permit which may be issued by: the chief of any customs office; the chief of any post office, should the value of the content be no more than 30 leva Bulgarian retail prices. In bigger customs offices or post offices an export permit may be issued by a specially assigned official.

(2) The permit shall be issued in writing: On customs declaration S2/SR3 for mail parcels; on label S1 and the wrapping for small parcels.

(3) Customs declaration form No S2/SR3 shall also include the number, date and amount of the collection order showing that export fees have been collected.

(4) The declaration shall be attached to the report on the shipment of the parcel and kept by the control office of the Sofia customs office.

Article 15. The wrapping of small parcels the value of whose content does not exceed 30 leva, shipped to countries signatories of the 30 May 1963 protocol on a one-sided customs check of small parcels shall mandatorily carry the rhombic seal stamped by the local customs office for small parcels accepted by post offices in settlements with a customs office or by the Soviet customs office for all small parcels accepted by post office settlements without a customs office.

Article 16. (1) Accepted parcels with their accompanying documents shall be shipped to the international exchange post office of the Soviet customs office as per NPS procedure.

(2) Customs control of international postal parcels accepted for export by post offices throughout the country shall be provided by the Sofia customs office which, in cases of doubt, shall recheck the content of the parcels.

(3) Postal parcels received by the Sofia customs office without a customs declaration or with an improperly filled customs declaration shall be returned to the initial post office for proper completion.

Article 17. International postal parcels shall be shipped to the border customs offices together with a customs sheet issued by the internal customs office on the basis of the description list drawn up by the exchange post office.

Section III

Transit

Article 18. (1) The transit shipment of international postal parcels across the territory of the Bulgarian People's Republic shall be allowed providing that the parcels do not contain objects prohibited by the Universal Postal Convention or other international treaties or legal documents.

(2) International postal parcels containing objects whose import in the Bulgarian People's Republic is forbidden may be hauled in transit only by permission of the customs office chief.

Article 19. (1) Customs control of transit international postal parcels shall be based on documents.

(2) Bags with transit international postal parcels as well as the parcels themselves shall be passed by the customs offices entering or leaving the country without being opened and without the breaking of foreign seals.

(3) The following shall be subjected to customs control: In cases of justifiable doubt that the content does not correspond to the accompanying documents; should the packaging be damaged or should its appearance lead to the assumption that its content has been damaged.

(4) The opening of the bags or the parcels themselves as stipulated in the preceding paragraph shall be conducted jointly by customs and post office officials. The results of the investigation shall be entered in a document one copy of which shall remain in the customs office while the second shall be delivered to the postal service.

Article 20. (1) International postal parcels shall be accompanied by a transit sheet issued in duplicate by the customs office at the point of entry on the basis of international postal documents and the post office descriptions drawn up by the postal service.

(2) The customs office at the point of exit shall check the condition of the wrapping and the seals and number of bags. Should they correspond to the entries in the transit sheet, the bags shall be passed through customs. The customs office shall initial the transit sheet and return it to the customs office at the point of entry.

Chapter 3

Duty-Free Imports and Exports

Article 21. (1) No duty shall be levied on the following:

1. Parcels whose content is worth no more than 10 leva in Bulgarian retail prices, shipped to local or foreign physical persons;

2. Parcels arriving from socialist countries and addressed to local physical persons, providing that their content is not worth more than 30 leva, Bulgarian retail prices;

3. Small parcels bearing a rombic seal on the wrapping, arriving from countries signatories of the 30 May 1963 protocol on one-sided customs control of small parcels;

4. Parcels received quarterly by members of families of Bulgarian citizens residing abroad for purposes of work, specialization or assignment for over six months in accordance with the restrictions stipulated in Article 23 paragraph 1 of the present ordinance;

5. Parcels containing food products, clothing, shoes, and other objects for the personal needs of foreign students, graduate student, secondary school students, and others, attending Bulgarian educational institutions;

6. Parcels containing items for the personal and family requirements of foreign specialists working in Bulgarian institutions, enterprises or organizations;

7. Parcels containing local goods regularly shipped abroad, if returned to the country within one year from the date of export and addressed to the exporter or his representative;

8. Parcels containing objects imported on the basis of claims for the replacement of defective goods, shipped free of charge within the period covered by the guarantee;

9. Pacels containing works of art or of science, privately owned by the addrssee--a local physical person;

10. Parcels containing moveable property for individual or family use by individuals settling in the country, should they arrive within three months from the date of settlement.

(2) Should the value of the content of the parcel, as per items 1 and 2 of the preceding paragraph, exceed stipulated limits, duty shall be paid on the entire value of the parcel.

(3) No customs fees shall be charged on parcels whose content has become unuseable because of damages or spoilage.

Article 22. (1) No duty shall be charged on the following:

1. Parcels whose content shall be worth no more than 10 leva, Bulgarian retail prices;

2. Parcels sent on a quarterly basis by Bulgarian citizens to members of their families residing abroad for purposes of employment, specialization, assignment, or training exceeding six months in accordance with the restructions stipulated in Article 23, paragraph 2 of the present ordinance.

(2) Should the value of the content of the parcel, as per items 1 and 2 of the preceding paragraph, exceed stipulated limits, duty shall be paid on the entire value of the parcel.

Article 23. (1) Parcels as per Article 21, paragraph 1.4, shall be duty-free should their overall value not exceed 100 leva, Bulgarian retail prices, and should they contain food products, clothing, shoes, and toys for the personal needs of members of the shipper's family located in Bulgaria. Clothing and shoes within a single parcel may not exceed one piece (pair, set) of each type.

(2) Parcels as per Article 22, paragraph (1) 2. shall be allowed to pass duty-free should their overall value not exceed 100 leva and should they contain items

for personal or family requirements. Clothing and shoes within a single parcel may not exceed more than one item (pair, set) of each kind while food products may not exceed a total weight of two kilograms.

(3) Should the content of the parcels as stipulated in the preceding paragraph exceed the stipulated limits, the surplus value shall be taxed in accordance with the Customs Tariff on the Taxation of Goods Imported or Exported by Physical Persons (DV, No 80, 1979).

Article 24. (1) The rayon or other customs offices, as stipulated by the Customs and Customs Control Directorate, shall open files for control over parcels as per Article 23.

(2) Files shall be opened at the request of the interested individuals submitted to the chief of the customs office in the area where the addressee (sender) maintains his permanent residence.

(3) The following documents must accompany the petition for the opening of a file: service note issued by the institution which has assigned the individual to a foreign country; declaration of family status of the employed (the specialist, the assigned individual).

(4) Should the addressee (sender) change his place of residence, the file may be transferred only by permission of the rayon customs office on the basis of a petition submitted in accordance with the preceding paragraphs.

Article 25. (1) In the sense of the presence ordinance the term family shall mean the following: spouse; minor children; children of legal age in the armed forces, full-time secondary or university students, the incapacitated, or individuals declared legally incompetent regardless of age.

(2) Parcels as per Article 22, paragraph (1) 2. may be shipped also by close relatives (children of legal age, parents, brothers, sisters, grandmothers, or grandfathers of either spouse) not considered members of the family in the sense of the preceding paragaph.

Chapter 4

Special Regulations for Sending or Receiving Certain Items

Article 26. (1) Gramophone records and taped recordings may be sent or received after hearing; printed matter must be checked.

(2) The export of manuscripts, negatives, slides, drawings, or photographs for publication in newspapers, periodicals or books, or for participation in exhibits or similar activities shall be allowed by permission of the Committee for Culture--Copyright Agency--and the Committee for the Press--Book Propaganda, Exhibitions and Fairs Directorate.

Article 27. (1) The shipping and receiving of pharmaceuticals shall be allowed on the basis of types and quantities permitted by the Ministry of Public Health.

The types and amounts of pharmaceuticals whose export is allowed are indicated in Appendix No 5. The import of pharmaceuticals shall be allowed on the basis of a prescription or a protocol issued by a medical institution.

(2) Permits for imports of pharmaceuticals may be issued and their prices may be determined by the pharmaceutical enterprises of the individual okrugs and the pharmacist at the Sofia Customs Office. The control-permit shall be noted on the prescription or protocol.

Concluding Stipulations

Only paragraph. The present ordinance is issued on the basis of Articles 29 and 75 of the Law on Customs and Article 78 of the Regulation on the Application of the Law on Customs, replacing the Ordinance on Customs Control and Customs Duties on International Postal Parcels of 1974 issued by the Ministry of Finance and the Ministry of Information and Communications.

Minister: B. Belchev

Appendix No 1 to Article 3, paragraph (1)

List of Customs Offices and Areas in Which Matters Related to the Export and Import of Items Through International Postal Parcels May Be Resolved

Customs Office	Area
Vidin	Vidin Okrug
Lom	Mikhaylovgrad and Vratsa okrugs
	Pleven Okrug
	Turnovo, Gabrovo and Lovech okrugs
Ruse	Ruse, Turgovishte and Razgrad okrugs
	Silistra Okrug
Tolbukhin	Tolbukhin Okrug
Varna	Varna and Shumen okrugs
Burgas	Burgas, Yambol and Sliven okrugs
	Khaskovo Okrug
Plovdiv	Plovdiv, Stara Zagora and Smolyan okrugs
Sofia Customs	Sofia, Kyustendil, Pernik and Blagoevgrad okrugs

The customs offices in Malko Turnovo, Kulata, Zlatareo, Stanke Lisichkovo and Gyueshevo will deal with problems related to the export of items by physical persons through international postal parcels exclusively for the settlement in which the corresponding customs office is located.

In addition to its activities in its stipulated area the Sofia Customs Office will control all small parcels arriving from the GDR, Poland, USSR, Hungary and Czechoslovakia whose wrapping bears the rombic seal. Such parcels shall be then sent directly to the post offices of their destination for delivery to the addressees (Article 7, paragraph 2).

Appendix No 2 to Article 4, paragraphs (2) and (3)

List of Objects Whose Import From and Export Into the Bulgarian People's Republic is Prohibited and of Items Whose Duty-Free Export From the Bulgarian People's Republic Through Postal Parcels is Prohibited

Section I

A. Items Whose Export From the Bulgarian People's Republic is Prohibited

1. Weapons, ammunition, military equipment, explosives, and inflammatory and other dangerous substances.

2. Narcotics and attachments for their use.

3. Objects of immoral content.

4. Goods for commercial purposes or production purposes; commodity samples.

5. Bank notes, coins, valuables and other foreign exchange valuable items as per Article 3 of the Law on Deals in Foreign Exchange Valuables and Foreign Exchange Control (ZSVTsVK).

6. Items, produce, or beverages in hermetically sealed containers (cans, etc.) concealing their content.

7. Cancelled or uncancelled mailing stamps and other philatelic materials with the exception of the cases and in accordance with the procedure stipulated in the Regulation on the Exchange of Postal Stamps with Foreign Countries.

8. Live animals with the exception of bees, leeches, silkworms, parasites and destroyers of harmful insects used for research purposes exchanged exclusively among officially recognized scientific institutes and establishments.

9. Printed matter, photographs, films, drawings, designs and other items whose shipping abroad could cause economic or other damage to the state; official publications and materials with restricted circulation and use.

10. Seeding and planting materials.

11. Antique objects and works of art such as paintings, drawings, portraits, sculptures, miniatures, carpets, tapestries, icons, church and household items, weapons, furniture, fabrics, decorations, clothing, manuscripts, books, musical instruments, craft instruments, coins made of precious and nonprecious metals, and other items of archaeological, antique or numismatic significance or considered ornaments of culture.

12. Objects whose shipping in postal parcels is forbidden in accordance with the stipulations of Ordinance No 4 on postal communications and the Universal Postal Convention.

13. Items whose importation is prohibited in the country of destination.

14. Persian-type rugs and carpets.

B. Items and parcels may not be imported into the Bulgarian People's Republic

1. Weapons, ammunition, military equipment, explosives, and inflammatory and other dangerous substances.

2. Narcotics and attachments for their use.

3. Objects of immoral content.

4. Goods for commercial purposes or production purposes; commodity samples.

5. Bank notes, coins, valuables and other foreign exchange valuable items as per Article 3 of the Law on Deals in Foreign Exchange Valuables and Foreign Exchange Control (ZSVTsVK).

6. Items, produce, or beverages in hermetically sealed containers (cans, etc.) concealing their content.

7. Cancelled or uncancelled mailing stamps and other philatelic materials with the exception of the cases and in accordance with the procedure stipulated in the Regulation on the Exchange of Postal Stamps with Foreign Countries.

8. Live animals with the exception of bees, leeches, silkworms, parasites and destroyers of harmful insects used for research purposes exchanged exclusively among officially recognized scientific institutes and establishments.

9. Printed matter, cliches, negatives, still and motion pictures, films, photographs, paintings, drawings, designs, manuscripts, records or recorded tapes, and others which may be politically, economically and ideologically harmful to the socialist state.

10. Gift parcels containing used clothing, shoes, bedding, covers, or bed covers.

11. Used motor vehicle tires.

12. Shipments by foreign companies with the exception of the cases stipulated in Article 66 of the PPZM and Note 3 of the list.

Note 1. Items confiscated for moral, health or political reasons shall not be returned.

2. Parcels as per item 10 shall be returned to sender at his expense.

3. The prohibition as per item 12 shall not apply in the following cases:

a. Postal parcels containing objects worth no more than 50 leva, Bulgarian retail prices, providing that receipt of the parcel does not originate any obligation on the part of the local resident to the foreign company;

b. Should the object be ordered from a foreign country as per Article 7, letter "b" of the Ordinance on Foreign Currency Deposits by Local Residents.

4. Foreign currency and other valuables received by local residents in postal parcels must be submitted to the Bulgarian National Bank (Bulgarian Foreign Trade Bank) within 14 days of the date of receival (Article 20 of the Ordinance on Border Control of Valuables (NGKVTs), DV, No 59, 1966). Bulgarian leva included in international postal parcels shall be submitted to the Bulgarian National Bank for deposit as state revenue (Article 20 of the NGKVTs).

Section II

Items whose duty-free exportation from the Bulgarian People's Republic is prohibited.

1. Clothing for babies and children, including knitted goods and babies' and children's shoes.

2. Unbleached calico and sheeting and their products--bed sheets and pillow cases.

3. Meat products.

4. Dairy products.

5. Vegetal and animal fats.

Remark. The prohibition does not apply to cases stipulated in Article 22, paragraph 1, point 2, of the ordinance.

Postal Administration of the Bulgarian People's Republic	Appendix No 3 to Article 13, paragraph 1
Customs Declaration	S2/SR3
(1) Name and address of sender	(2) Eventual reference number of sender
(3) Name and address of addressee	(4) Mark with (x) the proper square ☐ gift ☐ commercial samples
	(5) I hereby certify to the accuracy of the information contained in the declaration.
	(6) Place of issue and date.
(7) Note	(8) Signature
	(9) Country of origin of the goods (10) Country of destination
(12) Number of parcels	(11) Total gross weight kg grams
(13) Detailed description of contents	

(14) Tariff number
(15) Net weight (16) Value

kg grams

The customs declaration must be filled in French or any other language admissible in the country of destination.

(A) Read instructions on reverse side before filling declaration.

Appendix No 4 to Article 13, paragraph 1.

Customs Office S1

May be opened officially

.....

(Part which must be cut off should the parcel be accompanied by a customs declaration. If not, it must be filled.)

See instructions on back.

Detailed description of contents

.....

.....

Mark with (x) if it is:

a gift _____

a commercial sample_____

Value (indicate currency) Net Weight

Appendix No 5 to Article 27, paragraph 1

List of pharmaceuticals which may be exported and shipped to a foreign country and their amounts

Abriderm ointment--20 gram container	no more than 30
Abricyclin vials for intravenous injection 0.275 and 0.11 grams	" " " 30
Abricyclin vials for intermuscular injection o.15 and 0.35 grams	" " " 30
Adepren ampules 0.25 percent--1 ml	" " " 50
Adepren sheet tablets 0.005 grams, container of 50	" " " 5 pkgs
Adepren " " 0.01gram, container of 60	" " " 5 "
Adinorm and Adinorm neo, liquid--10 mg container	" " " 5 "
Adrenalin tartaric, ampules, 0.1 percent--1 ml	" " " 50
Adrenalin tartaric ampules, 0.25 percent--1 ml	" " " 50
Albumen tannic, 0.5 gram tablets, container of 20	" " " 5
Alcosin ampules, 2 ml	" " " 50
Alcosin sheet tablets, container of 20	" " " 5

Alergosan ampules 0.02 grams--2 ml	no	more	than	50
Alergosan pills 0.025 grams, container of 20	"	"	"	5
Alergosan ointment 1 percent, 18 gram container	"	"	"	5
Alergosan cream 1 percent, 18 gram container	"	"	"	5
Aliliormorphine ampules 0.5 and 1 percent, 1 ml	"	"	"	50
Almagel and Almagel A, 170 ml container	"	"	"	5
Alumoxide powder, 50 gram container	"	"	"	5
Alumoxide with belladona tablets, container of 2	"	"	"	5
Alcid V, package of 60	"	"	"	5
Amidopirin (amaidophene), 0.1 and 0.3 gram tablets, container of 10	"	"	"	5
Ampicillin, 0.5 gram flasks	"	"	"	30
Ampicillin capsules 0.25 grams, container of 16	"	"	"	5
Ampicillin granules, package of 30 grams	"	"	"	5
Ampicillin sheet tablets 0.25 and 0.5 grams, cont. of 16.	"	"	"	5
Analgin tablets, 0.5 grams, container of 10	"	"	"	5
Analgin ampules 50 percent, 1 and 2 ml	"	"	"	50
Analgin-quinine pills, cont. of 10	"	"	"	5
Anapirin tablets, cont. of 6	"	"	"	5
Antialersin ampules 0.05 grams, 2 ml	"	"	"	50
Antialersin pills 0.025 grams, cont. of 20	"	"	"	5
Antianemin forte ampules, 2 ml	"	"	"	50
Antiastmin tablets, cont. of 20	"	"	"	5
Antiacid and antiacid B, cont. of 100	"	"	"	5
Antigripal pills, cont. of 20	"	"	"	5
Antiepilepticum tablets, cont. of 30	"	"	"	5
Antiseborin, liquid, cont. of 120 ml	"	"	"	5
Antisclerol pills, container of 30	"	"	"	5
Antispasmin tablets 0.005 grams, container of 20	"	"	"	5
Antistenocardin pills 0.025 grams, container of 30	"	"	"	5
Antistenocardin ampules 0.01 gram, 2 ml	"	"	"	50
Antitusin liquid, 10 ml container	"	"	"	5
Apitonin capsules 0.005, 0.02 and 0.06 grams, container of 16	"	"	"	5
Apomorphine hydrochloric ampules 0.003 and 0.005 grams, 1 ml	"	"	"	50
Arsenferatol liquid, 250 ml container	"	"	"	5
Arthrochin ampules 5 percent, 5 ml	"	"	"	50
Arthrochin tablets 0.25 grams, container of 10	"	"	"	5
Ascophen tablets, container of 10	"	"	"	5
Astma cigarettes, container of 20	"	"	"	5
Astmophysin neo ampules, 1 ml	"	"	"	50
ASTM ampules 20 E, 1 ml	"	"	"	50
Atropin sulfuric ampules 0.1 percent, 1 ml	"	"	"	50
Atropin sulfuric tablets, 0.5 mg and 0.01 gram, container of 20	"	"	"	5
Atropin sulfuric liquid 1 percent, 10 ml container	"	"	"	5
Aphroton pills, container of 25	"	"	"	5
Ahistamine tablets 0.05 grams, container of 20	"	"	"	5
Ahistamine ointment 2 percent, 18 gram container	"	"	"	5
Ahistamine cream 2 percent, 18 gram container	"	"	"	5
Acetisal tablets 0.5 grams, container of 20	"	"	"	5

Acetisal tablets, effervescent 0.5 grams, container of 50	no	more	than	5
Acetisal tablets 0.6 grams container of 30	"	"	"	5
Acetisal with vitamin C tablets, effervescent, container of 10	"	"	"	5
Acephein tablets, container of 10	"	"	"	5
Boric acid ointment 5 percent, 18 gram container	"	"	"	5
Glutaminic acid tablets 0.25 grams, container of 10	"	"	"	5
Nicotinic acid ampules 1 percent, 2 and 5 ml	"	"	"	50
Nicotinic acid tablets 0.05 grams, containers of 10 and 20	"	"	"	5
Orotic acid ampules 1 percent, 1 ml	"	"	"	50
Folic acid tablets 0.05 grams, container of 100	"	"	"	5
Barbiphen tablets container of 10	"	"	"	5
Benalgin tablets, container of 60	"	"	"	5
Beldipin pills, container of 20	"	"	"	5
Belascusin suppositories, container of 5	"	"	"	5
Belastelin suppositories, container of 3	"	"	"	5
Bellergamin pills, container of 50	"	"	"	5
Bellonal tablets, container of 20	"	"	"	5
Benalgin tablets, container of 20	"	"	"	5
Benzacillin syrup, 60 ml container	"	"	"	5
Benzacillin flasks, 600,000 and 1,200,000 E	"	"	"	50
Benzacillin composite vials 1,200,000 E	"	"	"	50
Benastmin sheet tablets, container of 70	"	"	"	5
Bisalax pills 0.005 grams, container of 30	"	"	"	5
Bixalax suppositories, 0.005 and 0.01 gram, container of 6	"	"	"	5
Biiodiorinethyrosin tablets 0.1 gram, container of 20	"	"	"	5
Biclothymol ointment 5 percent, 20 gram container	"	"	"	5
Biclothymol powder 0.5 percent, 50 gram container	"	"	"	5
Biclothymol tablets 0.005 grams, container of 20	"	"	"	5
Bionabol tablets 0.002 and 0.005, container of 40	"	"	"	5
Bionabol tablets 0.001 gram, container of 20	"	"	"	5
Bismuthanalbin tablets, container of 20	"	"	"	5
Bismucide, granules, 4 grams, container of 20	"	"	"	5
Bisolvon tablets 0.008 grams, container of 20	"	"	"	5
Bisolvon solution 2 mg per ml, 40 ml container	"	"	"	5
Bisulphon D, 0.75 gram tablets, container of 12	"	"	"	5
Bisulphon D granules for syrup, 30 gram container	"	"	"	5
Bisulphon D syrup 10 percent, 50 ml container	"	"	"	5
Brivicide eye ointment, 10 gram container	"	"	"	5
Brivicide losenges, 5 mg, container of 50	"	"	"	5
Brivicide concentrated powder, 10 gram container	"	"	"	5
Brivicide ointment 2 mg per gram, 20 gram container	"	"	"	5
Bresol liquid 120 ml container	"	"	"	5
Bromalgin ampules, 10 mg	"	"	"	50
Bromatropin ampules 0.5 and 1 mg, 10 ml	"	"	"	50
Bromisovalum tablets 0.3 grams, container of 10 grams	"	"	"	5
Broncholithin syrup 125 gram container	"	"	"	5
Bourge granules, 4 grams, container of 20	"	"	"	5
Bourge neo granules 4 grams, container of 20	"	"	"	5
Buscolisin ampules 2 percent, 1 ml	"	"	"	50
Buscolisin pills 0.01 gram, container of 20	"	"	"	5
Buscolisin suppositories for adults, 0.01 gram, cont. of 6	"	"	"	5

Buscolisin suppositories for children, 0.0075 grams, container of 6	no	more	than	5
Buscolisin complex ampules 5 ml	"	"	"	50
Buscolisin complex pills, container of 25	"	"	"	5
Buscolisin complex suppositories, container of 6	"	"	"	5
Butadion pills 0.2 grams, container of 20	"	"	"	5
Butapirin pills, container of 20	"	"	"	5
Butasal tablets, container of 20	"	"	"	5
Butasolon tablets, container of 40	"	"	"	5
Vagisteran tablets, 0.2 grams, container of 12	"	"	"	5
Vasolat ampules, 0.05 grams, 1 ml	"	"	"	50
Vasolat tablets 0.025 grams, container of 20	"	"	"	5
Vasolat liquid 1 percent, 20 ml container	"	"	"	5
Venoruton ampules, 0.5 grams	"	"	"	50
Venoruton capsules, 0.3 grams, container of 50	"	"	"	5
Venoruton gel, 40 gram container	"	"	"	5
Veridon tablets 0.4 grams, container of 10	"	"	"	5
Vibramycin capsules 0.1 gram, container of 5	"	"	"	5
Vicomplex pills, container of 100	"	"	"	5
Vincapan tablets 0.01 gram, container of 50	"	"	"	5
Vipraplex forte linament, 50 gram container	"	"	"	5
Vitaiodurol liquid, 15 ml container	"	"	"	5
Vitamaltosa granules, 250 gram container	"	"	"	5
Vitamin A ampules 25,000 and 30,000 E	"	"	"	50
Vitamin A drops 2,500, 4,500, and 50,000 E	"	"	"	5
Vitamin A pills 2,500 and 50,000 E	"	"	"	5
Vitamin B_1 ampules 2.5 and 4percent--1 and 2 ml	"	"	"	50
Vitamin B_1 pills 0.003, 0.005 and 0.01 grams, containers of 20 and 40	"	"	"	5
Vitamin B_1 coated tablets 0.003 and 0.005 grams, container of 40	"	"	"	5
Vitamin B_2 ampules 0.50 percent, 2 ml	"	"	"	50
Vitamin B_2 pills 0.001 gram, container of 10	"	"	"	5
Vitamin B_2 sheet tablets 0.001 gram, container of 20	"	"	"	5
Vitamin B_{12} ampules 50, 100, 250 and 500 mg	"	"	"	50
Vitamin B_{12} with Vitamin B_1 ampules 2 ml	"	"	"	5
Vitamin B_2 complex ampules 2 ml	"	"	"	50
Vitamin B_2 complex pills, container of 20	"	"	"	5
Vitamin B complex syrup, 125 ml container	"	"	"	5
Vitamin C ampules 5 and 10 percent, 2 and 5 ml	"	"	"	50
Vitamin C tablets 0.1 gram, container of 40	"	"	"	5
Vitamin D_2 ampules, oil solution 30,000 and 60,000 E	"	"	"	50
Vitamin D_2 pills 1,000 E, container of 20	"	"	"	5
Vitamin D_2 drops 80, 500, 1,000, 10,000, and 100,000 E	"	"	"	5
Vitamin D_3 ampules 300,000 E, 1 ml	"	"	"	50
Vitamin D_3 capsules 300,000 E, container of 20	"	"	"	5
Vitamin D_3 liquid, 10 ml container	"	"	"	5
Vitamin E ampules 0.03 grams, 2 ml	"	"	"	50
Vitamin E pills 0.01 and 0.05 grams, container of 20	"	"	"	5
Vitamin E drops 0.005, 0.01 and 0.015 grams	"	"	"	5
Vitamin K ampules 0.01 gram, 1 ml	"	"	"	50
Vitamin K pills 0.01 gram, container of 20	"	"	"	5

	no	more	than	
Vitestrol ampules 0.1 percent, 1 ml	"	"	"	50
Vitestrol ampules 1 percent, 1 and 2 ml	"	"	"	50
Vulnusan ointment, container of 20 and 45 grams	"	"	"	5
Gamma-globulene ampules 1 and 3 ml	"	"	"	5
Gastrofarm tablets 2.5 grams, container of 20	"	"	"	5
Gentamycin ampules 0.01 gram, 1 ml	"	"	"	50
Gentamycin ointment 0.1 percent	"	"	"	5
Gentamycin cream 0.1 percent,15 gram container	"	"	"	5
Gentamycin eye drops 1 percent, 5 ml	"	"	"	5
Gentamycin eye ointment 0.05 percent, 5 gram container	"	"	"	5
Gentamycin aerosol spray, 0.1 percent, 210 ml container	"	"	"	5
Gentamycin aerosol foam, 0.08 percent, 210 ml container	"	"	"	5
Gericain ampules 0.1 gram, 5 ml	"	"	"	50
Gericain tablets 0.1 gram container of 25	"	"	"	5
Geritamin capsules, container of 40	"	"	"	5
Glauterpin tablets, container of 10	"	"	"	5
Glaurent pills 0.01 and 0.04 grams, container of 20	"	"	"	5
Deavit ampules 1 ml	"	"	"	50
Deavit liquid, 10 ml container	"	"	"	5
Depo-sulfamide M tablets 0.5 grams, container of 10	"	"	"	5
Dermatin ointment 30 gram container	"	"	"	5
Deflamol ointment, 18 gram container	"	"	"	5
Dehydratin tablets 0.25 grams, container of 25	"	"	"	5
Dehydratin Neo tablets 0.025 grams, container of 20	"	"	"	5
Diabecide P tablets 0.5 grams, container of 50	"	"	"	5
Diasepam tablets 0.005 and 0.01 gram, container of 20	"	"	"	5
Dietasal, 30 gram container	"	"	"	5
Digitalin liquid 1 per thousand, 10 ml container	"	"	"	5
Dideapil tablets, container of 100	"	"	"	5
Disenterol tablets 0.22 grams, container of 20	"	"	"	5
Disepin ampules (powder) 0.1 grams + (r-tel)	"	"	"	50
Dsepin pills 0.005 and 0.01 gram, containers of 150 and 100	"	"	"	5
Dimenhydrinate tablets 0.05 grams, container of 25	"	"	"	5
Dimenhydrinate syrup 0.3 percent, 125 ml container	"	"	"	5
Delin ampules 2 ml	"	"	"	50
Dolispan suppositories, container of 6	"	"	"	5
Dolispan sheet tablets, container of 20	"	"	"	5
EDTA Calcium-disodium ampules 10 percent-10 ml; 20 percent - 5 and 10 ml	"	"	"	50
EDTA disodium collirium 0.37 percent, 10 ml container	"	"	"	5
Velerian extract sheet tablets, 0.3 gram	"	"	"	5
Thyroid gland extract, pills 0.1 and 0.3 gram, container of 50	"	"	"	5
Eldona tablets 0.5 gram, container of 40	"	"	"	5
Elixir tonic, liquid 150 gram container	"	"	"	5
Endoiodin ampules 20 percent. 2 ml	"	"	"	50
Enteroquin pills, container of 20	"	"	"	5
Epiphelisin ointment, 20 gram container	"	"	"	5
Ergotamin pills, 0.001 gram, container of 15	"	"	"	5
Ergotamin liquid 0.1 percent, 10 ml container	"	"	"	5

Eritran pills, 0.2 and 0.1 gram, container of 20 and 10	no	more	than	5
Eritran tablets, 0.1 and 0.25 gram, container of 20	"	"	"	5
Eritran granules for syrup, 30 gram container	"	"	"	5
Escuvasin liquid, 20 ml container	"	"	"	5
Escuvasin composite liquid, 20 ml container	"	"	"	5
Estradiol B and Estradiol R ampules, 1 ml container	"	"	"	50
Estradiol B and Estradiol R (lingveti) 0.1 mg. container of 10	"	"	"	5
Etambytol tablets, 0.1 and 0.25 gram, container of 100 and 50	"	"	"	5
Etistrol (lingveti), container of 20	"	"	"	5
Etistrol ampules, oil solution, 1 ml	"	"	"	50
Eunervina liquid 200 ml container	"	"	"	5
Eupaverin ampules 0.03 gram, 200 ml container	"	"	"	50
Euspazmin tablets, container of 20	"	"	"	5
Euspazmin suppositories, container of 5	"	"	"	5
Isophen tablets 0.005 grams, container of 20	"	"	"	5
Isobutason pills, container of 20	"	"	"	5
Isoprenalin (lingveti) 0.2 grams, container of 20	"	"	"	5
Isoprenalin liquid 1 percent, 10 ml container	"	"	"	5
Indometacin capsules 0.025 grams, container of 30	"	"	"	5
Indometacin suppositories 0.05 grams, container of 6	"	"	"	5
Indometacin ointment 20 percent, 20 grams	"	"	"	5
Insulin "Farmakhim" 200 E	"	"	"	30
INKhA-17 tablets, 0.3 grams, container of 50	"	"	"	5
Ichtio ointment 10 percent, 18 gram container	"	"	"	5
Iodferatol liquid, 250 ml container	"	"	"	5
Yohimbin tablets, 0.01, container of 10	"	"	"	5
Potassium iodide pills 0.001 and 0.0005 gram, container of 100	"	"	"	5
Potassium chloride ampules 15 percent, 10 ml cont.	"	"	"	50
Potassium chloride tablets 0.5 gram, container of 70	"	"	"	5
Calcium bromate ampules 4 percent, 5 and 10 ml	"	"	"	50
Calcium bromlactobionate ampules, 5 and 10 ml	"	"	"	50
Calcium bromlaktobionate granules, 100 gram	"	"	"	5
Calcium C tablets, container of 40	"	"	"	5
Calcium D tablets, container of 40	"	"	"	5
Calcium chloride ampules 10 percent, 5 and 10 ml	"	"	"	50
Calcium C-Phospho sheet tablets, container of 40	"	"	"	5
Canamicin sulfuric capsules 0.25 gram, container of 16	"	"	"	5
Canamicin sulfuric tablets 0.125 gram, container of 20	"	"	"	5
Capsiplast "Emka" Plaster 15 by 15 cm	"	"	"	5
Capsiplast "Emka",plaster 15 x 25 cm	"	"	"	5
Capsiplast "Emka" plaster 15 by 50 cm	"	"	"	5
Carbiphen tablets 0.5 gram, container of 40	"	"	"	5
Activated carbon granules, containers of 25 and 50 grams	"	"	"	5
Kinetol ointment 20 gr container	"	"	"	5
Codterpin tablets 0.01 gram, container of 10	"	"	"	5
Cola granulata granules 100 gram container	"	"	"	5
Compresol tablets, container of 10	"	"	"	5
Corasol liquid 10 percent, 10 ml container	"	"	"	5

	no	more	than	
Corasol-dicodal liquid, 10 ml container	"	"	"	5
Corasol-ephedrine liquid, 10 ml cont.	"	"	"	5
Cordiamin liquid 25%, 10 ml cont.	"	"	"	5
Corticadinol jelly, 18 gram cont.	"	"	"	5
Corticorenol jelly, 18 gram cont.	"	"	"	5
Cortimycin eye ointment, 5 gram container	"	"	"	5
Cortimycin dermitological ointment, 10 gram cont.	"	"	"	5
Cofenal tablets, container of 10	"	"	"	5
Cofergamin pills, container of 20	"	"	"	5
Lanatigen C tablets	"	"	"	5
Lanatigen C liquid, 0.1 percent, 10 ml cont.	"	"	"	5
Levocort aerosol 140 grams, 240 ml	"	"	"	5
Locacorten cream 30 gram cont.	"	"	"	5
Locacorten ointment 30 gram cont.	"	"	"	5
Locacorten N ointment, 30 gram container	"	"	"	5
Locacorten N cream, 30 gram cont.	"	"	"	5
Locasalen ointment, 15 gram cont.	"	"	"	5
Lonetil tablets 0.1 gram, container of 50	"	"	"	5
Masolek ointment, 5 gram container	"	"	"	5
Manivit granules, effervescent, 12 grams each, cont. of 20	"	"	"	5
Maralit ampules, 50 ml cont.	"	"	"	50
Maraslavin liquid, 100 ml container	"	"	"	5
Marbadal-ciren tablets, cont. of 30	"	"	"	5
Mecamilamid tablets, 0.0025 gram, cont. of 40	"	"	"	5
Melivenon--all kinds	"	"	"	5
Methionin tablets 0.5 grams, container of 20	"	"	"	5
Methionin ampules, 10%, 5 ml cont.	"	"	"	50
Metromin tablets, container of 12	"	"	"	5
Mitisin powder, container of 100 grams	"	"	"	5
Mycodermin ointment, container of 18 grams	"	"	"	5
Mycodermin powder, 20 gram container	"	"	"	5
Narcoterpinn tablets, container of 10	"	"	"	5
Sodium salicylate ampules 10 percent, 5 and 10 ml cont.	"	"	"	50
Naphasolin liquid 0.05 and 0.1 percent, 10 ml cont.	"	"	"	5
Nelidix tablets 0.5 gram, cont. of 56	"	"	"	5
Nemibacin dermatological ointment, cont. of 5 grams	"	"	"	5
Nemibasin ointment, cont. of 2.5 grams	"	"	"	5
Neoginon pills, container of 21	"	"	"	5
Neohepatis ampules, 2 ml container	"	"	"	50
Neostigmin tablets 0.015 grams, container of 20	"	"	"	5
Neurin pills, cont. of 100	"	"	"	5
Neurobex pills, cont. of 30	"	"	"	5
Neurolax pills, 0.025 grams, cont. of 50	"	"	"	5
Neurotin pills, cont. of 100	"	"	"	5
Nivalet tablets, cont. of 50	"	"	"	5
Nivalin ampules 1; 2.5 and 5 °/oo; 1 percent, 1 ml cont.	"	"	"	50
Nivalin tablets, 0.001 and 0.005 grams, cont. of 50	"	"	"	5
Nicohol sheet tablets, 0.25 gram, container of 60	"	"	"	5
Nistatin tablets 500,000 E, cont. of 20	"	"	"	5
Nistacyclin pills, cont. of 24	"	"	"	5
5-Nitrox sheet tablets 0.05 grams, cont. of 10	"	"	"	5

Nifimycin vaginal tablets, 10,000 E, cont. of 15	no	more	than	5
Nifimycin powder 12.5 percent, container of 20 grams	"	"	"	5
Nifimycin ointment, 5 percent, cont. of 20 grams	"	"	"	5
Noviform eye ointment 5 percent, cont. of 5 grams	"	"	"	5
Novobyosin capsules 0.25 gram, cont. of 16	"	"	"	5
Novoplex ampules, 2 and 5 ml	"	"	"	50
Novphyllin ampules, 0.48 and 0.24 grams, 2 and 10 ml cont.	"	"	"	50
Novphyllin tablets 0.1 gram, cont. of 10	"	"	"	5
Nodoplegin tablets 0.0025 grams, cont. of 50	"	"	"	5
Normoflor capsules 0.1 gram, cont. of 16	"	"	"	5
Normotimin tablets 0.3 grams, cont. of 40	"	"	"	5
Norsulfasol ampules 20 percent, 2 and 5 ml	"	"	"	50
Norsulfasol tablets 0.5 grams, cont. of 20	"	"	"	5
Oxacillin capsules, 0.25 gram, cont. of 10	"	"	"	5
Oxitetracyclin liquid for intramuscular and intravenus use, 0.1 gram	"	"	"	30
Oxitetracyclin capsules, 0.25 grams, cont. of 16	"	"	"	5
Oxitetracyclin eye ointment, cont. of 5 grams	"	"	"	5
Oxitetracyclin B-complex capsules, cont. of 16	"	"	"	5
Oleandecetil granulated, cont. of 30 grams	"	"	"	5
Oleandomycin liquid 0.5 grams for intramuscular and intravenus use	"	"	"	50
Oleandomycin pills 0.125 grams, cont. of 24	"	"	"	5
Oleflavit pills, 0.125 grams, cont. of 24	"	"	"	5
Ombroderm ointment, cont. of 18 grams	"	"	"	5
Orafuran tablets 0.1 gram, cont. of 50	"	"	"	5
Oreatron ampules 0.5 mg - 1 ml	"	"	"	50
Orestron tablets 0.25 mg. cont. of 20	"	"	"	5
Orovit ampules, 1 ml	"	"	"	50
Otalgeton liquid, 5 ml container	"	"	"	5
Pancreatin pills, 0.25 gram, cont. of 50	"	"	"	5
Papaverin hydrochloric ampules 1 and 2 percent, 1 ml	"	"	"	50
Parquisan tablets 0.002 and 0.005 grams, cont. of 100	"	"	"	5
PAS-sodium tablets, 0.5 gram, cont. of 1000	"	"	"	5
Penicillin G potassium 250,000, 500,000 and 1,000,000 E	"	"	"	30
Pepsinal syrup, 125 ml container	"	"	"	5
Peflavit C pills, cont. of 100	"	"	"	5
Perigran syrup, container of 170 grams	"	"	"	5
Pilocarpin hydrochloric Collir 1, 2 and 6 percent, 10 ml container	"	"	"	5
Pilocarpin hydrochloric ointment 1 and 2 percent, cont. of 3 grams	"	"	"	5
Piloton liquid, 100 gram container	"	"	"	5
Piperasin adipinate tablets 0.25 and 0.5 grams, cont. of 12	"	"	"	5
Piperasin granulated, effervescent, cont. of 50 grams	"	"	"	5
Piramem ampules 20 percent, 5 ml·container	"	"	"	50
Piramem sheet tablets 0.4 gram, container of 60	"	"	"	5
Piraminal tablets, container of 10	"	"	"	5
Piranal tablets, 0.5 grams, cont. of 6	"	"	"	5
Pimadin ampules 0.5 percent, 2 ml	"	"	"	50

Pituhormone ampules 3 and 10 E, 1 ml	no	more	than	50
Polyminerol liquid, 100 ml container	"	"	"	5
Prednisolon tablets, 0.005 grams, cont. of 20	"	"	"	5
Prednisolon F tablets 0.5 —cont. of 30	"	"	"	5
Prenilamin and Prenilamin 8 pills, 0.015 grams	"	"	"	5
Primolut-nor tablets 0.005 gram, cont. of 20	"	"	"	5
Procilin liquid, 300,000, 600,000, 1,200,000 E	"	"	"	50
Progesteron ampules 0.5 and 1 percent, 1 ml	"	"	"	50
Psychophorin ampules, 0.025 gram, 2 ml	"	"	"	50
Psychophorin pills, 0.025 gram, cont. of 50	"	"	"	5
Pulbequin ampules 1 and 2 ml	"	"	"	50
Laxative tablets for children, 0.1 gram, cont. of 25	"	"	"	5
Rasemid tablets, cont. of 30	"	"	"	5
Reserpine tablets 1.4 and 0.1 mg. container of 40	"	"	"	5
Reserpine complex, cont. of 50	"	"	"	5
Rectan paste, container of 8 grams	"	"	"	5
Retisid tablets, container of 30	"	"	"	5
Rimetin tablets, 0.01--cont. of 10	"	"	"	5
Rimicide ampules 0.05 grams, 2 ml	"	"	"	50
Rimicide tablets, 0.05 and 0.1 grams, cont. of 150	"	"	"	5
Rinosol aerosol, 30 ml container	"	"	"	5
Riperol granules	"	"	"	5
Rosalin ointment, cont. of 18 grams	"	"	"	5
Rosanol capsules 0.1 gram, cont. of 30	"	"	"	5
Rondomycin capsules 0.15 gram, cont. of 16	"	"	"	5
Rutascorbin sheet tablets, container of 100	"	"	"	5
Rutasterol pills, cont. of 50	"	"	"	5
Salastesin liquid, 100 ml container	"	"	"	5
Bromium salt, granulated, effervescent, 100 gram cont.	"	"	"	5
Salicylamide tablets 0.5 gram, cont. of 20	"	"	"	5
Saluretin tablets 0.1 gram, cont. of 15	"	"	"	5
Sandosten calcium tablets, effervescent, cont. of 12	"	"	"	5
Santamon tablets, cont. of 12	"	"	"	5
Santonin tablets 0.02 gram, cont. of 10	"	"	"	5
Sedalgin tablets, cont. of 10	"	"	"	5
Sedalgin neo tablets, cont. of 10	"	"	"	5
Sedaphene tablets, cont. of 10	"	"	"	5
Sinemet tablets, cont. of 90	"	"	"	5
Scabisol aerosol 10 and 30 percent, 210 ml container	"	"	"	5
Soluran granules, cont. of 300 grams	"	"	"	5
Spasmalgon ampules, 5 ml	"	"	"	50
Spasmalgon tablets, cont. of 20	"	"	"	5
Spasmalgon liquid, 10 ml container	"	"	"	5
Spasmocalm tablets, 0.02 grams, cont. of 10	"	"	"	5
Spasmocalm tablets, 0.04 grams, cont. of 10	"	"	"	5
Spasmocalm ampules, 2 percent, 1 ml	"	"	"	50
Spironolalcton pills, 0.025 grams, cont. of 30	"	"	"	5
Stenopril sheet tablets, 0.02 grams, cont. of 30	"	"	"	5
Stipticin tablets 0.05 grams, cont. of 20	"	"	"	5
Streptomycin sulfuric, 0.5 and 1 gram flasks	"	"	"	30
Streptopanat 1 gram flasks	"	"	"	30

	no	more	than	
Strophantin G and Strophantin K ampules, 0.04 percent, 1 ml	"	"	"	50
Strichnoarsin pills, cont. of 70	"	"	"	5
Sulfacol powder, 18 gram container	"	"	"	5
Sodium sulfacil ampules 30 percent, 2.5 and 10 ml	"	"	"	50
Tabex tablets 0.0015 grams, container of 100	"	"	"	5
Tavegil tablets, 0.001 gram, container of 20	"	"	"	5
Tavegil syrup, 200 ml container	"	"	"	5
Temo tablets, container of 20	"	"	"	5
Tempalgin tablets 0.52 gram, container of 10	"	"	"	5
Tempalgin ampules, 2 ml	"	"	"	50
Tempalgin suppositories, cont. of 6	"	"	"	5
Tempidon ampules, 2 percent, 1 ml	"	"	"	50
Tempidon tablets 0.02 grams, cont. of 50	"	"	"	5
Teobrosal tablets, 0.5 gram, cont. of 20	"	"	"	5
Teobrosal calcium tablets, 0.5 gram, cont. of 20	"	"	"	5
Teresulfol capsuls 0.15 gram, cont. of 60	"	"	"	5
Testosterone ampules 0.5 percent, 1 ml	"	"	"	50
Testosterone pills, 0.01 gram, cont. of 10	"	"	"	5
Testosterone sublingual tablets, 0.005 gram, cont. of 30	"	"	"	5
Tetraolean capsules 0.25 gram, cont. of 16	"	"	"	5
Tetraolean flasks 0.1 gram flasks for muscular application	"	"	"	30
Tetraolean granules for syrup, cont. of 30 grams	"	"	"	5
Tetracyclin B-complex capsules 0.25 gram, cont. of 16	"	"	"	5
Tetracyclin hydrochloric capsules 0.25 gram, cont. of 16	"	"	"	5
Tetracyclin hydrochloric flask 0.1 and 0.25 gram	"	"	"	30
Timidasol tablets 0.005 grams, cont. of 50	"	"	"	5
Thyoridasin pills 0.005 grams, cont. of 25	"	"	"	5
Thyroidasin pills 0.01 gram, cont. of 25	"	"	"	5
Thyroidasin pills 0.0025 grams, cont. of 50	"	"	"	5
Thyroidasin pills 0.05 grams, cont. of 50	"	"	"	5
Thyroidasin pills 0.1 gram, cont. of 25	"	"	"	5
Thyreotropin powder ampules, 0.005 grams	"	"	"	50
Tolasolin tablets 0.025 grams, container of 20	"	"	"	5
Tolasolin ampules 0.01 grams, 1 ml	"	"	"	50
Tosalin tablets 0.025 grams, cont. of 20	"	"	"	5
Torecan pills 0.0065 grams, cont. of 50	"	"	"	5
Tridiral liquid, 10 ml container	"	"	"	5
Trisim pills, cont. of 50	"	"	"	5
Trimesol tablets 0.12 grams, cont. of 20	"	"	"	5
Trimesol tablets 0.48 grams, cont. of 20	"	"	"	5
Tripsin dry ampules 0.05 grams	"	"	"	50
Trisulfon S tablets 0.5 grams, cont. of 10	"	"	"	5
Trisulfon S eye ointment, 10 percent, cont. of 5 grams	"	"	"	5
Trichomonacide tablets 0.25 gram, cont. of 20	"	"	"	5
Trichomonacide tablets 0.5 grams, container of 10	"	"	"	5
Tubocin capsules 0.15 and 0.3 grams	"	"	"	5
Tubocin granulated for syrup, 30 gram container	"	"	"	5
Tucedan tablets, container of 20	"	"	"	5
Tucifen and Tucifen-bebe, 100 ml container	"	"	"	5
Tucirol, 170 ml container	"	"	"	5

Ultradehydrocortizone cream, 5 gram container	no	more	than	5
Vitaform ointment, cont. of 5 grams	"	"	"	5
Dulce ointment No 1 and No 2, 20 gram contai	"	"	"	5
Ephedrin ointment, 10 gram container	"	"	"	5
Ichtiol ointment, 18 gram container	"	"	"	5
Menthol ointment, 10 gram container	"	"	"	5
Rivanol ointment, 20 gram container	"	"	"	5
Zinc ointment, 18 gram container	"	"	"	5
Uridan, 50 gram container"	"	"	"	5
Urutin ampules, 1 ml	"	"	"	50
Pharmavit syrup, 100 ml container	"	"	"	5
Phenocillin tablets 0.100, 0.200 and 0.250 grams	"	"	"	5
Hausman Ferum ampules 0.1 gram, 2 ml	"	"	"	50
Phytamina granules, 10 gram container	"	"	"	5
Phytinofex granules, 100 gram container	"	"	"	5
Phytin tablets, 0.25 gram, cont. of 40	"	"	"	5
Phytodont liquid, 100 ml container	"	"	"	5
Flatugel, 170 ml container	"	"	"	5
Flatugel A, 170 ml cont.	"	"	"	5
Fluoride tablets 0.25 and 0.5 mg.	"	"	"	5
Fluperin pills 0.001 gram, cont. of 50	"	"	"	5
FFluperin pills, 0.005 grams, cont. of 50	"	"	"	5
Fransen suppositories for children, cont. of 5	"	"	"	5
Francen suppositories for adults, cont. of 5	"	"	"	5
Fungite and Fungite H ointment, 20 gram container	"	"	"	5
Fungite and Fungite H liquid, 20 ml cont.	"	"	"	5
Furacillin tablets, cont. of 20	"	"	"	5
Curacillin powder, 15 gram container	"	"	"	5
Furantril tablets, 0.04 grams, cont. of 12	"	"	"	5
Furantril tablets, 0.5 gram, cont. of 20	"	"	"	5
Furotalgin liquid, 5 ml container	"	"	"	5
Mustard plaster--sheets	"	"	"	5
Hexamide tablets 0.25 gram, cont. of 50	"	"	"	5
Hexacitrol tablets 0.5 gram, cont. of 20	"	"	"	5
Helmicide, 100 ml container	"	"	"	5
Hemoroidal suppositories, container of 6	"	"	"	5
Hepavit dulce liquid, 200 ml container	"	"	"	5
Heparin ampules 10 and 40 percent, 5 and 10 ml	"	"	"	50
Heparin tablets, 0.5 grams, container of 20	"	"	"	5
Hydrocortizone collyrium 1 percent, 3 ml container	"	"	"	5
Hydrocortizone cream 2.5 percent, 5 gram container	"	"	"	5
Hydrocortizone ointment 1 percent, 5 gram container	"	"	"	5
Hilasin ampules, 300 E, 2 ml	"	"	"	50
Quinidine sulfuric 0.2 grams, container of 20	"	"	"	5
Quinine pills, 0.5 grams, container of 40	"	"	"	5
Quinine pills, 0.2 grams, container of 10	"	"	"	5
Quinoxon tablets, container of 25	"	"	"	5
Histamine hydrochloric, collyrium, 3 ml container	"	"	"	5
Histamine hydrochloric ointment, 3 gram container	"	"	"	5

Chlorasin ampules, 1, 2 and 5 ml	no more than 50
Chlorasin pills, 0.025 grams, container of 50	" " " 5
Chlorasin liquid, 4 percent, 10 ml container	" " " 5
Chlorquinaldol pills, 0.1 gram, container of 50	" " " 5
Chlorquinaldol ointment 5 percent, 20 gram container	" " " 5
Chlorquinaldol ointment with hydrocortizone, 10 gram container	" " " 5
Chlorquinaldol powder, 15 gram container	" " " 5
Chlornitromycin capsules 0.25 grams, container of 16	" " " 5
Chlornitromycin syrup 5 percent, 50 gram container	" " " 5
Chlornitromycin dermatological ointment	" " " 5
Chlornitromycin eye ointment	" " " 5
Chlornitromycin B complex capsules, 0.25 grams, cont. of 16	" " " 5
Chlorpropamid tablets 0.1 gram, container of 100	" " " 5
Chlorpropamid tablets, 0.25 gram, container of 30	" " " 5
Chlorphasolin tablets 0.15 mg, container of 50	" " " 5
Chlorphasolin ampules, 0.1 mg. 1 ml	" " " 50
Cholagon pills, 0.25 gram, container of 50	" " " 5
Centrophenoxin capsules 0.1 gram, container of 30	" " " 5
Centrophenoxin sheet tablets0.1 gram, container of 30	" " " 5
Cephalexin sheet tablets 0.25 grams, container of 20	" " " 5
Cephalotin, 1 gram flask	" " " 50
Cytiton ampules, 0.15 percent, 1 ml	" " " 50

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DEVELOPMENT OF AGRARIAN ECONOMY SINCE 1944 REVIEWED

Sofia SPISANIE NA BULGARSKATA AKADEMIYA NA NAUKITE in Bulgarian No 4, 1980 pp 52-61

[Article by Prof Nikola Palagachev: "Development and Achievements of Agriculture in the Course of 35 Years of People's Regime"]

[Text] The 9 September 1944 victorious uprising is the most profound revolutionary event of the entire almost 1,300-years-old Bulgarian history. It marked the defeat of the fascist dictatorship, the overthrow of the bourgeoisie and the victory of the democratic forces rallied within the Fatherland Front, headed by the communist party, who assumed responsibility for the further fate of the country.

In the course of 13 centuries Bulgaria has had a number of general or partial revolutions. The acceptance of Christianity in 865 and the beginning of the dissemination of the Slavic-Bulgarian alphabet were of revolutionary significance. The liberation of the country from the Turkish yoke, which put an end to the feudal system and gave scope to the development of the bourgeois society, was another social revolution.

However, against the background of all historical events the 9 September revolution is of outstanding grandeur as the most decisive and broadest possible revolution which not only defeated fascism and capitalism but became an event leading to the implementation of the loftiest aspirations, strives, and hopes of the brightest minds of the country and of the fighters for freedom and progress during the centuries. The 9 September victory laid the beginning of deep changes which marked a turn in the overall course of all previous Bulgarian history.

These have been 35 years of free creative life. Revolutionary changes on the way to socialism are continuing in all the areas of the material and spiritual building of a new life in Bulgaria.

The changes which occurred in the development of Bulgarian agriculture play a particular role in the overall constructive progress. This special role is defined not only by the great successes in agricultural output. The socialist reorganization of agriculture occurred with the creative application of the Leninist cooperative plan. It became a leading experience, a contagious experience for many countries.

Great difference in agrarian relations and in the levels of development of agricultural production exist in the various parts of the world.

The changes which took place in the development of Bulgarian agriculture on the way to its industrialization indicate one of the means for the reorganization of small private farming aimed at the effective solution of the complex agrarian problem under Bulgarian conditions. At all times the agrarian problem has been one of the theoretically most complex and most acute political problems most closely affecting the destinies of millions of rural people. In practical terms, the progressive and democratic structure of agrarian relations remains one of the most important and most sensitive problems of our time. The new way and example indicated by the socialist countries in this respect are among the most significant phenomena in the historical development of the world after 1917.

The Bulgarian People's Republic as well took this new path of development. In the course of the past 35 years it changed from a backward agrarian country into an advanced industrial-agrarian state.

At the end of World War II, following the victory of the people's system on 9 September 1944, the state's policy was directed toward the following objectives: insuring the feeding of the population by achieving at a faster pace the satisfaction of consumption requirements based on scientific nutrition norms; meet the needs of industry for agricultural raw materials; intensify Bulgaria's participation in the international division of labor by steadily increasing exports of agricultural commodities, both fresh and processed; and resolve within a short time the social problems facing the Bulgarian countryside through the elimination of major disparities between town and country and between agricultural and industrial labor.

Small private farming was unable to meet such requirements. It had to be converted into large-scale, mechanized and highly profitable farming.

The socialist reorganization of agriculture in our country was completed relatively quickly. The difficulties paralleling this reorganization were successfully surmounted as well. A decisive role in this respect was played by the clear theoretical line provided by the BCP and its leader G. Dimitrov, which emphasized the following basic stipulations:

The main prerequisite is available: A people's democratic system, headed by the powerful alliance between the working class and the toiling peasants with the leading role of the workers;

The nationalization of the land is not a mandatory prerequisite for the socialist reorganization of agriculture. The preservation of the private ownership of the land and rental payments do not hinder but assist the cooperativization process;

The agrarian reform eliminated the biggest land owners. However, it was unable to eliminate small-scale farming or to heal its organic ills: poverty, hired labor, leasing of the land and other forms of exploitation;

Under socialism the nature of the cooperative changes. Cooperative organizations and enterprises assume a socialist nature. They become similar to state enterprises despite certain differences;

Given the existence of the Soviet Union and its powerful industry, the socialist reorganization of Bulgarian agriculture became possible without awaiting the process of industrialization as was the case with the collectivization of Soviet agriculture.

The scientific analysis provided by G. Dimitrov of the general and the specific aspects of the socialist reorganization of agriculture eliminated unnecessary confusions and hesitations. The specific conditions of Bulgarian agriculture merely concretized the ways and means without reducing the effectiveness of the general principles governing the application of Lenin's cooperative plan. Thus, Lenin's general concepts obtained a new development and increased their power and influence over the reorganization of the old Bulgarian agriculture.

By providing an accurate theoretical substantiation of these basic landmarks, G. Dimitrov directed the party along the true practical way for the solution of one of the most difficult problems facing the economy of any country—the agrarian problem.

When we speak of the structuring and development of our cooperative system, we must not forget the particularly valuable experience of the peasants in the area of the cooperative movement. Long before the people's victory the peasants extensively participated in the development of various types of cooperatives, including production cooperatives. Under the influence of developing socialism in the USSR, before 9 September 1944 our country had set up over 40 production agricultural cooperatives of which 29 had remained by 9 September 1944. Thus, under the leadership of the BCP, the development of the cooperative movement in our country in the areas of credits and consumption was extended to agricultural production as well. Under the bourgeois system and capitalist conditions, the agricultural production cooperative appeared in our country following the example of the kolkhozes. Along with the remaining cooperative organizations it assumed its position as an economic organization aimed at unifying the progressive forces in the Fatherland Front. It became an effective school for the reeducation of the peasants in a collective spirit. Such party activities yielded abundant results: A tremendous capital was accumulated which, under the people's system, provided a powerful impetus and accelerated the cooperativization of the farms.

The great popularity and influence of and faith in the BCP in the villages was a powerful factor for the accelerated process of the socialist reorganization of agriculture in our country. At this point let us strongly emphasize the role of the people's intelligentsia, raised by the party and tempered in battle, rallied within the union of Bulgarian agronomists, systematically fighting in defense of the rights of the peasants, educating and directing the specialists, starting with the university, loyally to serve the people. The members of the society led the progressive mass organizations of tobacco growers, vine growers, livestock breeders, the cooperative organizations in the villages, and so on. Trained in this fighting school, and having participated in the struggle waged

by the entire people against facism, agronomists, veterinarians, teachers, and cooperative workers enthusiastically began to work, with the dawn of freedom, for the reorganization and development of Bulgarian farming. This played an important role not only in the pace of cooperation but in the collective management of the TKZS [Labor Cooperative Farms] and the DZS [State Farms].

The development of Bulgarian agriculture may be divided into five stages in terms of concentration, specialization and integration:

The first stage (1944-1948) may be described as that of restoration: surmounting the damages caused by the war period.

The second stage (1949-1952) is a revolutionary period in agricultural reorganization. It was a time of the first mass collectivization and over 60 percent of the land to be brought into the cooperatives became socialized. Machine-tractor stations (MTS) were set up. Socialist ownership of productive capital became the standard base for industry and agriculture.

The third stage (1953-1958) was that of strengthening and further cooperativization of agriculture. It was a period of the total victory of socialism in the Bulgarian countryside. This concluded the overall cooperativization and socialization of production in agriculture on a socialist basis. The material and technical base expanded and the disparity between the development of production forces and existing production relations was largely surmounted. This could be accomplished thanks to the substantial material aid provided by the USSR during that period through deliveries of agricultural equipment.

The fourth stage (1959-1969) was the stage of the further strengthening and concentration of production into larger production units and enterprises, conversion to high-pace production intensification, increased specialization and enhancement of the effectiveness level. The average size of agricultural enterprises (TKZS and DZS) rose from 3,000-12,000 decares by 1958-1960 to 38,000-42,000 decares of arable land. During that period a sharp increase in the role of chemization, irrigation and mechanization was the main line of intensification. In 1965-1967 7.5-12.6 kilograms of chemical fertilizers (in terms of active agent) were applied per decare of cultivated land. Bulgarian and foreign high-yielding and high-grade strains were applied. Qualitative changes in the material-technical and production base and the combination of biological factors with chemization, irrigation and mechanization, achieved in that period, led to high and relatively stable yields from basic farm crops.

The fifth and current stage began in 1970. Its characteristic features are even higher rates of production intensification with the accelerated application of industrial technologies and production and management methods. The April 1970 BCP Central Committee Plenum adopted an expanded program for a new concentration of agriculture and for its development on an industrial basis. The Agroindustrial Complex (APK) was established as the basic form of concentration of agricultural production at this stage.

The Agroindustrial Complex is developing as the basic organization through whose continuing development the following basic problems are resolved:

The improved location and acceleration of the process of specialization and concentration as the base for large-scale machine production in farming;

Improved agricultural integration and integration between agriculture and the other sectors of the national agroindustrial complex;

The resolution of the economic, social and living problems which equalize the conditions between town and country on a high scientific and technical level in accordance with the requirements of the developed socialist society;

The training of cadres--managers, specialists and operational--for industrial agricultural production.

According to NAPS [National Agroindustrial Union] data in 1979 agriculture was organized in big agricultural enterprises as follows: agroindustrial complexes (APK) numbering 275, with an average size of arable land of 131,300 decares; scientific-production viticultural-wine-making complexes (NPLVK): eight with 145,100 decares; a fruit and vegetable complex with 309,200 decares; NPK [Scientific-Production Complex] and DSS [State Seed-Growing Farms] of the Grade Seeds DSO [State Economic Trust]: 34 with 38,400 decares; NPK of the NPO [Scientific-Production Trust] for cattle and sheep breeding: 14 with an average size of 36,000 decares of arable land.

The APK are the basic territorial economic units which are systematically and purposefully acquiring a system of intensive industrial agricultural production. Consequently, the establishment and development of the APK will contribute to the solution of the basic problems related to building a developed socialist society.

The solution of the agrarian problem, the industrialization of the country, the development of agricultural science and the training of specialists offered opportunities for the utilization of resources and provided scope for the steady improvement of technology and the application of technical progress in agricultural production.

Agricultural science plays a decisive role in determining the possibilities of available resources and technologies. Its development is most closely linked with the development of socialist agriculture and the achievements of world science. The agricultural scientists are extensively using the experience and discoveries of other countries and are developing themselves specific scientific problems related to our agricultural production. The country has a widespread network of 56 scientific institutes and experimental stations in the field of agriculture. They have specialized in accordance with typical natural and economic conditions. They employ over 1,800 scientific workers. Under the people's system agricultural science in Bulgaria was able to achieve considerable successes. So far, 484 Bulgarian strains and hybrids have been developed, 284 of which have been applied. After investigation under our conditions, a number of foreign strains and hybrids of corn, wheat, sunflowers, barley, and others have been used as well. Soviet Bezostaya 1, Avrora, and Kavkaz wheat strains and Peredovik, Smyana and Mayak sunflower strains have become quite popular.

New industrial technologies have been developed and are being applied for growing wheat, corn, sunflowers, tobacco, cotton, grapes, vegetables, and others. Our selected strains come close to the best world standards. Particularly valuable are the winter wheat strains Sadovo 1, Ludogorka, Levent, Rusalka and others, the Knezha corn hybrids, and cotton, tobacco, and other crop strains.

Large-scale soil maps have been charted (1:25,000 and 1:400,000) and the availability of variable forms of nutritional elements in the soils has been established. The building and equipment of the Soil Fertility Institute were expanded in cooperation with the FAO. The institute is engaged in soil studies domestically and abroad.

Considerable successes have been achieved in the area of plant protection. The most successful methods for fighting crop diseases and pests are being used. A beginning has been laid to the development of suitable and means for waging the struggle with biological agents.

Our animal husbandry science has made a practical contribution to the development of new and highly productive farm animal breeds, animal nutrition, and so on. Bulgarian veterinary science has achieved great accomplishments as well. Particularly noteworthy is our experience in the development of new breeds of farm animals. The specific complex scientific collectives which were organized developed within a short time valuable highly productive breeds of cattle, sheep, hogs, and other farm animals.

The agroeconomic science developed a number of basic problems of large-scale output. Zoning, forecasting, price-setting, payments, norms, and others are of decisive importance to the victory of the cooperative system and the intensive development of agriculture.

The successes and scientific achievements of ouragriculture are directly related to the development of a system of specialized scientific research institutes and experimental stations.

Bulgarian agricultural science is most closely linked with the intensification and industrialization of agricultural output. The participation of Bulgarian scientists and specialists in the training of agricultural cadres in higher educational institutions and in secondary and practical schools plays a particular role in this direction.

Bulgarian agricultural science and cadre training developed and are continuing to develop dynamically in very close cooperation with world science and practice.

The major and basic structural changes which occurred in Bulgarian agriculture were accompanied by a radical change in technical facilities. Forces and means were focused on irrigation, chemization, mechanization, use of new crop strains, and accelerated upgrading of livestock breeds. Let us strongly emphasize the efforts made to insure the comprehensive use of these four directions of technical progress in farming with a view to obtaining maximum results.

Table 1. Development of Agricultural Intensification

	1952	1960	1975	1978
Capital investments in agriculture per 100 hectares arable land, leva	1561	7801	16472	16627
Tractors (in terms of 15 hp) per 100 hectares arable land, number	2.6	8.3	28.8	32.1
Chemical fertilizers in pure substance per 100 hectares arable land, kilograms	415	3206	14327	15586
Total output per 1,000 decares arable land, leva (comparable prices)	34000	52000	102559	106260

[1]"Statisticheski Godishnik na NRB" [Statistical Yearbook of the Bulgarian People's Republic], 1979.

The productive capital per hectare of arable land rose from 362 leva in 1939 to 1,270 leva in 1975. From the qualitative viewpoint the changes are even more startling. The bulk of the old and primitive capital assets was replaced by new and more advanced tools: draft cattle, and iron and wooden plows were replaced by tractors; animal-pulled carts were replaced by motor vehicles; pack animals were replaced by machines, and so on.

In about 25 years the number of tractors (on the basis of 15 hp) rose by a factor of 15: from 8,657 in 1950 to 136,551 in 1975. Until 1950 there were no combines in agriculture. Today there are 22,562. In 1970 there were 63 hectares of arable land per tractor (15 hp); the ratio rose to 35 hectares in 1975, thus reaching the level of other countries whose ratios are as follows: GDR, 34.5; Czechoslovakia, 27.4; France, 17.9; Britain, 20.9; Italy, 28.0; and United States, 36.7 hectares.

The development of the material and technical base and of production forces in agriculture took place rapidly. All agricultural intensification factors have been developing at a fast pace (see Table 1).

Between 1960 and 1975 power availability in agriculture quadrupled. It doubled within a 10-year period (1965-1975) (see Table 2).

Table 2. Power Availability in Agriculture (per 1,000 decares arable land, hp)[1]

Year	All category farms: Mechanical engines and draft cattle	All category farms: Including mechanical engines
1956	42	27
1960	65	56
1965	104	97
1970	148	142
1975	199	194
1978	229	224

1. Statisticheski Godishnik na NRB, 1974, 1976, 1979.

Table 3. Overall Agricultural Output[1] with 1960 = 100

Year	Total	Per Capita	Crop Growing	Per Capita	Animal Husbandry	Per Capita
1960	100,0	100,0	100,0	100,0	100,0	100,0
1965	117,1	112,2	112,1	107,5	127,3	121,9
1970	138,6	128,4	133,3	123,5	149,5	138,5
1975	160,1	144,3	144,1	130,0	191,2	172,5
1978	165,6	147,9	143,9	128,5	206,8	184,5

1. Statisticheski Godishnik na NRB, 1961, 1966, 1976, 1979.

Table 4. Yields and Productivity of All Category Farms, Average by Period[1] (per hectare, kilogram, pieces)

Indicator	1934 - 1939	1961 - 1965	1966—1970 г.	1971—1975 г.	1976—1978 г.
Wheat	1246	1811	2743	3380	3748
Corn	1171	2509	3653	3968	3813
Sunflower	830	1336	1685	1699	1670
Sugar beets	15720	20544	32280	29276	28212
Tomatoes	23670	30091	28993	28050	25601
Milk per cow	450	1453	2211	2264	2245
Wool per sheep (grams)	1511	2429	3300	3800	3819

1. Statisticheski Godishnik na NRB, 1979.

The growth and qualitative changes of production forces in agriculture triggered substantial changes in the volume, structure, and pace of agricultural production (see Table 3).

The increase in agricultural output was achieved through intensive means only--by raising yields and animal productivity and increasing labor productivity (see Tables 3 and 4).

Thanks to the comprehensive use of science and technology, agriculture is successfully developing and has achieved remarkable successes in terms of the growth of overall output and increased production effectiveness. On the basis of comparable prices, between 1939 and 1976 overall agricultural output rose by a 2.5 factor. Between 1960 and 1975 overall agricultural output rose 161 percent while overall food output rose 289 percent. In terms of current prices agricultural output per capita rose from 309 leva in 1960 to 495 leva in 1970 and 557 leva in 1975.

Compared with 1948 the 1975 national income from agriculture had nearly quadrupled (3.8). It was double the 1960 output. Between 1960 and 1977 exports of agricultural commodities rose by a 2.5 factor or, together with food industry exports, by a factor of 4.8.

Bulgaria has increased its food production considerably. Thus, for example, on a 5 year average (1966-1970), compared with 1961-1965, its food production rose 131 percent whereas other averages were as follows: global, 115 percent; GDR, 120 percent; Hungary, 116 percent; Czechoslovakia, 114 percent; United States, 113 percent; France, 112 percent; Greece, 126 percent. Compared with 1961-1965, the same output for the 1971-1975 rose 139 percent in Bulgaria, 129 percent globally, 134 in Czechoslovakia, 132 percent in the GDR, 145 percent in Hungary, 127 percent in the United States, 125 percent in France, and 148 percent in Greece. Average productivity of basic crops and livestock increased several hundred percent compared with the prewar level. In terms of average wheat, corn, and sunflower yields Bulgaria ranks with countries with the highest average yields such as Denmark, The Netherlands, France, Canada, the United States, the GDR, Hungary, and others.

Labor productivity in agriculture has been rising steadily. It rose by a 3.7 factor between 1961 and 1975.

In 1978 there were about one million people employed in agriculture or 24.5 percent of the total working force in the country. However, it accounted for over 36 percent of all commodity stocks in domestic trade and about 30 percent of exports. Between 1976 and 1978 the average output from a total of 47 million decares of arable land was as follows: grain, 8 million tons; fruits, 2 million tons; vegetables, 1.6 million tons; meat, 700,000 tons; and oriental tobacco, 118,000 tons. Achievements in the development of agriculture and the food industry enabled us to successfully resolve two basic problems of our national economy: first, to insure the supply of the population with farm products, fresh and processed, in accordance with enhanced living standards; second, to allocate considerable quantities of agricultural products for export. In terms of the production of basic food products per capita the Bulgarian population is far above average global data and is equal or close to the levels of the most developed countries. The production of some goods per capita in the world and in the country in 1976 was as follows:

	Global	Bulgaria
Grain	378	978 kilograms
Meat	29	84
Milk	107	207
Eggs	5.9	10.6

The highest indicators for grain are those of the United States with 1,200 kilograms, Denmark with 1,165 kilograms, and Sweden with 670 kilograms. For meat the highest indicators are those of Denmark with 212 kilograms, The Netherlands with 130 kilograms and the United States with 116 kilograms. For milk: Denmark with 1,025 liters, The Netherlands with 768 liters and France with 564 liters.

The rates of increase in the production of food clearly indicate that by 1980 the scientific nutritional norms will be reached for basic staples; in the case of individual products this will be achieved in the 1981-1985 Five-Year Plan (see Table 5).

Table 5. Nutritional Norms and Consumption of Basic Food Products (kilograms, pieces, liters)

Product	Scientific norms based on December program	1978	
		Per capita Production	Per capita Consumption
Meat and meat products	80.0	82	61.1
Fish and canned fish	10.0	..	7.0
Milk and dairy goods	360.0	220	156.9
Eggs	265.0	252	197.0
Vegetal oils	13.0	..	14.1
Flour	100.0	300	155.6
Rice	4.0		4.2
Beans and other leguminous	6.0		4.0
Sugar and confectionary goods	32.0		35.0
Vegetables, total	180.0	200	93.8
Potatoes	40.0	44	23.1
Fruits, total	200.0	230	112.5

An entire set of indicators characterized strength and dynamics of our socialist agriculture. A great deal has been achieved compared with capitalist Bulgaria and with a number of nonsocialist countries throughout the world. However, looking ahead and assessing our achievements on the basis of the criteria of mature socialism, our conclusion would unhesitatingly be that such achievements are merely one of the numerous important steps of progress. Displaying new tireless revolutionary enthusiasm, the party is opening new horizons and pointing at new peaks. Age-making new scientific accomplishments of the human genius are being implemented in the socialist society and consciously used for the good of man. The new horizons in agriculture are particularly important today, when the peoples of the world are struggling for the preservation of the peace and against unemployment, poverty, food shortages, harmful living conditions, environmental pollution, housing shortages, and so on.

Today the world's population exceeds four billion of which about 40 million die of hunger every year. Predictions indicate that by the year 2000 the population on earth will total 7.5 billion. In order to maintain the present nutritional level agricultural production must be doubled. As a result, one billion people will be hungry and the number of those who die of hunger will rise from 40 to 80 million people. In order to improve human nutrition throughout the world the production of food must at least quadruple. These most general figures alone indicate the great importance of agriculture.

This makes the successes of our socialist agriculture even more important as the basis for the future development of our output.

The forecasts on the development of agriculture and the food industry by the year 2000 are based on the scientific and technical achievements of Bulgarian and global agricultural science. In most general terms, scientific predictions are characterized by the following indicators: By the year 2000 overall agricultural output will rise by a 2.2-2.5 factor compared with the 1971-1975 average annual data while net output will rise, respectively, by a factor of 2-2.3. Such predictions are based on the rational utilization of land, water, and fuel resources in the country and the steady improvement of current and future farming technologies. They call for the conservation of labor and materials per unit of output through improved biological, technical, organizational, economic and social production factors.

Current experience in this direction confirms the reliability of the indicators included in the forecast and the plans. In 1977 alone agriculture and the food industry applied 244 scientific and technical accomplishments with annual economic savings totaling 150 million leva. The more important among them are the following: 188 new or improved technologies with annual savings of 60.8 million leva; and 14 new or improved various crop strains with annual savings of 40.2 million leva.

The scientific and technical forecasts formulated for 1990-2000 call for the application of scientific achievements in production yielding considerable savings. This includes new soil cultivation systems, 114,000 leva; new wheat strains, 80,000 leva; cold-resistant grapevines, 5.6 million leva; new irrigation technology, 10.6 million leva; technologies for industrial tomato production, 11.4 million leva; technologies for industrial fruit production, 8.2 million leva; and technology for industrial fodder production, 10.2 million leva.

The basic directions followed in the development of science and technical progress in agriculture in the Eighth Five-Year Plan (1981-1985) and through 1990-2000 are the following: To insure the most rational utilization of the land and the biological possibilities of farm crops and livestock. Priority will be given to research for determining the genetic-production classification of soils, regulating circulation of nutritional substances in the soil for the development of optimum fertilizer norms; the improvement and development of new industrial technology in crop growing; the application, development, and utilization of new strains; the intensification of research on biological means for fighting diseases and pests; the establishment of a biologically and economically optimum irrigation regimen and the extensive application of highly productive machine systems; the improvement and development of new industrial technologies in animal husbandry and fodder production, and the expansion and improvement of hybrid animal husbandry.

Cadre training--scientific workers, specialists with higher and secondary training and highly skilled production experts--will face new requirements.

The implementation of the 1990 program, on a longer-range basis, will greatly depend on the resolution of the problems facing Bulgarian science and its successful cooperation with world science.

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RESULTS OF COAL RESERVES STUDIES DISCUSSED

Sofia SPISANIE NA BULGARSKATA AKADEMIYA NA NAUKITE in Bulgarian No 4, 1980 pp 31-45

[Article by Academician Yovcho S. Yovchev: "On the problem of Bulgarian Raw Material Fuel-Energy Potential Related to Extractable Coal Discovered in the Country"]

[Text] Following the liberation of Bulgaria from the age-old yoke of the Ottoman Empire, one of the many problems to be resolved by the young capitalist state was the study of the geological structure of the country with a view to the search for minerals. Naturally, even under the Turkish rule, particularly following the powerful development of capitalism which began following the French revolution, the problems of the raw material base in the highly developed capitalist countries were among the first requiring a solution for such development. Naturally, even before that time countries such as England (one of the most developed countries at that time) were interested in this problem which was the basis for the development of great interest in colonies displayed both by England and the remaining capitalist countries. It is particularly now, in the age of development of imperialism, that the factor of extractable raw materials is of decisive global significance which could be noted today by any politician, economist, or even common man, for the latest crises developing today under capitalism are also related to raw material problems.

Published data show that before the liberation of our country scientists from the Western countries came to study the geological structure of the Balkan Peninsula ruled by the Ottoman Empire. They included scientists from France, Germany, and Austria-Hungary, countries which, to one or another extent, were interested in the raw material problem as a main factor. However, studying the geological structure as a first stage, they greatly contributed to the study of Balkan geology.

These studies made it possible to undertake, as early as the 1860s, an attempt to summarize Balkan geology. This was most successfully accomplished by the French geologist Ami Boue who synthesized the material in such a way as to chart the first geological map of the Balkans.

It is accepted that the beginning of studies of the geological structure and of minerals in the country started in the 1880s, following the appointment of

the first geologist in the country, G. Zlatarski. However, due to the lack of funds unavailable to the Bulgarian youth, he was unable to organize and develop geological studies in Bulgaria. He studied individual problems of the geological structure of the country and publications on geological research in the Balkans. His main task, however, as head of the geological service, was to supply information to those who were interested at that time in the opening of quarries and chart and protect perimeters.

At the beginning of the 20th century a small number of geologists began to work more intensively on the geological structure of the country, particularly when the work was joined by Professors G. Bonchev, L. Vankov, St. Bonchev, and others.

At that time G. Zlatarski was intensively working on summarizing the published geological material, as a result of which he charted the first geological map of the country on a scale of 1:300,000. Naturally, however, the studies were conducted within the limits of the possibilities of the state and of the necessary financial means used for the procurement of equipment and cadre training. However, the state was unable to allocate the necessary funds for major geological studies of minerals and the discovery of coal, ore, and nonmineral deposits.

Let us note that almost simultaneously with the charting of the geological map by G. Zlatarski, the Serbian geomorphologist and geographer Yovan Tsviych, working on Balkan geomorphology, visited Bulgaria, as a result of which he provided the first morpho-tectonic geological outline of the country which consisted of a morpho-tectonic zoning.

Still at that time individual coal and, partially, ore extraction were taking place on a significant scale. Somewhat later more significant coal extraction was developed, for the needs of the railroads increased and in order to avoid coal imports.

However, a considerable impetus in the exploitation of minerals was noted after the first imperialist war, between 1918 and the liberation of our country from capitalism and fascism on 9 September 1944. Within this relatively long period coal extraction for domestic needs, mainly for railroad transportation and, partially, for fuel for the urban population, increased. Many new private and a lesser number of state perimeters were developed, including coal basins and ore deposits most of which exploited by private and foreign capital. At that time the biggest coal extraction areas were the Pernik State Mine followed by Bobov Dol, Maritsa-Zapad, Pirin, the Burgas Mine and the Balkan Mines.

However, even at that time reserves of coal and ores, for whose study the necessary funds were not allocated, were insignificant. The Pernik State Mine alone had greater funds available as a result of which that basin showed certain industrial deposits. Somewhat later, toward the end of the period, certain yet minor studies were undertaken of coal deposits in other state mines and even in some privately owned deposits.

A similar situation prevailed in the case of ore deposits, even though the scale of prospecting within that period was considerably lower. The Granitoid Company alone allocated some funds for studies. This led to the discovery of possibilities at the Pirin Mine and the ore deposits in the Rodopi Mountains.

In the interest of truth we must note, when discussing cadre possibilities in the area of the extraction and study of minerals and the detailed study of the geological structure of our lands, that the country had relatively well-qualified engineers and technicians, particularly in the period following World War I. They included engineers Konyarov, S. Toshkov, B. Radoslavov and many others. Some of them, studying the problems of the geology of minerals and their forecasts, wrote a number of interesting summarizing works. For example, Engineer Konyarov wrote interesting works on coal and iron ore deposits; Engineer S. Toshkov was the first to write a book on mineral ores. Many other engineers published individual articles on the extraction of minerals and, in some cases, on their geology.

During that period a substantially greater number of works were published on the country's geological structure. Particularly noteworthy were the works of scientists and geological specialists such as G. Zlatarski, G. Bonchev, L. Vankov, St. Bonchev, P. Bakolov, Str. Dimitrov, El. Koen, Ts. Dimitrov, Ek. Bonchev, V. Tsankov, B. Kamenov, R. Beregov, A. Yanishevski, Sht. Zhelev, and many others. This galaxy of scientists and specialists was the aktiv of our country engaged in the study of its geological structure before our liberation from capitalism on 9 September 1944. Let us note that other than the works of Konyarov and some others no major or serious summarizing works on mineals have been published.

Toward the end of that period there was no scientifically deeper synthesis of the geological structure of the country. However, the need for such a synthesis of the geological structure and of minerals became particularly urgent after 9 September 1944. That is why, on the recommendation of Soviet scientists and specialists, it was suggested that the geological service which existed until 1948, headed by Ts. Dimitrov, to be assigned such a summation on the basis of all available data related to the country's geology and mineral deposits. This was assigned to a collective headed by Dr Koen and Ts. Dimitrov, with the participation of Str. Dimitrov, Prof G. Bonchev, Prof V. Tsankov, Prof B. Kamenov and some others. The result of their efforts was a major work on the foundations of Bulgarian geology with a geological map on the scale of 1:500,000, charted by B. Kamenov and edited by El. Koen. This work was the basis for the establishment of the geological service and related to the further detailed study of the geological structure and minerals in the country. It has still not lost its scientific significance.

Such was the situation of the geological knowledge about the country and the state of the study of minerals before 9 September 1944.

Let us cite a few figures to illustrate the condition of the insufficient study of a great variety of minerals over this long period of capitalism following the liberation, for no such figures have been provided. Thus, for example, ore deposits, mainly polymetallic in the Rodopi ore deposit area were assessed at one million tons; copper ores, several tens of thousands of tons; iron ores, several hundred thousand tons; lignites, 214 million tons; hard coal, 150,200 tons; anthracite, several tens of thousands of tons. The annual output of all types of coal did not exceed 3-3.1 million tons; lignite extraction did not exceed 80,000-100,000 tons; brown coal, 2.7-2.8 million tons; hard coal, about 160,000 tons; and anthracite, about 15,000-20,000 tons.

Naturally, such reserves could not constitute a foundation for a socialist industry and, particularly, of heavy industry such as the power industry, metallurgy, chemistry, construction, and machine building, without which the development of the country's economy under socialist conditions was impossible. This made it necessary for the people's regime, the BCP Central Committee, the Fatherland Front and the government to resolve, as the first and immediate task, problems related to the development of the necessary mineral raw material base. This was undertaken gradually, after the people seized the power.

However, the decision of the Fifth BCP Congress provided at that time a particular impetus for the solution of the problem. It substantiated the need for the development of a socialist industry and the measures which had to be taken in mining and geological surveys. However, the development of this project in accordance with the implementation of these decisions in such a major area required large funds which were unavailable to our country at that time. Thus, for example, the need for funds, cadres, equipment, preparatory and laboratory facilities, and so on, required that the necessary steps be taken for normal geological surveys despite such difficulty conditions. Let us note here, yet once again, that the geological surveys conducted under capitalist conditions, particularly regarding the study of minerals, were on a very low scientific-methodical level. This particularly applied to the absence of any scientific-methodical base: the lack of highly skilled cadres and the virtual absence of equipment and instruments. Under such conditions we were unable to implement the decisions of the Fifth BCP Congress. These problems could be resolved only with Soviet help.

That is why we asked for USSR help which was granted. In order to carry out our assignments the country's geological service had to be reorganized on the basis of the new Soviet scientific principles governing geological work in the country, after which the general lines of work had to be earmarked along all basic directions. This included the detailed study of the country's geological structure, and geological surveys to determine the deposits of coal, ores, and nonmineral deposits the respective geological prerequisites and criteria for which existed in the country. In order to implement all this, at the beginning of 1948, following the reorganization of the geological survey service, we were given Soviet aid which, considering the particular urgency of the need to rapidly find and prove the existence of industrial deposits of nonferrous and ferrous metals, had to be used most efficiently. For this reason it was concentrated on the study of polymetallic deposits in the Rodopi Mountains and of copper in the Burgas area. To this purpose a Soviet geological expedition was set up consisting of Soviet and Bulgarian specialists. Later, toward the end of 1949, the expedition was assigned the study of petroleum and gas deposits in northeastern Bulgaria. Our geological survey service dealt with all remaining types of ores and with nonferrous metals outside the Rodopi ore deposits area and the Burgas ore deposits region. Tremendous geological survey operations were launched for virtually all types of minerals and for the geological mapping of the country on a scale of 1:25,000 and 1:100,000.

As a result of all this, at the beginning of the 1950s surveys for coal and ore and nonmineral deposits began to yield specific positive results: Coal reserves grew extensively and reserves of polymetallic ores, copper, ferrous metals and nonmineral deposits and construction materials increased sharply. Substantial

coal deposits were found in the already known East Maritsa Basin and in the other already known coal basins. The first petroleum deposit was discovered. Great reserves were discovered of gypsum, kaolin, fire-proof clays, and a number of other nonmineral deposits and sources of construction materials. In that period the basic deposits for the development of a ferrous metallurgy were discovered as well--the Martinovo and Krumovo iron ore deposits and, particularly, the Kremikovtsi deposits. This largely resolved the problem of the development of our ferrous metallurgy. At that time we also discovered industrial deposits of polymetal ores. This enabled us to develop our polymetal industry and the discovered copper ore deposits enabled us to develop our copper extraction industry, the chemical industry, and the construction industry, on a broad scale, particularly in terms of cement, fire-proof materials, the porcelain and glassware industries, and many others. The construction of a number of big coal mines and electric power plants was undertaken on the basis of the coal deposits.

The historical April 1956 plenum played a particular and a decisive role in this new major impetus given to the development of geological surveys and the development of heavy industry. We were helped by Comrade T. Zhivkov personally in the implementation of its decisions related to the geological survey of the country. This enhanced the enthusiasm of the geological surveyors, as a result of which the new petroleum and gas deposits were discovered in the central and western parts of northern Bulgaria. In connection with the developed geological surveys for petroleum and natural gas a number of survey drills were made leading to the discovery of the Dobrudzha coal basin with its very big coal deposits. Other such drills led to the discovery of substantial gypsum deposits in the vicinity of Vidin and Oryakhovo and of the big manganese ore basin near Obrochishte Village in Tolbukhin Okrug. All in all, the results of the search for petroleum and natural gas led to the discovery in northern Bulgaria of no less than 20 hot mineral water springs, mainly in the coastal areas of Varna and Tolbukhin okrugs.

The geological studies related to the mapping of the country resolved a number of important regional geological problems while the materials of the studies were summarized as a result of which a number of proper standard works were created together with a number of very important geological documents such as the various types of geological maps on scales of 1:25,000, 1:50,000 and 1:100,000. On this basis the following geological maps covering the entire country were charted and published: A 1:200,000 scale geological map of the country; a 1:200,000 scale tectonic map of the country; and a 1:200,000 scale gravimetric map. On the basis of these fundamental geological documents and materials obtained on the country's hydrogeology, a hydrogeological map of the country on a scale of 1:200,000 was issued together with two other specialized hydrogeological maps on a scale of 1:200,000.

Special metalogenic maps were charted as follows: Metalogenic zoning of Bulgaria on a scale of 1:500,000; metalogenic-forecast maps for ferrous and nonferrous metals on a scale of 1:500,000; forecast (area) maps on coal deposits and a petroleum-natural gas map on a scale of 1:500,000. All these metalogenic and other maps and the map of minerals on Bulgarian territory were based on the geological map on a scale of 1:500,000. All this shows that the foundations were laid for new directions in the search for basic types of minerals.

Since 9 September 1944 no less than 1,000 works have been published on the country's geological structure; the Central Geology Fund of the Committee for Geology received about 7,000 papers as a result of studies reflecting our work on geological surveys with a detailed study of the geological structure of the country and its minerals.

Today we may be proud of the 35 years of work of our socialist geological service, not only because of the creation of a raw material base for the development of the industrial power of the country, which is the main thing now, but also because through the study of the geological structure of the country we are offering a base for its study by the future generations, something not available to many other countries.

The tremendous achievements of our geological science and studies in the country earned universal recognition not only in the socialist but the capitalist countries. Currently the country's institutes are still extensively at work on scientific problems related to its geological structure and of directions aimed at the discovering of new deposits of numerous types of minerals, accomplished today under relatively more difficult conditions. Both in terms of geological studies, whose purpose is to discover and prove reserves, as well as problems of the country's geological structure, today we have great facilities through the use of the latest research methods, such as geophysics, which has developed in our country to a tremendous extent and has a powerful scientific and technical base, as well as through geochemistry, using the latest methods and proper laboratory facilities. The older methods such as the stratigraphic, structural, lithological, petrological, paleontological, chemical, and others are being steadily improved and used with the proper cadres, laboratories, and equipment.

Speaking of the cadres used in promoting the powerful development of geological studies, let us note that currently the army of geological prospectors in our country numbers from 10,000 to 12,000 workers, specialists and scientists, 2,000 to 3,000 of whom are engineering-technical personnel. Among the latter, geologists and geophysicists number over 1,000 people with higher education.

II

We already reported our achievements in the field of geological studies conducted since 1948. The purpose of this article, however, is to characterize most briefly the fuel and energy potential on the basis of extractable coal discovered in our country within that period.

Some 67 coal-bearing areas in the country were studied containing various types of deposits reflecting, to one or another extent, interesting coal-bearing features. In the overall number of areas studied in the country, broken down by individual types of coal, the picture was as follows: Deposits and basins of lignite were found in 15 areas considered of the greatest interest; deposits and basins of brown coal, in 5; deposits and basins of coal, in 8, among which the deposits of Vrushka Chuka in the Kula area, and Zeleni Grad in the Belogradchik area are considered exhausted; anthracite deposits and basins, in 3, of which the Draganitsa has been worked out.

The overall area of the studied coal-bearing areas in the country is shown in the data of Table 1.

Table 1.

(a) Площи	(b) Лигнитни въглища	(c) Кафяви въглища	(d) Черни въглища	(e) Антрацитни въглища
1. Обща площ на басейните, кв. км.	8000=100%	5896=100%	720=100%	215=100%
2. Площ на басейните, в които е проучено, кв. км	2500=30%	1202= 20%	240= 30%	20= 10%
3. Проучени площ с промишлени запаси	272= 3,5%	95,4= 1,6%	180= 30%	6,5= 3%
4. Площ за търсене на нови находища, кв. км	4250=54,5%	5024=83,5%	540= 46%	200= 93%

Key: (a) area
(b) lignite
(c) brown coal
(d) coal
(e) anthracite

1. total basin area, square kilometers
2. studied area of basins, square kilometers
3. studied areas with industrial deposits
4. area for searching of new deposits, square kilometers

On the basis of these studied areas the quantitative and qualitative deposit indicators may be determined in accordance with the data in Table 2. These data show that lignite deposits belonging to the industrial extractable category, together with forecast quantities, total 4,703,308,000 tons. Converted in terms of conventional fuel units (7,000 kilocalories), on the basis of variable and differentiated computations (from 1,300-1,600 to 2,500 kilocalories) these deposits show reserves of 914 million tons of coal in conventional fuel of categories $A+B+C_1$, and, respectively, 155 million tons for category C_2. The anticipated deposits of this type of coal, recomputed in conventional fuel, are assessed at 550 million tons.

All lignite indicators are assessed at 1,620,000,000 tons of conventional fuel.

The brown coal deposits shown in Table 2, computed on the same basis as the lignites, with a respective caloric value (3,500 kilocalories), for all categories, account for about 216 million tons of conventional fuel.

A recomputation of coal deposits as shown in Table 2, again in conven[illegible]l fuel for industrial and extractable categories, shows a total of 1,583,000,000 tons of this high-grade fuel. Adding to this indicator the coal reserves of the L-coking coal, also recomputed in terms of conventional fuel, conventions fuel reserves of such coal would total 2,200,000,000 tons. Naturally, this does not include forecasts which are not shown in Table 2 and which are currently assessed at about 600-700 million tons of conventional fuel.

Table 2

(1) Тип въглища	(2) Басейн, находище	(3) Балансови запаси по състояние 1. I. 1979 г.				
		(4) прост. изт. A+B+C₁		(7) перспект. изт. C₂		(8) общо A+B+C₁+C₂, хил. т.
		(5) хил. т.	(6) $A^{р}$, %	(5) хил. т.	(6) $A^{р}$, %	
(12) Лигнити	(13) Калчонски басейн	6803,9	29,7	—	—	6803,9
	(14) Разлошки басейн	62918,2	26,6	2120,4	32,6	65038,6
	(15) Кюстендилски басейн	25830,2	35,4	3225,0	39,0	29055,2
(16) Лигнити	(17) Ломски басейн	554278,0	36,0	1115839,0	39,3	1670117,0
	(18) Софийски басейн	889092,4	29,9	17877,0	26,7	906969,4
	(19) Чукуровски басейн	9244,6	31,1	—	—	9244,6
	(20) Бурелски басейн	44447,1	35,0	—	—	44447,1
	(21) Хребърски басейн	3164,1	24,6	—	—	3164,1
	(22) Алдомировски басейн	35677,8	39,9	7000,0	33,2	42677,8
	(23) Самоковски басейн	31969,0	27,6	—	—	31969,0
	(24) Станимски басейн	27903,1	27,7	—	—	27903,1
	(25) Източномарашки басейн	2791774,8	29,3	5774,1	32,8	2797548,9
	(26) Западномарашки басейн	156139,5	32,7	39446,0	28,7	195585,5
	(27) Елховски басейн	—	—	602901,0	30,3	602901,0
	(28) Карловски басейн	—	—	—	—	—
	(29) Всичко лигн. в-ща	4084964,7	29,7	678343,5	30,2	4763308,2
(30) Кафяви	(31) Оряхово-Свищл. басейн	9800,1	18,3	22126,2	21,9	31926,3
	(32) Пирински басейн	9314,3	33,8	—	—	9314,3
	(33) Черноморски басейн	65907,6	35,0	15520,2	26,0	81427,8
	(34) Бобошевски басейн	182307,4	34,1	34385,4	41,4	216692,8
	(35) Перущски басейн	57675,5	40,8	19455,3	38,0	77131,0
	(36) Рило-Доспейски басейн	101,6	36,0	—	—	101,0
	(37) Николевски басейн	8358,5	41,0	—	—	8358,5
	(38) Всичко кафяви в-ща	333465,0	33,1	91487,3	33,3	424952,3
(39) Черни	(40) Добруджански басейн	—	—	1200000,0	—	1200000,0
	(41) Проучв. у-к Сухострел	498,7	35,5	—	—	498,7
	(42) Зеленигрид	428,2	34,4	271,2	37,2	699,4
	(43) Горно Озирово	916,4	37,2	521,9	36,5	1438,3
	(44) Проучв. у-к Трън	289,0	32,7	—	—	289,0
	(45) Балкански басейн	23733,4	33,2	16354,4	30,6	40092,8
	(46) Проучв. у-к Сливница	29,2	44,6	—	—	29,2
	(47) Всичко черни в-ща	25899,4		1217147,5	30,8	1243047,4
(48) През 1980 г. се очакват нови прогнозни запаси, главно по Добруджанския басейн						
(49) Антрацити	(50) Стакевци					
	(51) Своченски басейн	173,1	32,0	—	—	173,1
	(52) Проучв. у-к Селце	9066,5	34,1	11895,0	36,9	20961,5
	(53) Всичко антрац. в-ща	851,3	26,3	—	—	951,3
		18190,9	33,3	11895,0	36,9	22085,9

(54). Запасите на Ломския басейн са заведени като експлоатационни поради сложни и специфични минно-технически условия и не са включени в общото количество на балансовото запаси към 1. I. 1979 г.

[Key on following page]

Table 2 (continued)

(9) Произнесени запаси	(10) Общи запаси, хил. т.	(11) Качествени показатели				
		S^r, %	C^r, %	V^r, %	W^p, %	Q^p, %
—	6803,9	1,08	67,5	49,1	41,7	2240
—	65038,6	0,81	64,8	55,4	39,0	2400
	29055,2	5,07	66,9	51,0	26,6	2560
100000,0	100000,0	1,53	64,7	54,9	44,1	1750
800000,0	1706969,4	2,50	64,5	52,0	48,5	1750
10000,0	19244,6	1,00	64,3	57,0	33,0	2530
	44447,1	1,71	60,9	61,0	47,5	1700
	3164,1	—	—	—	—	—
	42677,8	2,20	62,3	53,0	52,5	1230
	31969,0	1,59	—	47,8	54,6	1400
	27903,1	2,77	61,0	46,8	52,5	1570
	2797548,9	3,98	65,0	55,8	50—60	1600
100000,0	295585,5	5,0	64,5	54,8	40,0	1700
430000,0	430000,0	8,20	61,0	53,0	55,0	1550
60000,0	60000,0		—	—	—	—
2400000,0	6560407,2					
—	31926,3	2,80	66,0	48,3	80,4	3150
—	9314,3	2,15	70,8	47,8	15,5	4690
15520,2	81427,8	4,4[illegible]	68,8	50,0	20,5	3350
—	216692,8	2,37	72,7	46,2	15,2	3680
	77131,0	1,39	77,5	43,5	15,0	3440
—	101,0		—	—	—	—
—	8358,5	2,14	73,3	40,6	9,4	3970
15520,2	424952,3					
		0,73				5000
	1200000,0	5,46		22—49		7000
	498,7	3,13		28,8	2,1	5880
—	699,4	4,5	80,0	38,0		
—	1438,3	4,33	87,5	30,3	2,2	4580
—	289,0	3,46	82,5	26,7		
		1,5				
	40392,8	3,2	83—90	10—35	3—6	5000
	29,2	6,93	81,5	38,2	4,4	3230
—	173,1	3,48		3,1		
••	20981,5	0,48	95,8	5,1	9,0	4550
	951,3					
—	22085,9					

* При 1980 г. не бяхме изяснени геолого-структурните обстановки и перспективите на басейна.

(55)

[Key on following page]

Key to Table 2

(1) Type of coal
(2) Basin, deposit
(3) Balance reserves as of 1 Jan 1979
(4) Industrial category $A+B+C_1$
(5) Thousand tons
(6) A^c, percent
(7) Prospective category C_2
(8) Total $A+B+C_1+C_2$, thousand tons
(9) Forecast reserves
(10) Total reserves, thousand tons
(11) Quality indicators
(12) Lignite
(13) Kalchinski Basin
(14) Razlog Basin
(15) Kyustendil Basin
(16) Lignite
(17) Lome Basin
(18) Sofia Basin
(19) Chukurovo Basin
(20) Burelski Basin
(21) Khraburski Basin
(22) Aldomirov Basin
(23) Samakov Basin
(24) Stanyanski Basin
(25) East Maritsa Basin
(26) West Maritsa Basin
(27) Elkhovo Basin
(28) Karlovo Basin
(29) Total lignite
(30) Brown
(31) Oranovo-Simitli Basin
(32) Pirin Basin
(33) Black Sea Basin
(34) Bobov Dol Basin
(35) Pernik Basin
(36) Rila-Dospeyski Basin
(37) Nikolaevo Basin
(38) Total brown coal
(39) Coal
(40) Dobrudzha Basin
(41) Survey sector Sukhostrel
(42) Zelenigrad
(43) Gorno Ozirovo
(44) Study sector Trun
(45) Balkan Basin
(46) Study sector Slivnitsa
(47) Total coal
(48) New forecast reserves are expected mainly in the Dobrudzha Basin in 1980
(49) Anthracite
(50) Stakevtsi
(51) Svoge Basin
(52) Study sector Seltse
(53) Total anthracite
(54) The Lom Basin reserves are considered nonbalance because of complex and unclarified mining-technical conditions and are not included in the overall amount of balance reserves on 1 January 1979.
(55) The geological-structural circumstances and possibilities of the basin will be determined in 1980.

Therefore, according to the data for all coal categories converted into conventional fuel, the overall coal fuel potential may be assessed at four billion tons.

The connection between our coal basins and their reserves with the individual lithologo-stratigraphic formations and their age may be characterized by the following data: Lignites are related to Pliocene formations; the brown coal is almost exclusively related to deposits from the upper Eocene. The coal basins are related to the following: Old tertiary (a single very small deposit--the Sukhostrel), deposits of the upper cretaceous (the Balkan Coal Basin), and deposits of the middle and lower Jurassic--Lias-Dogger (Ozirovo, Tuden, Slivnitsa, and others), nonindustrial deposits; the coal basins and the anthracite deposits and basins are related to deposits of the upper Carboniferous.

The biggest reserves of lignite are concentrated in the following basins: Maritsa-Iztok, Sofia, Lom, West Maritsa and Elkhovo. The relatively biggest brown coal basins are the Pernik, Bobov Dol, Pirin and Burgas. The biggest coal basin is the newly discovered Dobrudzha Basin and the drastically smaller Balkan Basin. Small industrial deposits of anthracite are found in the Svoge Basin.

The breakdown of the coal basins indicates that 13 out of 30 okrugs have coal basins and deposits and 10 okrugs have more significant industrial deposits.

In terms of origin our coal may be graded as follows:

1. All lignite basins are of the so-called platform type--fresh water swamp-lake.

2. Brown coal basins are of the swamp-lake platform type. The Burgas coal basin alone is of the limno-brackish seashore-type or mixed-type basin.

3. Virtually all anthracite basins are of the geosynclinal type--sea coastal.

Genetically, in virtually all our basins the coal was formed from humus, i.e., the residue of higher vegetation. In the Burgas Basin alone the coal is partly humus and partly humus-sapropelic.

Basic data on the chemical-technological characteristics of the coal may be found in Table 2. Naturally, in this case we are unable to provide data on the chemical structure of the inorganic part of the coal (A_c).

The overall fuel-energy coal potential computed on the basis of kilocalories is assessed at over 28 trillion kilocalories.

III

In order to describe the contribution of our geological studies conducted in recent years on the discovery of new coal deposits, we must consider, even though in its most general aspects, the description of the Dobrudzha coal basin and its deposits confirmed 11 years ago. We believe this to be the greatest discovery made so far in the area of Bulgarian geological surveys.

In the course of our search for petroleum and gas in northern Bulgaria and, particularly, in the course of the special so-called support drills made in 1963, we came across strata bearing highly caloric coal in the area between Kavarna and Balchik, at a depth of 1,300 meters. We discovered about 60 seams some of which up to 10 meters thick. Some of the seams showed coking qualities. Coal was found in the upper carbonatious deposits spread over an area of no less than 200 square kilometers.

Let us note at this point that in the course of our search for petroleum and natural gas in northern Bulgaria such drilling enabled us to discover substantial deposits of manganese in the Oligocenic deposits (in the vicinity of Obrochishte Village, Tolbukhin Okrug), as well as substantial gypsum deposits in Vidin and Vratsa okrugs. New salt deposits were discovered, unfortunately located at a great depth (about 3,200 meters) not far from Omurtag. Let us also note that dozens of mineral and hot water mineral springs were discovered throughout

northern Bulgaria and, particularly, in the coastal areas of Varna and Tolbukhin okrugs.

Following the discovery of coal in the Dobrudzha Basin deep drilling was immediately undertaken for preliminary geological surveys, as a result of which by the end of 1969 some 60 drills had been completed and a tremendous amount of geological data had been collected, processed, and presented in a special report submitted to the Central Geological Fund of the Committee for Geology. Because of the depth of the coal seams and the great complexity of the geological structure of the basin, we asked the help of highly skilled Soviet specialists who, together with Bulgarian geologists conducted the studies and drafted the report. The study determined that the basin has substantial deposits of coal assessed at 1,200,000,000 tons of high-grade coal.

We are including here the composite diagram of the geological crosscut of the basin (Figure 1). This makes it unnecessary to describe the geological structure in this article, for the column of the crosscut offers an idea of the basin's geology and the coal-bearing strata in the individual layers of the upper carbonaceous.

At this point, however, we must pay attention to one of the greatest difficulties in the development of this big coal basin: the five water-bearing strata: in the Sarmatian, Eocene, Lower Cretacious and Upper Jurassic, Lower Jurassic and the Carboniferous complex. The thickest water stratum is the Malm-Valanginian, 500-700 meters thick, whose middle area is highly cavernous, filled with water with a very high flow rate. It is this layer that presents difficulties in the drilling of shafts. The second difficulty in developing the basin is its tectonic block structure (Fig. 2).

As shown in the crosscut, the coal in the upper carbonaceous deposits is found in three conrboniferous formations. The first, identified by the geologists as the N formation consists of seven coal seams of industrial significance with estimated reserves of about 300 million tons. The coal of this formation is high-caloric (6,000-7,000 kilocalories) but has no coking qualities. In the future, as the reserves of this formation are developed, they will be used as high energy raw material. This formation is in the uppermost part of the coal deposits.

The N formation is followed by the M formation. It consists of 12 thick seams which are also low sulfuric and high-caloric coal (6,000-7,000 kilocalories), slightly more metamorphized in some of the lower carboniferous areas. One of the manifestations of this fact is that through layering such coal could yield up to 30 percent of the overall coking amount. The M formation deposits are assessed at about 900 million tons. Therefore, the overall deposits of the N and M formations total some 1.2 billion tons, provisionally classified as category C_2.

Below the M formation is the L formation containing about 41 seams which are considered by the geologists industrially unuseable because of their thinness. Studies indicated that the seams of the L series have coking qualities. Nevertheless, until last year this series was not properly considered. Let us mention in this connection, however, that one of the basic stipulations determining the

the assessment of the deposits, and is considered one of the main criteria, is the thickness of the seam.

According to both Soviet and Bulgarian methods for computing reserves through the criterion of thickness, the minimum acceptable thickness is 0.8 meters for coal and 0.7 meters for coking coal. At the time of the geological surveys international coal prices were relatively low and coal extraction had declined in virtually all countries with the exception of the USSR, Poland, the United States and China who were gradually increasing their output. The reason was that the relatively inexpensive petroleum and natural gas products, produced on a global scale, were expected to satisfy for many dozens of years ahead the needs of mankind for fuel and energy and chemical raw materials. This view and the erroneous approach adopted in assessing petroleum consumption were the reason for which no serious attention was paid to the development of the Dobrudzha Basin or to the geological processing of the L formation deposits which were not estimated. In the course of our research related to the study of the geochemical structure of the inorganic component of coal in the country (A_c), including the Dobrudzha coal basin, looking at the materials of the latter we realized that the various data related to the computation of reserves and the overall assessment of the L series suffered from a very substantial shortcoming. The detailed study of the data contained in the respective documents enabled us to determine, together with Engineer Iv. Bozhinov, with whom we cooperated, that the L formation had the potential for great reserves of coking coal. Following the study of all data and the orientational computations, we were able to definitely determine that the reserves amounted to hundreds of millions of tons. I drafted a special report to Minister Prof Stamen Stamenov and to Candidate of Geological and Mining Sciences Y. Kunev, chairman of the Committee for Geology, along with suggestions I submitted on the determination of such reserves. Both agreed, as a result of which, in accordance with my suggestions, a collective was set up which will complete the work by the end of this year. The data so far processed, however, enabled us to determine the specific reserves of the L formation. Forty of the 41 coal seams of this series showed industrial reserves. On the basis of the previous standard (seam thickness in excess of 0.7 meters) new reserves were computed in the basin totaling 630 million tons of coking coal; as the result of the standards we developed, on the basis of the updatingof the old and the new price of coking coal and the great need of such coal, its international price, in terms of coke, equals that of petroleum. Our computations show that the minimum thickness of the seam could be reduced to 0.4 meters; hence, the computations based on thicknesses ranging from 0.4 to 0.7 meters proved that the reserves could be increased by yet another 280 million tons of coking coal. In other words, the overall reserves of the Dobrudzha Basin in the N and M formations, with the added reserves of the L formation, currently totals 2.1 billion tons, 910 million of which in the L formation possess coking qualities.

The adoption of a comprehensive approach to the assessment of the studies of the Dobrudzha Basin enabled us to determine that nearly all M seams had an overall average ash content (A_c) of 22 percent, had a high content of Al_2O_3, ranging from 30 to 37 percent. Preliminary estimates show that the reserves of dialuminum trioxide may total 15-20 million tons. We report this interesting fact, for in England the flushing of coal containing such a percentage of dialuminum trioxide

for coking yields a highly effective industrial product from which the highest grade refractory materials are produced.

Another factor which makes us approach the assessment of the basin on a comprehensive basis is that the study of the waters conducted by a Soviet specialist determined that the carboniferous waters contain a high percentage of minerals, even though of a low flow, including a great deal of salt (over 100 mg per liter) and very high contents of other valuable components. The final assessment factor which must be included in the overall assessment of the basin, in our view, is the possibility to use the great flow of Valangian waters which are an excellent material for irrigation and even for human consumption.

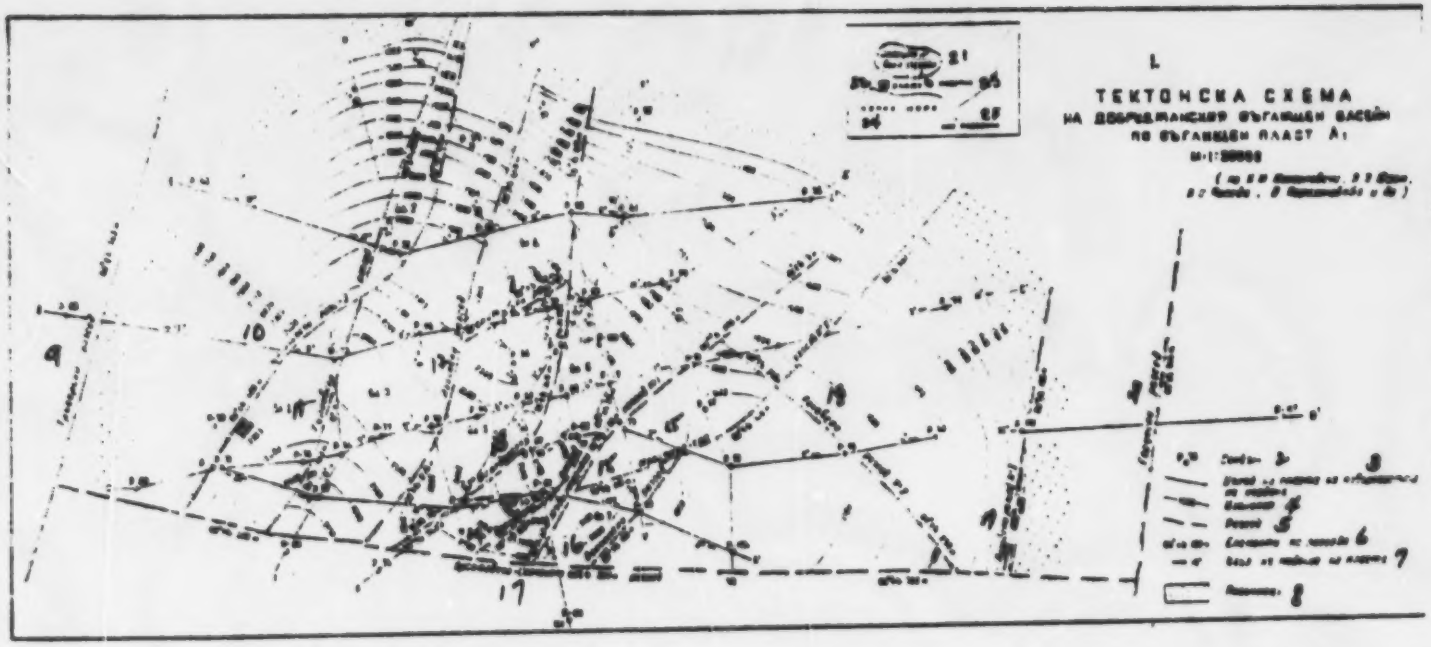
Presenting all these facts on the Dobrudzha Basin, regarding the development of the basin's reserves, let us mention that some of the areas may have reserves of several hundred million tons. Very great attention should be paid to this matter in subsequent studies of the basin even though, on our recommendation, the Committee for Geology has already begun the study of this matter. Hence the great tasks to be implemented in the further study of the basin related to the conversion of possible and forecast categories into industrial reserves, and, particularly, the complete clarification of all problems related to the determination of the hydrogeological and engineering-geological parameters required for planning purposes.

Let us point out in conclusion that the full determination of the industrial potential of this fuel raw material related to extractable coal calls for extensive additional geological surveys involving both the conversion of assessed coal reserves into industrial reserves and forecast results into assessed reserves and the discovery of new possible reserves. In this connection extensive scientific research must be conducted since an even more accurate foundation is needed for the geological surveying to be conducted by the geology institute of the Bulgarian Academy of Sciences and the Institute of Minerals of the Committee for Geology.

The overall studies must include as a particularly major problem the technology related to the study of the determination of the types of coking coal including those requiring layering. Let us add to such studies the need for further specification of the qualitative and quantitative indicators of the dialuminum trioxide not only in the M formation but in the N and L formations as well, as well as the extraction of the valuable components contained in the waters of the carboniferous formations.

For the time being, however, the major problem is that of selecting the places for drilling the shafts. Intensive work is being done in this area by the Committee for Geology and by Minproekt together with Soviet planning organizations.

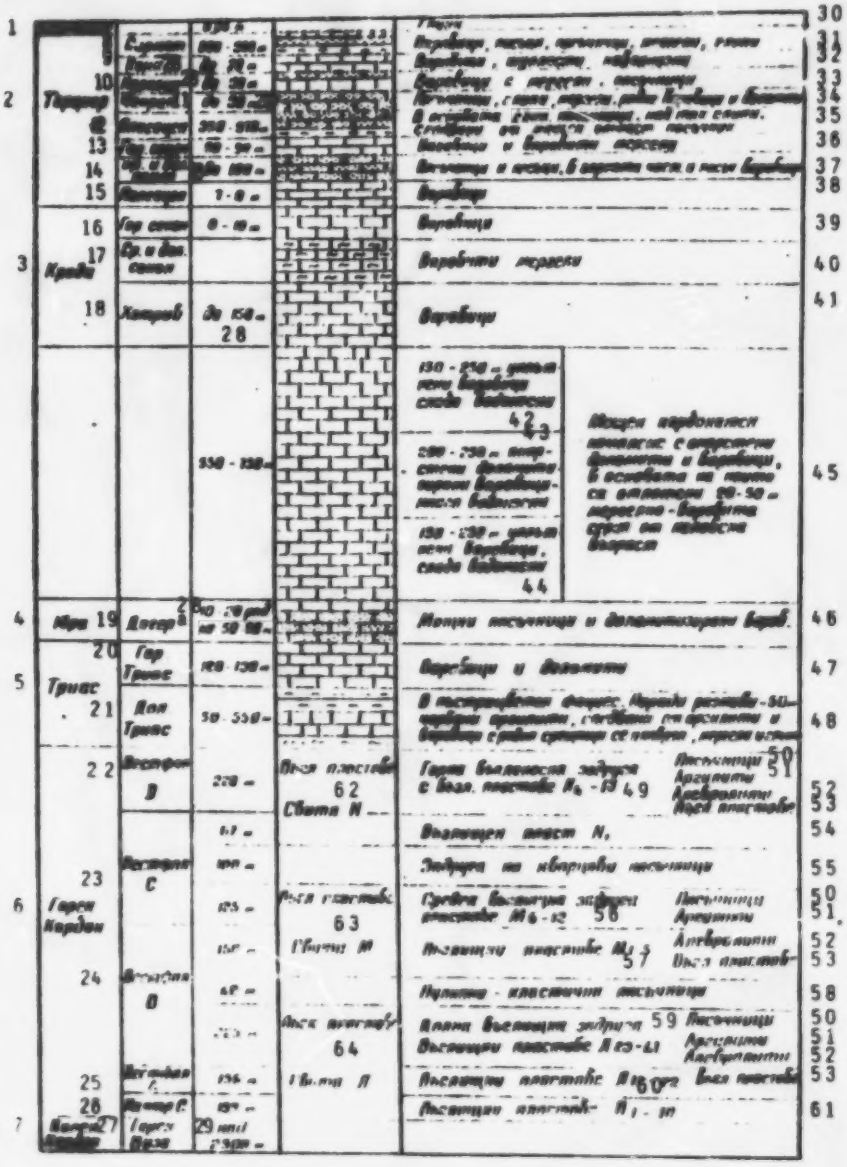
It would be desirable in the study, designing, construction, and development of the basin to use the latest technical and economic approaches, for this country does not have an abundant amount of coal even though following the discovery of the Dobrudzha Basin no other country in the Balkans has the type of coal discovered in our country.



Key:

1. Tectonic diagram of the Dobrudzha Coal Basin, L_1 coal seam; scale 1:50,000 (charted by N. M. Mozelevskiy, V. V. From, N. I. Peseda, V. Parashkevova, and others)
2. Drill
3. Seam outcrop on the surface of the carbonaceous
4. Isoline
5. Fault
6. Fault elements
7. Angle of inclination of the seam
8. Sandstones
9. Trigorski Fault
10. Tsarichinski Fault
11. Gurkovski Fault
12. (Lilyanski) Fault
13. Makedonski Fault
14. Velkovski Fault
15. Magelishtenski Fault
16. Selchenski Fault
17. Braslavsko-Selchenski Fault
18. Rakovski Fault No 2
19. Ralibski Fault
20. Gorunski Fault
21. Coal basin formation
22. Balchik
23. Kavarna
24. Black sea
25. Kalika Cape

Figure 1. Diagram of the Crosscut of the Dobrudzha Coal Basin



Key:
1. Quaternary
2. Tertiary
3. Cretaceous
4. Jurassic
4. Triassic
6. Upper carbonaceous
7. Lower carbonaceous
8. Sarmat
9. Kank
10. Karagan

[Key continued on following page]

Key to Figure 1, continued

11. Chakrak
12. Oligocene
13. Upper Eocene
14. Middle and lower Eocene
15. Paleocene
16. Upper Senonian
17. Middle and lower Senonian
18. Hatrib
19. Dogger
20. Upper Triassic
21. Lower Triassic
22. Westphalian D
23. Westphalian C
24. Westphalian B
25. Westphalian A
26. Namur C
27. Upper Visean
28. Up to 28a rare
29. Over
30. Clays
31. Limestones, sands, sandstones, marls, clays
32. Limestones, porous, cavernous
33. Limestones with marls and sandstones
34. Sandstones, clays, marls, rare limestones and dolomites
35. At the bottom clays, sandstones
36. Limestones and limestone marls
37. Sandstones and sands in the upper part and sandy limestones
38. Limestones
39. Limestones
40. Limestone marls
41. Limestones
42. Packed limestones low water-bearing
43. Karst dolomite limestones, highly water-bearing
44. Packed limestones low water-bearing
45. Thick carbonate complex with karst dolomites and limestones based on 20-50 meter marl-limestone series of (Calavian) age.
46. Thick sandstones and dolomitized limestones
47. Limestones and dolomites
48. Multicolored facies diffused 50 meters of red argillites, followed by argillites and limestones with infrequent allebrolites, marls, and clays.
49. Upper carboniferous formation with coal seams N_4-13
50. Sandstone
51. Argillites
52. Allebrolites
53. Coal seams
54. Coal seams N_1
55. Quartz sand formation
56. Little coal formation, seams M_{6-12}
57. Coal seams M_{1-5}
58. Volcanic-clastic sandstones
59. Lower coal formation coal seams L 23-41
60. coal seams L-22
61. Coal seams L_{1-10}
62. Coal seams formation N
63. Coal seams formation M
64. Coal seams formation L

In this connection, one of the most important problems related to the utilization of the reserves of the Dobrudzha basin is to determine the most economical solution involving the lowest possible losses of reserves of such valuable and scarce coal in our country.

5003
CSO: 2200

SEPTEMBER 1980 ECONOMIC RESULTS SUMMARIZED

Prague HOSPODARSKE NOVINY in Czech 31 Oct 80 p 2

[Article from the Federal Office of Statistics: "Report on Plan Fulfillment, September 1980"]

[Text] The results achieved in the development of the national economy in September were influenced by 2 more days of available worktime than in the same month last year. Most of the basic economic indicators recorded an accelerated rate of growth that month; in certain cases there were shortcomings in meeting planned goals.

There was increased dynamism in the sales of industrial production as compared with the same month last year with respect to deliveries of consumer goods as well as deliveries for export to socialist and nonsocialist countries. Enterprise plans in all aspects of sales were surpassed. Industrial production recorded a higher rate of growth in September compared with that of January to August, whereas average daily production fell in September by 2.6 percent compared with the same month last year. Production plans of enterprises were not totally fuflilled. In construction the objectives of the state plan in overall volume and structure of building production were not fulfilled; average daily production fell by 8 percent in September compared with the same month last year. There was low fulfillment of the plan in deliveries of housing units constructed. In agriculture the harvesting of sugar beets and potatoes was delayed compared with last year. In animal production the scheduled plan for procurement of all basic animal products was met. In domestic trade the dynamism of retail sales in the main trade systems accelerated in September. Retail sales of the Nabytek [furniture] trade organization were the only ones remaining below that of last September. In foreign trade the growth rate of imports was lower than that of exports.

In centrally planned industry, enterprise plans in all aspects of sales were surpassed by the end of September. Deliveries for export to nonsocialist countries recorded overfulfillment of the plan by 3.5 points in wholesale prices and by 4.9 points in deliveries for export to socialist countries. The number of enterprises which did not meet their enterprise plans in indicators of sales trends during the period January to September was lower than for January to August 1980. In comparison with the same period last year, from the beginning of the year to the end of September the volume of deliveries for export to nonsocialist countries at all charges paid prices increased most conspicuously (by 23.2 percent). A high rate of growth was also achieved in deliveries for export to socialist countries

at all charges paid prices--110.9. With the exception of deliveries for domestic trade, the rate of growth achieved in the first 9 months in all sales trends was higher than that planned for the whole year.

In agriculture the harvesting of most of the remaining grain fields was completed and relatively good increases were attained in the crops of potatoes, sugar beets and silage corn. As of 13 October corn for silage was harvested from 94.8 percent of planned areas and potatoes from 77.6 percent of planned areas. Compared with last year, 21.6 percent of planned areas of sugar beets have been harvested. Preparation of the soil and the planting of winter crops are nearing completion. In procurement of basic animal products there was a marked increase in September of procurement of hogs for slaughter (10.7 percent or 8,000 tons more than September of last year). There was also a marked increase in the procurement of eggs over September of last year (11.8 percent) as well as fattened poultry (10.8 percent). Compared with last September the total procurement of slaughter animals including poultry was over 11,900 tons more this September, milk was 14.7 million liters more and there were 24.7 million more eggs.

In construction the low fulfillment of building production plans continued into September. The monthly schedule of building enterprise plans for construction work completed with internal resources showed an overall fulfillment of 98.8 percent. Low plan fulfillment was recorded particularly by the Silnice [highway] and Cestne Stavby [road construction] enterprises. The total volume of construction work completed with internal resources in September amounted to Kcs 7.7 billion, or 0.8 percent more than last September. However, average daily production in construction during September remained 8 percent below the level of last September. Likewise, the number of housing units delivered by contractors was lower than last September. Enterprise plans for building production were 99 percent completed in the period January to September. Almost 55 percent of building enterprises failed to meet their scheduled enterprise plans in this period. Compared with the same period last year the volume of construction work completed with internal resources increased 1.9 percent and reached over Kcs 61.7 billion. Thus 72.4 percent of the state plan for the year was completed by September. The year's planned rate of growth in construction was also lower during the 9 months in labor indicators: the number of workers and productivity of labor.

In capital construction the amount of work and deliveries completed, less Action Z [self-help] and individual efforts, (according to September estimates) came to over Kcs 92 billion in current prices during the 9 months and was 3.4 percent more than in the same period last year. From the beginning of the year until the end of September deliveries of machinery and equipment increased more rapidly (5.9 percent) than the volume of construction work (increment of 1.6 percent), even though the year's state plan assumed an opposite development in the structure of investment work and deliveries. Altogether 65.9 percent of the year's state plan for capital construction was completed by the end of September. Projects designated as mandatory tasks of the state plan achieved a higher proportion of completion with contractors' capacities concentrating on them.

In public freight transportation the September plan for transportation of goods was 99.8 percent fulfilled. The monthly railroad transportation plan was not met while CSAD [Czechoslovak Vehicular Transportation] and river shipping exceeded their planned transport objectives in September. A total of 55.1 million tons

of goods was transported in September which is 3.7 percent more than last September. From the beginning of the year to the end of September public freight transportation handled 473.4 million tons of goods, or 3.3 million tons more than was planned for this period. Total railroad loadings for the 9 months increased by 1 percent compared with the January to September period last year, and average daily loadings in freight car units increased by 0.9 percent. The average turnaround time for freight car units was 4.21 days for the January to September period, whereas the planned time was 4.06 days. Compared with the same period last year the average freight car turnaround time increased by 0.5 days.

In domestic trade the main trade systems realized Kcs 18.1 billion (in current prices) in retail sales in September. In comparison with the same month last year retail sales increased in September by 6.0 percent. From January to September retail sales came to over Kcs 154.9 billion, which is Kcs 5.1 billion more than in the same period last year. The growth rate of retail sales in the first 3 quarters is 103.4; the year's state plan for all trade systems is 102.2. Enterprise plans of growth in retail sales in the CSSR were fulfilled 101.3 percent in the 9 months, in the CSR 101.5 percent and in the SSR 100.7 percent. Planned retail sales for January to September were not met by the trade organizations Nabytek [furniture] (96.8 percent) and Odevy [clothing] (98.8 percent).

In foreign trade the rate of growth in imports slowed down in September compared with the preceding period. From the beginning of the year to the end of September total exports increased faster than the year's planned growth, both according to the territorial structure and to imports from nonsocialist countries. Imports from socialist countries recorded a lower rate of growth in the 9 months than that projected in the year's state plan. Of the year's planned objectives 72.6 percent of total exports and 69.8 percent of total imports were fulfilled by the end of September.

Personal savings account deposits increased by Kcs 344 million from 15 August to 15 September. Total deposits came to Kcs 151.6 billion as of 15 September 1980, which was Kcs 4.5 billion more than the same time a year ago.

Basic Indicators of Development of National Economy in September 1980
Increments over Comparable 1979 Period (in percent)

	Sept	Jan-Sept	State Plan[1]
Deliveries of the centrally planned industry for:			
Investment at wholesale prices	-	- 0.2	- 5.3
Domestic trade at retail prices	-	3.8	3.6
Exports to socialist countries			
--at wholesale prices	-	7.3	3.0
--at all charges paid [franko] prices	-	10.9	7.2
Exports to nonsocialist countries			
--at wholesale prices	-	6.1	4.9
--at all charges paid [franko] prices	-	23.2	15.0
Other sales for manufacturing consumption and operations at wholesale prices	-	4.3	-

	Sept	Jan-Sept	State Plan[1]
Gross industrial production	6.7	3.6	3.5
Average number of employees	0.5	0.7	0.7
Labor productivity	6.2	2.9	2.8
Construction:			
Construction work completed with internal resources	0.8	1.9	4.5
Average number of workers	- 0.5	0.0	0.4
Labor productivity	1.3	1.8	- 4.1
Housing units delivered by contracting enterprises	- 2.5	- 2.3	6.1
Procurement:			
Slaughter animals (including poultry)	7.8	0.8	0.4
Milk	3.4	6.5	1.8
Eggs	11.8	6.1	3.2
Retail trade:			
of the main trade systems	6.0	3.4	2.2[3]
Foreign trade:[2]			
Exports to socialist countries	0.3	10.5	7.2
Exports to nonsocialist countries	11.2	24.1	17.5
Imports from socialist countries	-10.2	4.9	8.5
Imports from nonsocialist countries	- 7.9	17.0	8.2

	Aug	Jan-Aug	State Plan[1]
Accomplished investment work and deliveries (less action Z [self-help projects] and individual efforts	- 1.7	4.3	2.0
including: construction work	- 3.6	3.0	6.0
plant and equipment	1.3	6.0	- 2.9
National personal earnings[5]	2.7	4.8	5.4[4]
of which: income from wages[5]	2.6	3.4	4.1
Actual cash expenditures[5]	- 4.5	4.8	3.8[4]

FOOTNOTES

1. Increments compared to actual 1979 results with the exception of industrial work indicators.

2. Data on actual results refer to actual transactions and the state plan does not include unplanned actions in the framework of cooperation, unplanned reexport trade, exchanges and conditional trade transactions, etc.

3. All trade systems.

4. Including estimated interest added to loans.

5. Data calculated on the basis of the SBCS [Czechoslovak State Bank] treasury plan.

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CSSR OFFICIAL SEES URANIUM AS PRIME ENERGY SOURCE

Prague HOSPODARSKE NOVINY in Czech 31 Oct 80 p 6

[Discussion with Engr Milan Povolny, director of the Fuels and Energy Department of the CPCZ Central Committee, Engr Vladislav Novy, general director of the Czechoslovak Uranium Industry: "The Energy Future Is Called Uranium".]

[Text] There are many significant uranium deposits in CSSR territory. This uranium is of various genetic types and industrial importance and constitutes the basis of our nuclear program. This program requires a domestic raw material base capable of covering present and future needs. We discussed current progress in this area with Engr Milan Povolny, director of the Fuels and Energy Department of the CPCZ Central Committee and Engr Vladislav Novy, general director of the Czechoslovak Uranium Industry.

[Question] How would you characterize the current position of the Czechoslovak Uranium Industry?

[Povolny] Our mining industry has a long tradition, but the extraction and utilization of uranium has a much shorter history. The Czechoslovak Uranium Industry, which this year is marking the 35th year of its existence, represents an essential component of the Czechoslovak mining industry. One may briefly describe the basic fields of its activity as prospecting for and analysis of deposits of radioactive raw materials, and extraction and processing of uranium ores. In addition, it contributes to the national economy in other areas as well, for instance with the results of its technical development efforts or with its construction and assembly capacity. The development of the Czechoslovak Uranium Industry, achieved with the effective assistance of Soviet experts, and a number of the outstanding results of its efforts, both attest to the high degree of initiative of its collective.

[Novy] The history of our uranium industry begins in Jachymov, where uranium ore has been mined on a modest scale since the end of the 19th century. It was used for the production of pigments and glazes in the glass and ceramic industries, and later also as a source of radium for medicinal purposes. As we all know, uranium became an important military-strategic raw material in the course of World War II, but at the same time a way opened for uranium truly to serve mankind. The peaceful use of uranium as the principal source of atomic energy may be tied

symbolically to the start up of the first Soviet atomic power plant in Obninsk in 1954. Since that date uranium has also been a fuel for atomic power plants and I hope that in the near future it will become a fuel for atomic heating plants.

The development of the Czechoslovak Uranium Industry is closely tied to the evolution of our domestic situation and international relations since World War II. As early as 1945 the Jachymov Mines national enterprise had begun at Jachymov, from which there gradually evolved the contemporary concern, Czechoslovak Uranium Industry, with its base at Pribram. Thanks to the significant professional and material assistance of the USSR, and as a result of committed work by the people, the mining and processing of uranium ores was successfully developed at a tempo which has no parallel in our geological prospecting and mining industry. Today the Czechoslovak Uranium Industry represents a comprehensively equipped economic production unit capable of systematically and purposefully concentrating its talents and resources on the fulfillment of planned objectives. At the same time we consider it natural to present the results of our work and our collective ability to assure even additional tasks directly connected to uranium related activities.

[Povolny] I can confirm this. Our uranium miners, who are known for their exceptional performance--even for a world record in the driving of horizontal shafts--helped us to cut a potable water conduit from Zelivka to Prague: that 52-kilometer tunnel required sophisticated technological execution and is a masterpiece of the tunneler's art. They built for us the high quality basic sewer main K in Prague which has helped in the removal of sewage, and waste water generally, from important locations in Prague. And of course we are counting on their future assistance in the construction of underground tunnels for energy or water management purposes in Dalesice, Dlouhe Strane, Josefuv Dole, and elsewhere. I could also name a number of projects at which the builders and assemblers from the uranium industry have been employed successfully.

[Question] Does that mean that our uranium industry is not concerned only with the prospecting for, extraction, and processing of ore?

[Povolny] I mentioned miners and construction with respect. In connection with the development of the uranium industry it is also possible to evaluate the work of its research and development base which appeared, for practical purposes, 20 years ago, and which is today already a respected institute. In addition to the mechanization of basic mining and processing activity, there has been developed here, for instance, an automated system which has been employed very satisfactorily at the operational management level of all new electric power plant units. We are counting on a later model of this unit for the automation of the conveyor belt transportation systems in the North Bohemian lignite region and in other locations. Close cooperation with agencies responsible for energy will indicate the possibilities which are offered within our uranium industry and in the utilization of the results of its work for our national economy.

[Novy] In automation technology we are cooperating closely with the Skoda works, to which we deliver our DIAMO system for exported turn-key projects. I wish to

point out, as an example of automation technology, our approach to the resolution of our own needs and those of society. From the beginning we have been covering out automation needs, i.e. automation in the mines and processing plants. A group of "fired up" people was able to come up with a unit which exceeded the original specifications at its introduction. Because we are trying to outfit our development base and our implementational capacity, we have succeeded in significantly shortening that well known, and so frequently rightly criticized, cycle of development-production-utilization. This applies, though, for other products or contracts let as well. Again, I will mention just as examples, drilling cars and other mechanized technology for miners, processing technology, vibration technology, the equipment and technology for gunite; all of these are being used successfully not only by us, but in other fields as well. Because we develop and produce our own radiometric measuring and controlling instruments, our experts have been able to advance as far as the design and production of flaw detecting and medical betatrons. You will find mobile modules, which we first developed and produced for our geologist prospectors, today not only at various locations in the republic, but also in many other countries.

We are placing great emphasis on the close connection of operation, design, and development. If our tunneling crews achieve a peak labor productivity of about 1.5 meters per worker per shift in crosscut tunneling--as, for example, the Mladeznicka brigade of Josef Holaza did recently at the uranium mines in Pribram--then this attests without doubt to the quality of mechanization and the competence of the workers.

[Question] There is, then, very extensive activity apart from uranium. Does this not mean that there is no longer anything to do in the area of uranium?

[Novy] Definitely not. We always accord first priority to the fulfillment of our mission which is given by our very name. We have prospected our republic in relative detail, but we still cannot rule out new discoveries of uranium deposits which do not extend to the surface, or of other types than those we have mined thus far.

We have significant uranium deposits, some of which are peaking in extraction potential, while we are only just acquiring others. We must constantly improve our processing technology. At certain deposits we have reached significant depths, more than 1,700 meters, and this demands that we solve a number of complex problems connected with the ventilation and climatization of the mines. Our uranium mines, together with our own National Health Institute have always responsibly and progressively approached the solution of the hygienic and safety issues related to the mining of radioactive raw materials, and I can say without exaggeration that we are first in the world in this area.

If we want to maintain and improve these good results in the mining and processing of uranium ores we must create the corresponding technical and material base. And if something which we have developed and produced is applicable in another branch as well, then it would be a shame if we were to refuse to deliver it to other interested parties Our capacity is limited, however, and it bothers us that we

cannot satisfy a number of requests. The needs of our miners, however, will always be uppermost in our minds, and because the Czechoslovak machine tool industry produces almost no specialized machinery and equipment for them, we are forced to rely on our own sector's efforts and on imports. Therefore we are preparing to strengthen our machine tool base for the production of the specialized machinery needed for ore and uranium mining. We cannot, however, produce everything ourselves, nor must we justify this. Unfortunately, however, deliveries from our machine tool enterprises are obtainable only with great difficulty and often are not of the necessary quality. The rapid tempo of development of the uranium industry and the acquisition of new deposits characteristic of this industry have taught us to give priority to the introduction of modern technology and new forms of work. This places high demands, however, on technical and material support. We particularly need to improve cooperative and consumer-producer relationships with machine tool organizations, as well as the innovation and modernization of certain components and construction elements. Our technicians are able to design good machines and technical procedures, and our workers achieve exceptional performance with them: our responsibility is not only to direct them this way and motivate them properly, but also to assist in the creation of a corresponding organizational and material base. As we have endeavored to show, at the same time we are not closing ourselves off, but helping the national economy where we can and where we have the ability - in the drilling of underground engineering tunnels, in the transferral of knowledge, and with certain products.

[Question] How is our uranium industry helping to solve the current fuel and energy balance?

[Answer] [Povolny] The answer is connected with our directive to shift to atomic power plants in the solution to our fuel and energy balance: in the Seventh Five-Year Plan they will cover more than 40 percent of the increased production, and in later years the fuel and energy balance is expected to be resolved exclusively with the help of atomic power plants. The operation of a single block of the V1 atomic power plant saves us almost 300,000 tons of coal a month. If we have saved more than 4 million tons of coal from the beginning of operation of this power plant, that is the operation of the first and second blocks, to the end of July of this year, then this is not only a significant success, but also proof of the correctness of this path.

Our nuclear program has just begun to develop. We are planning to build, prior to 1985, nuclear power plants with roughly 3,500 megawatts of capacity, and before 1990 we will achieve an installed capacity of more than 7,000 megawatts. We have a sufficient raw materials base. On this base is an established uranium industry, which we do not doubt is capable of supplying the nuclear program with uranium. But we are also of the opinion that we can count on its assistance in selected sectors of the technical development of nuclear energy.

It is clear that we could not implement as extensive a nuclear program as we have planned without the decisive assistance of the Soviet Union. At present this assistance is in the construction of a nuclear energy capacity based on

type VVER 440 thermal reactors and later the VVER 1000, but in the 1990's we are already planning for close cooperation in the preparation for a shift to so-called fast reactors. This means that despite its abundance we must rationally manage our uranium, and in fast reactors we can gain as much energy from one ton of uranium as from 3 million tons of crude oil.

Our uranium industry has its own irreplaceable mission in the nuclear program, and the remarks of the general director, Engr Novy, that the assistance rendered to the uranium industry by our machine tool industry needs to be improved, are completely justified. The uranium industry collective often helps itself, but in a developed social division of labor this is unacceptable: certainly we cannot produce ourselves those products which are the concern of specialized factories--hydraulic units, electronic components, and the like. We must emphasize that the implementation of our intentions in nuclear energy confronts us with a number of very demanding requirements, problems, and tasks, and they must become a matter for our whole society. The comrades from energy agencies and the uranium industry will certainly not end up owing us anything.

[Novy] We are aware of this and want to help, in areas which are our responsibility as well as where we can and are able, that is in uranium-related and enriched extra-uranium activities about which we spoke.

[Question] You mentioned safety and hygiene in the uranium mines. This is a very real subject in our conversation, along with the safety of atomic power plants and preservation of the environment.

[Povolny] Unfortunately, mankind knows of the huge amount of energy liberated from the atomic nucleus in its worst form--in atomic bombs. This has naturally left justified fears regarding the use of radioactivity. However, on the other hand, these fears have called forth, as their positive consequences, the conduct of extensive research work, the introduction of systems of inspection procedures and safety measures in atomic energy so that we have today, in many ways, a more profound knowledge about the effects of radioactive materials than we have regarding the effects of the discharges from tradional coal-fired power plants. Of course it is still necessary to resolve certain problems, for instance the processing and storage of wastes from atomic power plants. Even today, however, it is possible to prove that the nuclear program will play a positive and progressive role in the preservation of the environment.

[Novy] I have already mentioned the ventilation and climatization of our very deep mines, which is a complex and demanding task not only technologically, but also in terms of the economics of mining. If I am to attempt to summarize the crucial tasks in the caring for workers in the uranium mines and processing plants, then, with the danger of oversimplification, I would mention three main areas. I would place primary emphasis on attention to the working conditions, to the environment of mining work. This includes not only ventilation, but also the development of mechanization which we have already talked about, and technical procedures, the replacement of the physical toil so typical of mining in the past. The second trend also involves the work process, and is the system of hygienic and dosimetric inspection techniques. Today we have not only the overall work

environment of the mining and processing plant areas, but also every individual, under dosimetric control. Finally I must mention the health and social services for our workers, which correspond to the difficulty of their work. Mining is basically a pillaging activity, so our first step into the natural environment is--to put it plainly--disruptive. We are trying to limit these influences as much as possible and "clean up" after ourselves. We reclaim dumps and work spaces. A system of environmental preservation measures for our North Bohemian deposit is being devised even in a state research project with the help of other professional institutes.

Attention to the workers of the uranium industry and the preservation of the environment has been the subject of the discussions of the highest party and state agencies several times. It could be said that this has been given as a foundation of our socialist system. We see in this, however, also an evaluation of the significance of our work and this is, for us, a great commitment. We have the raw materials base, the developed material technical potential, and primarily the people, who know the tasks facing them, who know the need for uranium, and who are determined to contribute to our economy not only in uranium, but by their work as a whole.

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ENERGY SEMINAR URGES GREATER CONSERVATION MEASURES

East Berlin PRESSE-INFORMATIONEN in German No 124, 21 Oct 80 pp 1-14

[Excerpts from special edition, published by Press Office, Chairman, GDR Council of Ministers, on the council's Seventh Seminar on Efficient Use of Energy, held in Halle, 15 October 1980: "Experiences and Tasks in Efficient Use of Energy"]

[Excerpts] Efficient Use of Energy--Essential Element of Our Energy Policy: From the Concluding Speech by Wolfgang Rauchfuss, deputy chairman, GDR Council of Ministers; Director, Central Energy Commission

We can today note with satisfaction that our seminar made an important contribution to the preparations for the Tenth Congress of the SED. We base our statements on the fact that the analysis of the 11th and 12th conferences of the SED Central Committee in the combines, enterprises, and installations are providing strong impetus for the initiatives and activities aimed at a steady energy supply and greater material and energy savings and that the comprehensive competition in honor of the Tenth SED Congress in this field likewise produced significant results.

In his fundamental speech to the Gera party aktiv, Erich Honecker, secretary-general, SED Central Committee, particularly stressed the significance of expanding our own raw material base and consistently oriented us toward making increasing use of raw brown coal and using petroleum for the materials economy. Our discussion today proved that this demand encountered fertile ground.

Today we drafted the conclusions as to how we must proceed with a high level of action readiness, creative force, and a new pace in the economical and efficient utilization of energy as the most important factor in our proven socialist energy policy. It is precisely the rational and economical utilization of all energy sources and the increased supply and utilization of our domestic raw brown coal which constitute the firm foundations on which we will guarantee a steady energy supply for the population and the economy. This is our contribution which we will make by way of preparations for the Tenth SED Congress through our responsible work.

Being Self-Reliant

To solve the critical energy-economy and material-economy problems, our country's workers are orienting their thinking toward their own actions. This is an eloquent expression of their strong confidence in the proven policy of the party of the working class for the welfare of the people and their conviction that their vital interest are protected under that leadership.

The situation arising from the international energy and raw material development hit the GDR particularly hard because it is particular dependent on raw material and energy imports. What can we throw into the scales in order not only to master this situation but in order at all times to assure the national economic growth of our republic?

Here we have the even closer tie-in between the advantages of our socialist social system and the scientific-technological revolution;

Next we have the political organizational status and consciousness of our working class;

We have its close relationship of confidence with our party and we have the high educational level of our workers;

We have the fact that, today, thanks to the wise education policy of our party, we have more than 1.4 million cadres with college and technical school training and their number has almost doubled since the Eighth SED Party Congress.

It is of basic significance for the further successful advance on the road of the Ninth SED Party Congress that we achieve a high growth rate of production with a considerable smaller increase in energy and raw materials and fuels that are important to the national economy through a higher degree of refinement, utmost economizing, and utilization of all secondary energy, material, and raw material resources. Everybody must keep the correct yardstick in mind here. A fast production growth rate during the coming years is what we are going to have to guarantee to the extent of 90 percent through the better utilization of our raw materials, energy sources, and materials.

The reduction rates achieved so far in the specific consumption of energy, raw materials and material from an annual figure of about 3 percent must be raised to more than 5 percent. The main raw materials will during the coming years reveal a growth rate that is below one percent. In spite of increasingly complicated conditions, deliveries of raw materials from the USSR will be kept on the same level as in 1980.

Efficient and Economical Energy Utilization--Important Concerns

In our further work to secure the energy supply, we must start with the assumption that the most rational and most economical energy utilization and the elimination of any kind of energy waste are in first place throughout the country. Today, tomorrow, and in long-range terms, this is a fighting asignment for everybody. This is what we must convincingly explain to every worker, every citizen of our country, as the first prerequisite for the successful accomplishment of the energy supply during the next winter and during the coming years because everything we want to achieve calls for individual and independent thinking.

Efficient and economical handling of energy therefore is in first place because the expansion of our energy base--which we will continue to advance in the future likewise with a great effort and by using a large volume of national economy assets--is connected with growing expenditures.

Efficient and economical handling of energy is in first place because it is a question of just plain economical common sense since our discoveries tell us that the full utilization of all possibilities in this field--and the seminar brought out the magnitude of these reserves--ties up only half and in some cases even less national economic assets than would be necessary for additional expansions of the energy base.

Efficient and economical handling of energy is in first place because it is a question of respect for the work of others, for example, our miners and energy workers; because that which was created through hard work under difficult conditions must be used as carefully as possible. This is why we are guided by the idea of further stressing the careful handling of energy as an important feature of socialist attitudes toward work, as well as quickly utilizing all suggestions and ideas for economical energy use.

All managers bear a heavy responsibility for verbatim excuting the resolutions of our party and government regarding economical energy use, dating back to September of last year, and the winter directive issued by the party leadership and the government in May 1980, in the enterprises, in their LPG [agricultural producer cooperatives], their department stores--wherever energy is used--and to urge every worker, engineer, and scientist to be creative in their activities.

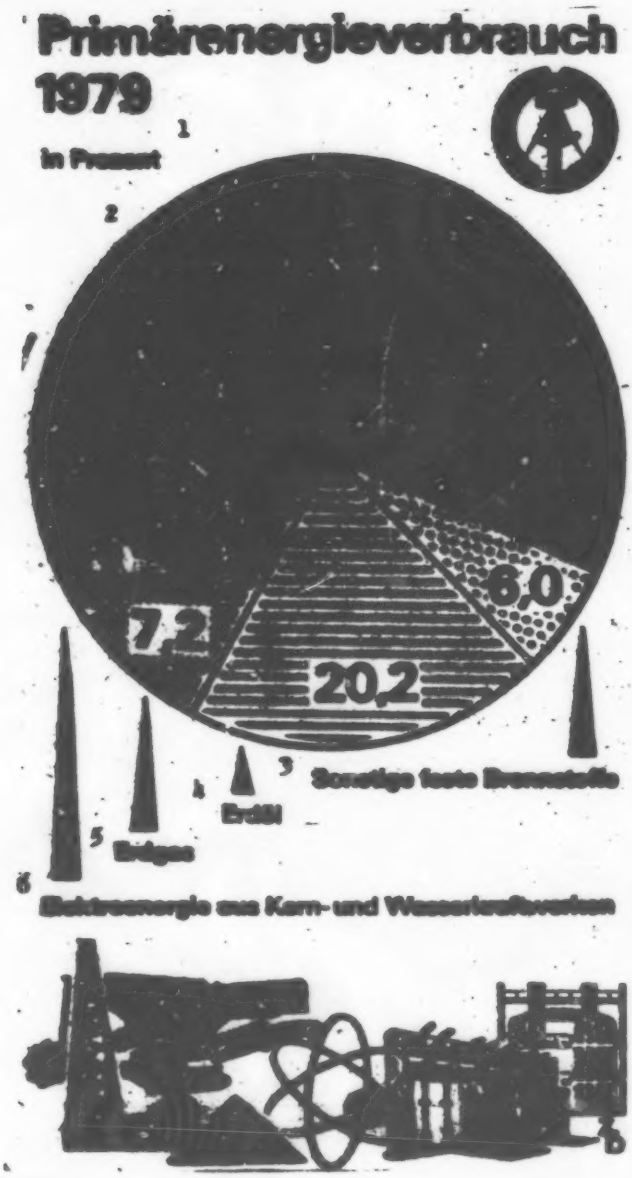
Exemplary Initiatives

This is what the workers of the VEB Carl Zeiss JENA Combine are doing, along with those of the VEB dkk Scharfenstein, the VEB Beierfeld Measurement Instruments Plant, the VEB Berlin Photochemical Works, and many others. Their activity is characterized by the fact that they implement the resolutions concerning energy savings and the replacement of heating oil and hard coal in their enterprise with a high degree of consistency.

In the VEB Carl Zeiss JENA Combine--which was the first combine in the republic to be recognized as a combine that works in an exemplary manner regarding energy management--all of the 13 combine enterprises have already been honored with that title. In 1980, careful measures resulted in a reduction of the heating oil utilization by one-third, amounting to about 650 tons. The use of hard coal was replaced to the extent of 100 percent through complete conversion to raw brown-screened coal in a mixture with brown coal briquettes and many combine enterprises are effectively implementing scientific-technological measures, with rising savings, moreover. In this combine, the emphasis is on the use of energy yield and the reduction of the heating and air conditioning expenditure.

One likewise however must not overlook the fact that not all enterprises are, as yet tackling the implementation of the resolutions of the party leadership and the government with the same goal-oriented attitude. The VEP Lithopone Fuerstenwalde, for example, just about promotes energy waste through insufficient management activity. For example, the workers assigned to the boiler plants and to energy-intensive drying plants are not given an incentive in the competition for economical energy utilization on the basis of technically-economically justified standards. The activities of the heating sector officer likewise were carried out very deficiently in this enterprise. This causes heavy losses during heat transfer and at the customer's end.

In our work we can start with the assumption that we have not only a high degree of consciousness and education among our working class and intelligentsia but also a well-developed management and planning establishment for energy-industry tasks, as well as a developed set of instruments for the planning and accounting of energy, which becomes considerably more effective through the resolutions aimed at the introduction of government quotas, their monthly accounting along with increased responsibility on the part of the general managers; this is also in keeping with the rising requirements for a high degree of flexibility.



1979 Primary Energy Consumption
Key: 1--Percent; 2--Raw brown coal; 3--Miscellaneous solid fuels; 4--Petroleum; 5--Natural gas; 6--Electric energy from nuclear and hydroelectric power plants.

Clear Concepts

The resolutions of the SED Central Committee Political Bureau and the Council of Ministers of September of this year regarding the comprehensive implementation of efficient energy utilization in 1981-1985 are of basic significance. The important thing now is to make sure that the ministers and general managers will draft their own concepts for the implementation of efficient energy utilization, starting with a thorough analysis of their sphere of responsibility, and that they will make that a part of their plan.

The most important thing here is to bring about agreement among goals in the fields of science and technology, rationalization and investments with the existing energy source quotas both in terms of the sum total of energy consumption and regarding the specific energy source. Only those concepts are useful to use in which the energy rationalization targets agree with the energy sources contained on our balance sheets. That starts in 1981.

Here we must prove that the assignment given by SED Central Committee Secretary-General Erich Honecker--once again formulated in the address to the Gera party aktiv--was correctly understood everywhere. So, let us fight for the utilization of the energy yield, let us fight for a reduction in energy consumption and for higher production targets with less energy--that is what this is all about.

The conference proved that we have made good headway since the sixth seminar in increasing the effectiveness of energy utilization in the national economy. At the same time we were able to see that we have the strength to attain the high goals for the years 1981-1985. The important thing now is to throw this ability into the scales by way of preparation of the SED's Tenth Party Congress and that we always start with the assumption that questions of energy and material savings are vital issues in our national economy.

Nobody must expect the situation in this field to become simpler and nobody must expect anybody to relieve him of his responsibility. Efficient energy utilization remains the very nucleus of our energy policy and a main factor in increasing the effectiveness of the national economy.

Ensure Economical and Efficient Use of Energy: From Speech by State Secretary Heinz Ziergiebel, Chief, Working Group on Efficient Energy Use, GDR Council of Ministers

[Text] At the 11th Conference of the SED Central Committee at the end of 1979 SED Central Committee Secretary-General Erich Honecker already observed that a new situation has arisen for the GDR which above all will have profound consequences regarding the output, importing, and utilization of all energy sources. This situation estimate was confirmed throughout 1980. The situation on the international energy source market has become more critical above all because the external conditions for raw material procurement and especially for energy sources such as petroleum, hard coal, and coke, which we must import most of all, have been drastically aggravated.

The party leadership and the government have adopted fundamental resolutions in order--through the most economical and efficient possible utilization of fuels and energy, primarily involving imported energy sources, and through the elimination of any waste--to create the most essential conditions for a steady energy supply in the GDR. This is the very core of our continuing energy policy; that is what the secure energy supply depends on primarily in connection with the continuation of the successful

economic and social policy of the Ninth Party Congress during the coming winter and the next several years.

As Erich Honecker noted in his fundamental speech to the Gera party aktiv conference, the important thing is to achieve the required increase in performance, the supply of more and better final products for the supply of the population, for the national economy, and for exports with a quantity of energy sources and primary raw materials "which will remain the same or which will increase only slightly. Successfully accomplishing this task is a vital issue in the truest sense of the word for the DGR national economy."

Visible Results and High Demands

A high rate of national economic growth was achieved for the first time in the GDR in 1980 without a rising energy utilization. Combines, such as, VEB LEUNA-WERKE "Walter Ulbricht," Carl Zeiss JENA, the "Wilhelm Pieck" Schwarza Chemical Fiber Combine, Shipbuilding, GISAG, Cotton, or the "7 October" Machine-Tool Combine, the Photochemical Combine and others in 1980 are guaranteeing considerable output increases with less or the same energy than during the preceding year. Today they are already tapping those reserves through the elimination of any kind of energy waste and consistent socialist rationalization with their own resources, as is in keeping with the requirements for the eighties.

Since the Eighth Party Congress, the primary energy expenditure per unit of industrial growth output has been reduced by 25 percent. The benefits deriving from energy rationalization in our enterprises over the past 9 years amounts to about 90 million tons in terms of raw brown coal. The directive of the SED Central Committee Political Bureau and Council of Ministers concerning the comprehensive implementation of efficient energy utilization during the 1981-1985 five-year plan now starts with the idea of saving more than twice the energy than during this five-year plan through rationalization, in the year 1985 as compared to 1980, on the scale of the national economy as a whole.

These targets are above all a challenge to science and technology. Accelerated rationalization of the production processes and the development of new energy-saving technologies and products with top-grade international values are decisive prerequisites in order to guarantee dynamic economic growth with a small energy increase in the long run. The most economical and the most rational utilization of energy is a national economic effectiveness factor of the first order. It demands considerable expenditures which however are at least by one half lower and in many cases even lower than that, than would be required for the expansion of our energy base and for the procurement of energy from imports--something for which we continue to require signficant national economic assets, at any rate, more than has been used for this purpose so far.

Use More Raw Brown Coal

The drastic change in the conditions connected with the import of energy sources compellingly demands a fast increase in the output of raw brown coal and its maximum utilization in the economy and in the social sector.

Heating oil must be released as fuel to a hitherto unknown degree because the stepped-up materials-economy utilization of petroleum and imported natural gas represents a decisive foundation for the raw material supply of the GDR national economy during the coming year. We start with the assumption that raw brown coal--in spite of increasingly unfavorable conditions regarding its extraction--is and remains by far the most effective energy source for the GDR in terms of its national economy. Looking at present-day prices alone, we can see that the social expenditure for one heating unit based on natural gas is four times greater and in the case of heating oil even eight times greater than in the case of raw brown coal. The increasing difficulties, which are undoubtedly connected with the use of raw brown coal, must be mastered in terms of the national economy and that is proved by the practical results; but the consequences arising otherwise from growing import burdens cannot be brought under control.

The initiatives triggered as a result of the resolutions of the party and government concerning the economical and efficient utilization of energy of September 1979 and the directive on fuel and energy supply during the coming winter semesters as well as the introduction of government quotas for energy supply enabled us during the last year to make most effective progress in our energy savings effort. Careful handling of electrical energy and heat, elimination of overheating and unnecessary illumination resulted in savings of 6-8 percent for electric energy and heat. That helped us save considerable quantities of heating oil, hard coal, and brown coal briquettes.

It is particularly important here to make sure that we achieve the output increase in industrial commodity production, almost without any increase in energy utilization, by the end of September. The specific electric energy consumption for industrial commodity production dropped by 6.2 percent compared to the preceding year. For the first time, likewise, we noted a considerable decline in energy consumption during that year in the communal sector; that is an expression of successful work, above all by the councils of the bezirks and the kreises and their energy committees which are increasingly developing into effective agencies working on the implementation of our socialist energy policy.

Compliance With Government Quotas

Although we can be satisfied with what we have achieved, we must not overlook the fact that--judging by the new requirements--initial steps were taken although much remains yet to be done. The past months tell us that the consistent implementation of resolutions concerning work with government quotas holds a key position. Government energy consumption quotas

constitute minimum requirements regarding the efficient utilization of energy but at the same time are the maximum permissible limit for energy consumption. They call for high quality in energy consumption norms. Government quota, energy supply contract, and cost planning must form a unit here. If the government quotas are exceeded, then government penalties will be collected for any additional consumption in the amount of ten times the price. The responsibility of the general managers of the combines for this task was considerably increased. We can say today with certainty that this resolution proved itself fully.

Our past work however also shows that much remains to be done in order everywhere to implement the required high level in connection with planning and accounting the energy consumption as well as regarding order and discipline in handling energy. At the end of August, there were still ten combines that exceeded the planned energy consumption figures.

Presently, about 80 percent of the energy utilization in conversion plants in industry and barely 50 percent of the energy consumption in practical application plants are being investigated by means of processed analyses. Nevertheless, their results have not yet been adequately transposed into technically-economically justified energy consumption norms and rationalization measures. Thus, the energy consumption in the combines of the ministries of ore mining, metallurgy and potash, of the chemical industry, as well as of coal and energy, are being planned to the extent of more than two-thirds with technically-economically justified norms while that share in the combines of the ministries of the metal-working industry, of electrotechnology and electronics, of the glass and ceramics industry, as well as the light industry comes to less than 30 percent.

Record Achievements in Science and Technology Indispensable

In order to develop the rational use of energy into the decisive factor of our energy policy in the long run, we must today absolutely have record achievements in research and development so that we may--in the planning and design of products, systems, methods, and building structures--quickly attain scientific-technical top-level standards in energy consumption, in the weight-output ratio, in the waste statistics, and in other important quality characteristics.

The drafting of 550 energy consumption norms, which are contained in 43 GDR standards, helped us in a series of products to achieve international top values for energy consumption. That involves the development of a new generation of induction heat systems at the VEB Locomotive Construction Combine, the "Hans Beimler" Electrotechnical Works at Hennigsdorf, where the specific electric energy consumption was reduced by one-fifth particularly through the use of static frequencies changers and where they managed to catch up with scientific-technical top-level standards.

The analysis of the valid energy consumption norms however also reveals that, in the case of several standards, the energy consumption achieved

is partly as much as 50 percent below the value of the confirmed standards so that this particular standard no longer has any stimulating effect.

Research and development must make the decisive contribution to the most efficient development of technological processes in our economy and the development of new results and methods with international top-level figures in energy consumption in order to attain and help determine top-level positions in the main directions of energy conversion and application. This is the critical point when it comes to asserting the most efficient utilization of energy, during the coming five-year plan and far beyond that, as the main pillar of the country's energy policy.

In order to manage and control the efficient utilization of energy more effectively with the help of the plan, the most important measures in the field of science and technology, of socialist rationalization as well as investments will, starting in 1981, be spelled out along with the state plan and central planning will be organized by combines. With the confirmation of the energy plan and the plan of rational energy utilization measures as a part of the enterprise plan by the general managers and plant managers starting in 1981, the possibilities of influencing the implementation of efficient energy utilization through the plan will be considerably increased.

Many combines are aiming at the correct goals. The VEB Carl Zeiss JENA Combine, in agreement with the high pledges spelled out in the letter to SED Central Committee Secretary-General Erich Honecker, guarantee an increase in 1981 industrial commodity output to a figure of 111.3 percent coupled with a decline of energy consumption down to 98.8 percent. The Wilhelm Pieck VEB Chemical Fiber Combine in Schwarza is topping the predetermined target for energy rationalization for example by energentically continuing the successfully begun utilization of energy yields which so far has resulted in an annual energy cost reduction; with the help of the 1981 plan, they want to reduce the energy requirement to 96.2 percent as compared to 1980. On the other hand, there are still combines and enterprises which do not meet the predetermined rationalization targets.

Better Utilization of Manifold Reserves

Critical points consist of the processes of energy conversion and technological heat and drying processes, including energy yield utilization. Here we can earn two-thirds of the savings potential, based on our calculations for the next several years, with a particularly favorable ratio between expenditure and benefits.

A group of experts have discovered that improved plant organization and waste heat utilization as well as the employment of modern burners, furnaces, and fire-proof material, in about 21,000 industrial furnaces, above all in metallurgy and chemistry, in the metal-working industry, the construction materials industry, and the glass and ceramics industry, will make it possible to tap reserves corresponding to a raw brown coal equivalent of 28 million tons, including 7 million tons alone through better plant

management and utilization of available BMSR [industrial measuring, control, and regulating technology] equipment. In these high-temperature processes, we use above all heating oil, gas, coke, brown coal briquettes, and electrical energy. The average rationalization expenditure amounts to only one-sixth of the funds otherwise needed for energy source procurement. And we must add that heat treatment in such furnaces, in keeping with quality requirements, decisively influences the quality of GDR products.

The are great possibilities for waste heat utilization, above all waste gas heat, in the temperature range between 400 and 1,200° C. Only a part of the fuel-burning industrial furnaces is equipped with air preheaters. Possible air preheating of up to 600° C reduces the energy requirements by 30 percent.

The consistent utilization of energy yields as the safest energy source, because it is present in each plant itself, above all calls for corresponding preparations in the combines and enterprises. The study however shows that there are still backlogs in the preparation and utilization of the energy yields at the plants.

Energy Savings During Construction Work

Energy-saving construction activities, efficient handling of energy in room heating--these are of great importance to the energy economy of the GDR. In the meantime, energy utilization for space heating has risen to more than 36 percent of the utility energy consumption. The Seventh Construction Conference of the SED Central Committee and the Council of Ministers directed the workers in the construction industry quickly to create a scientific head start in order to reduce the energy expenditure for new buildings and structures to be modernized by at least one-third by the year 1985.

The improvement in the quality of work in the board factories--as demanded in the winter directive--takes first place when it comes to saving energy in construction work. But here we often have energy losses of up to 20 percent per construction project. This is an extraordinary loss to the national economy if we keep in mind that buildings which contain quality shortcomings will unnecessarily burden our energy inventory for many decades to come. Subsquent repair work is expensive, in most cases it is not possible, and it does not produce the same anticipated effects as the proper kind of construction work would, if it were done correctly from the beginning.

Good lessons have been learned in the Schwerin and Karl-Marx-Stadt housing construction combines with respect to quality control and the implementation of government heat consumption norms. In Schwerin, the bezirk energy committee, the energy combine and the housing construction combine--through the rational development of the WBS-70 [Housing Construction Standard?] type--since 1976 reduced the heat requirement per apartment unit by one quarter and thus stayed within the norm. Quality control, better heat

insulation along gable walls as well as in the ground floor and the gable ceiling and more effective regulator equipment were important factors here. But not everybody is working in this way.

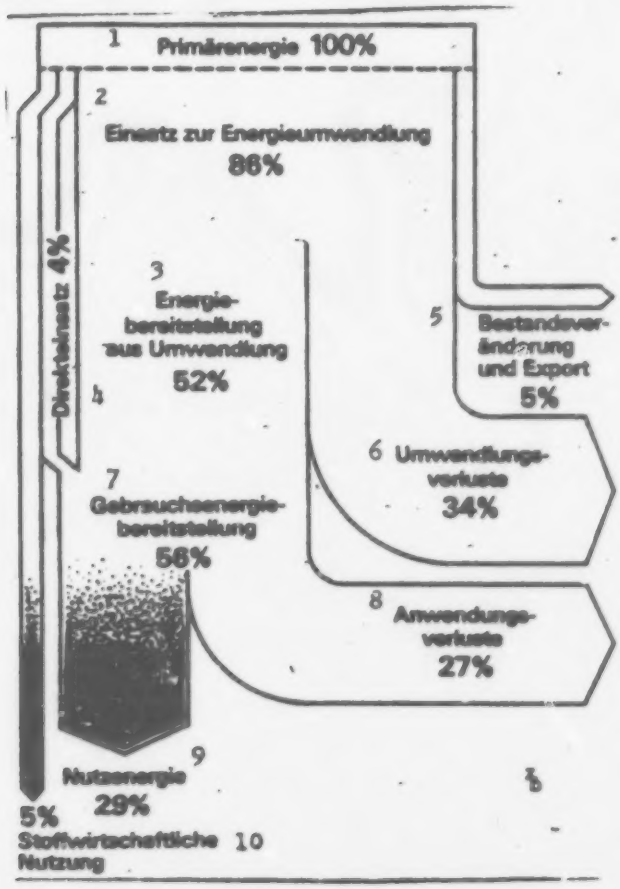
Economical energy utilization for space heating also calls for compliance with the adopted room temperatures. That must be ensured everywhere. Measurement and control of temperatures, expert regulation systems, use of precise operating curves, disciplined compliance with heating phases are just as indispensable for this purpose as the guarantee of the proper condition of the heating plants, including the proper functioning of the regulating valves [registers] on heating units. It is once again necessary to have all enterprises, government agencies, and public institutions investigate whether all prerequisites exist for proper space heating coupled with strict economy. This is important above all also for the health and well being of our citizens.

Reducing the Transportation Expenses

Fifteen percent of the national economy's energy requirements are taken up for transportation processes. Carburetor and diesel fuel are used mostly for this purpose. The most important thing here is the reduction of the transportation expenditure as such, the most efficient possible development of transportation, including the transportation structure, in order to use fuels as economically as possible. In 1980, considerable results were achieved as a result of the implementation of the resolutions. The transportation services were increased by 4.3 percent by the end of August and the use of diesel fuel was reduced by 4.4 percent compared to the same period of time the year before. This was possible above all because highway transportation was shifted to the railroads and to inland shipping.

But there are still great possibilities for savings in motor transport. In more than 3,000 inspected vehicles, technical and organizational shortcomings, exceeding the speed limit, and similar observations were made regarding 60 percent of the trucks. Among the trucks inspected, more than 500 were being driven without trailers.

It is also important to compare the same vehicle types with respect to fuel consumption. For example, we detect differences in vehicles of the same type in public and plant traffic in Halle and Dresden bezirks, amounting to as much as 45 percent; there is no justification whatsoever for that. Results of dispatcher stations which work in an exemplary fashion all show that--compared to the currently applicable guideline catalogue of the Ministry of Transportation--we are indeed achieving savings of up to 1.5 liter per 100 kilometers below the required level for passenger cars. The time has come to orient this standard catalogue to a greater extent by the optimum values actually attained.



1979 GDR Energy Flow Chart. Key: 1--Primary energy; 2--Utilization for energy conversion; 3--Energy supply from conversion; 4--Direct utilization; 5--Inventory change and exports; 6--Conversion losses; 7--Utility energy supply; 8--Application [utilization] losses; 9--Useful energy; 10--Utilization in materials industry [economy].

Growing Number of Exemplary Enterprises

The struggle for the title "Enterprise Working in an Exemplary Fashion in the Energy Industry" holds a considerable place in the endeavor to step up energy savings. More than 600 enterprises and installations have so far been able to win this title and they use 45 percent of industry's utilization energy. Starting in 1980, this title will also be awarded to cities and communities through the director of the Central Energy Commission for good results in energy-management work.

But the criteria for the attainment of this title will be pegged higher. Complying with government energy saving quotas, meeting rising production assignments with the same or lesser energy quantity, exemplary work with norms and high quality of products in terms of energy--these will carry greater weight in the award of these titles.

We will likewise not deviate from the basic principle to the effect that every enterprise which works in an exemplary fashion in the energy department must pass on the good lessons it learned within the branch and in the territory, the way in which, in Dresden Bezirk, in each kreis, an enterprise doing exemplary work in the energy department is doing active work as consultation base. We are concerned here with enterprises that do far more exemplary work in the energy department. We need optimum achievements not only in individual cases but across the board.

The development of enterprises and installations which work in an exemplary fashion in the energy department in community and social installations is still in its beginnings. Here at any rate we still take up 25 percent of the GDR's utility energy. Through the development of pilot enterprises for the maintenance and care of heating plants and BMSR equipment as well as burner adjustment in the bezirks and kreises, we must give even more effective support to the smaller enterprises and installations in these sectors in terms of the proper operations management and repair of their systems.

The most economical and the most rational possible energy utilization is of the utmost national economic and political significance and reveals a long-term and strategic character. This is something which the managers must more than ever before address themselves to. Let us be guided by past experience to the effect that knowledge regarding the interrelationships, regarding the national economic requirements on the part of every citizen, with a high level of technical knowledge, and at every work station, constitute those prerequisites from which will grow the kind of creative action, ingenuity, and high action readiness which we need.

Domestic Raw Brown Coal--Most Important Energy Source: From Speech by Wolfgang Mitzinger, Minister for Coal and Energy

[Text] Our concept for meeting the growing energy requirement of socialist society in the GDR starts with the consistent implementation of efficient energy utilization as well as the rapid increase in the output of raw brown coal. These new requirements also increasingly determine the action of the miners and energy workers in the combines, enterprises, and scientific installations of the coal and energy industry.

Considering everything that has to be done in the very near future, we must basically start with the idea that we must never and nowhere allow any kind of smug complacency. The conditions for a reliable energy supply are subjected to a high degree of dynamics. Something that is still sufficient today will no longer meet requirements tomorrow because the influence springing from the international market constantly confront us with new requirements which call for new decisions everyday regarding a reliable energy supply and a rapid response. There is only one way for us and that way is the increased use of raw brown coal.

Larger-Scale Substitution

The basic issue here is to meet the energy requirements to a much greater degree than so far planned on the basis of raw brown coal instead of hard coal and coke. Here is what that means: on the one hand, we must make available, for the producers, during the fourth quarter of 1980, solid fuels from our own production above and beyond the plan targets and above and beyond the competition pledges given so far. On the other hand, all energy consumers must, in addition to the tasks spelled out so far, regarding the substitution of heating oil and assorted energy hard coal, carry out additional measures with the support of the energy combines and the energy committees in the bezirks and kreises regarding the direct utilization of raw brown coal and, in special cases, also in case of admixtures of briquettes.

The main issue now is to make sure that, in all consumer areas, the use of raw brown coal will serve to release hard coal, coke, and briquettes without any reservations and that no time delay will be permitted here. The decisive thing thus is to make sure that the raw coal supply in each of the enterprises designated will actually be used in each installation specified.

There are already many enterprise collectives which are briskly using raw brown coal and which show us how the problems of raw brown [coal] extraction and screening-coal utilization can be mastered. These are enterprises in which this process is being directed correctly in political terms, enterprises where they long ago stopped discussing all of the "ifs" and "buts" and where they are instead tackling the tasks specifically. That was clearly brought out during a discussion in Leipzig on 17 September.

New Ways Opened Up

At the Erfurt-Rudisleben Chemical Systems Construction VEB, the swing-thrust grates in small water boilers were converted to raw brown coal by means of a change in the grate charging, the extension of the return plate, the increase in the swing frequency and the adjustment of the dumping height to the use of raw brown extraction and screening coal. Here they achieved almost the same performance parameters as during briquette firing. This system is now being carried out according to plan and the briquette quota was returned.

In Leipzig it was demonstrated just as convincingly that the use of screening coal on flat grates with stoker or manual charging is possible during heating-up with briquettes if the corresponding performance parameters are guaranteed. Here again, the necessary measures were documented in the information material released by the "Brown Coal Briquette Substitution through Raw Brown Coal" study group. The Leipzig Colored Yarn Works VEB were designated as consultation base.

The Harzer Works in Blankenburg successfully converted their steam generators from coke to screening coal and briquette firing. Measures designed

to implement the admixture of raw brown coal for briquette-fired articulated boilers in the various versions were demonstrated just as clearly. This enterprise engaged in another initiative. A suspension grate with secondary air supply was developed and cleared for production for the GK 20 articulated boiler which in the past achieved its planned performance parameters only when coke was used; it now guarantees the use of brown coal briquettes with full heat yields. This grate will be sold during the fourth quarter of this year through the Household Appliances Wholesale Company in related retail stores. The initiative displayed by the personnel force at the Harzer Works in Blankenburg will help us better solve problems of coke supply for social installations and the population. This initiative must now be continued for the use of screened coal.

We are naturally not overlooking the fact that the measures adopted may be connected with more labor on the part of operating personnel and, to a certain extent, a decline in boiler output. In many cases we run into the problem of storage capacity, the ash yield is greater and we are also going to run into other problems. It is therefore all the more necessary to provide strict management for the newly determined use of solid fuels in political and technical-organizational terms through the general managers of the combines, the council chairmen, and the plant managers, down to the last boilerman and uncompromisingly to implement this measure coupled with the full discharge of the individual responsibility of the energy users.

Spread Good Experiences

I would like briefly to summarize the good lessons we have learned. First of all it is necessary to make sure that the managers will personally organize this substitution process and that the implementation of the resolutions adopted in this connection, as well as the central directives, will be strictly supervised.

Second, the best results are achieved wherever--on the basis of fundamental decisions of our party and government regarding fuel utilization--a broad mass initiative of the workers is organized in pursuit of the most economical utilization of energy sources spelled out in terms of quotas. The important thing here is to make sure that our own reserves will be tapped for conversion and for reconstruction of boiler plants for the new fuel and that we explain to the boilermen why we are establishing and must establish new tasks for them likewise.

Third, our past experience shows us that the implementation of the central basic government guideline for fuel utilization calls for effective support from the local councils and their energy committee. Starting with the organization of territorial storage and transportation processes, continuing by rigid control of quota implementation and especially raw coal utilization, all the way to passing on experiences and lessons learned--all of these are tasks which can be organized most effectively in the territories.

Fourth and not last, it is also important to organize bezirk initiatives to tap local fuel reserves. For example, the Schwerin Bezirk energy committe made determinations regarding the utilization of broken wood which is no longer technologically useful, of wood residues and stumps, instead of brown coal briquettes. We do not consider this to be an emergency solution. The utilization of this kind of wood and of local peat deposits must be developed into a lasting factor, especially for the local fuel supply of agriculture and forestry.

It is therefore necessary to make sure that the bezirk and kreis energy committees, in cooperation with the agriculture and forestry departments, will quickly prepare a survey of these reserves, organize their utilization, and consider the use of such local energy resources in dimensioning the fuel quotas. Suggestions from citizens confirm again and again that many unused reserves are still present in this field.

Only through a significant increase in the supply of fuels and energy from domestic resources, through the complete elimination of energy waste in all sectors of social life, and through the increased direct utilization of raw brown coal instead of heating oil, hard coal, coal, coke, and briquettes will it be possible for us to accomplish the tasks facing us.

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ENERGY CONSERVATION ACHIEVEMENTS REVIEWED, PROSPECTS OUTLINED

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[Commentary by Wolfgang Rauchfuss, member, SED Central Committee; deputy chairman, GDR Council of Ministers; minister for materials management: "How Is Energy Conservation Progressing?"]

[Text] Considerable progress has been made in the GDR in recent years in the implementation of efficient energy utilization and in the struggle for a high savings rate in connection with energy consumption on the basis of the resolutions of the Eighth and Ninth SED party congresses. In 1976-1979, for example, when we had an average annual primary energy consumption increase of only about 2.5 percent, we were able to achieve more than twice as high industrial commodity output growth rates. This is a considerable achievement even on an international scale.

The reduction rates for electric energy and utility energy intensity, which were given to the economy as requirements, were attained and partly topped. Accounting for energy consumption during the first half of 1980 shows an increase in primary energy consumption amounting to less than one percent coupled with an industrial commodity output growth rate of 6.1 percent. This proves again that the resolutions of the party and the government regarding efficient energy utilization and elimination of any energy waste are becoming increasingly effective.

The point of departure in the management and planning of energy-industry development in the GDR and for all other sectors of the national economy must be the observation by SED Central Committee Secretary-General Comrade Erich Honecker to the effect that both the starting positions and the essential conditions for future dynamic economic growth differ at the start of the eighties from the situation during the past decade. The GDR today faces two major tasks in the field of the energy industry.

First of all, it is necessary to guarantee dynamic economic growth during the 1981-1985 five-year plan with a considerably lower increase in annual primary energy consumption. This means that efficient energy utilization during the eighties must make a far greater contribution to guaranteeing the fuel and energy inventory than during the past decade.

Second, the increase in primary energy during that period of time must be achieved only on the basis of domestic raw brown coal--which is still our most important energy source--and, to a limited extent, by means of an increase in nuclear energy, coupled with simultaneous substitution of heating oil and assorted energy hard coal. To attain this goal it is necessary to produce the required equipment, such as steam generators, coaling and ash removal plants, etc., and to erect the necessary

plants. These tasks create maximum requirements for science and technology and demand comprehensive investments.

The September 1979 resolution of the SED Central Committee Secretariat and the GDR Council of Ministers, entitled "On Efficient Utilization and Savings of Electrical Energy, Heat, Furnace and Engine Fuels as Well as the Elimination of any Waste in 1979," ushered in a new phase in the implementation of efficient energy utilization and economical employment of energy. Manifold initiatives were thus triggered in the combines, enterprises, and collectives. Many citizens submitted suggestions and provided hints as to economical and efficient energy use. Comprehensive measures for the elimination of energy waste and the tapping of reserves were taken in the enterprises of industry, the construction and transportation industries, agriculture, forestry, and the food industry, commerce, as well as educational installations, cultural facilities, and other sectors.

As a result, it was possible to relieve the electric energy and heat situations during the 1979-1980 winter semester by 6-8 percent; that meant that we were able to save considerable quantities of heating oil, gas, and solid fuels. That was a considerable contribution to steady energy supply in the GDR in the winter of 1979-1980.

To guarantee a better system and discipline connected with the economical utilization of energy in the economy, government quotas were issued in 1980 for the consumption of energy sources and the responsibility of the general managers of the combines for planning and accounting of energy sources--especially for the drafting and application of scientifically justified energy consumption norms--was increased. In this way we also better guaranteed uniform responsibility for production and energy consumption while at the same time we created better prerequisites for complex energy-industry work in the combines--the sort of thing that proves itself wherever we employ well-trained management personnel to accomplish energy-industry tasks and wherever we do not tolerate any narrow parochial approach to the work that has to be done. The lessons learned by such combines as the "Walter Ulbricht" Leuna Works--where the workers in socialist competition set themselves the target of guaranteeing output increase in 1980 already with less energy--should be applied in all combines and enterprises. The results and experiences of the workers at Leuna as well as the approximately 600 enterprises which in the meantime have received awards for exemplary energy-industry work constitute a good foundation for further successful energy-industry rationalization in all enterprises. The important thing is to help and support all collectives which have set themselves this task.

Through a combined effort with the ministries and combines, we drafted a "Concept for the Comprehensive Implementation of Rational Energy Use During the 1981-1985 Five-Year Plan." It starts with the idea that we must accomplish growing production tasks in many branches of the economy with the same energy quantities or with reduced energy utilization and at the same time replace imported energy sources--especially heating oil and assorted energy hard coal--with raw brown coal.

The concept comes up with specific assignments for the rationalization of the most important energy-industry processes, such as electric energy generation and

transmission, heat energy generation and transmission, space heating, technological heating processes, transportation processes, as well as electric energy consumption during the most important processes. High targets have been established for each combine regarding energy rationalization and the energy effects to be attained have been spelled out. Each combine and each enterprise now faces the task of drafting its own rationalization concept which starts with the idea that the production increase must lastingly be guaranteed with the energy quantity used so far or with a smaller quantity. Today, questions of energy savings of a long-term and strategic nature. They demand long-term concepts, they must be thoroughly discussed in the collective and they demand clear decisions.

What should we concentrate our efforts on primarily in tapping energy reserves?

The drafting and consistent application of technically-economically justified energy consumption standards are of special importance. Here we still have backlogs and delays in connection with various products which must be eliminated quickly.

In implementing the enterprise rationalization concepts--which are supposed to concentrate, among other things, on the insulation of heat-conducting lines and fixtures, the reduction of condensate and compressed-air losses, the utilization of energy yield as such, especially from heat processes--we must start with the increased use of our own, in-house capacities, especially the rationalization equipment construction and building construction departments. The energy-industry targets for the development of new products, processes, and technologies must relentlessly be measured against international top-level standards. That is the only way we can make sure that the prerequisites for the reduction of specific energy consumption will be created along with the new product or method. We are helped in this effort if we apply even stricter criteria in the confirmation of energy consumption norms and specifications, if especially the planners, designers, and technologists are involved even more effectively into energy-industry work and are urged to display ingenuity in their work.

We still suffer considerable energy losses due to incorrect operations management, especially effective equipment and maintenance of MSR [measuring, control, and regulating technology] installations and inadequate skill levels on the part of operating personnel. The implementation of economical energy consumption inevitably demands an exactly functioning MSR equipment unit and a high level of know how among operating personnel. The requirement for this is the necessary equipment of the systems with MSR installations and constant and above all system-related skill training for operating personnel. The unity of knowledge, ability, and constructive action on the part of the workers who handle these systems with a high energy utilization rate is of extraordinary importance for efficient energy use.

The exact accounting of energy consumption both for individual subsystems and for enterprise divisions and combines constitutes an important foundation for the implementation of government energy policy and energy savings. A particular critical main point here involves compliance with technically-economically justified energy consumption standards and the derived government quotas for energy consumption. Monthly accounting of energy consumption must become a constant management task of the enterprises and combines--not only if energy consumption has been exceeded with penalties amounting to ten times the price.

It is in the interest of all of us if the objectives of socialist competition include, in the enterprises and combines, the technically-economically justified energy consumption norms, measures aimed at the substitution of high-grade imported energy sources, scientific-technical objectives regarding the development of new products, the accomplishment of selected rationalization measures by the required deadline and with the required quality, and compliance with government quotas. The important thing here is to assign accountable tasks to the teams, plant divisions, and enterprise personnel forces and to organize their specific accounting.

To increase social influence and to guarantee the democratic cooperation of the workers in the combines and enterprises we have formed energy aktivs. It is their task above all to discuss the monthly results of the accounting of government quotas for energy consumption and the implementation of the "Plan of Measures for Efficient Energy Use." The emphasis here is on complying with government quotas and using less than specified in the government quotas as well as supervision over the implementation of all points in the plan of measures along with a check on the effects regarding specific and absolute energy consumption. It is a matter of energy policy to come to grips with the implementation of important innovator proposals regarding efficient energy use and to support their rapid practical implementation. The high demands of the eighties regarding economical energy use and the significant output increase in the field of the energy economy as a whole call for effective work by management personnel with a high level of political and technical knowledge. At this time, available training capacities are not being fully utilized at all colleges and technical schools although the enterprises in some cases are having shortages of cadres, especially for the management of technological heat processes. In the future the enterprises and combines should develop greater initiatives regarding the training and detached duty assignments primarily of young skilled workers and above all to the Zittau Engineering College, the Freiberg Mining Academy, and the Markkleeberg Technical School. It is important to make sure that all universities, colleges, and technical schools fully utilize the possibilities for the basic and advanced training of personnel in fields of science in accordance with rising requirements.

The implementation of efficient and economical energy use also confronts the public with new and higher requirements. Critical main points here are the rapid and effective popularization of the experiences of the best workers, the imparting of new discoveries and insights into the energy policy of the GDR to all citizens of the country, combined with persuading people consciously to cooperate toward economical energy use in the individual sector. The dissemination of interesting and convincing examples of efficient energy utilization in the economy and the transmission of specific recommendations aimed at preventing energy losses at home must be continued with even higher quality in the press, on radio and television so that "energy saving" will be increasingly upbeat in the GDR as a result of the conscious cooperation of its citizens.

5058
CSO: 2300

ECONOMIC REFORM ON HUNGARIAN MODEL CONSIDERED INADVISABLE

Warsaw KURIER POLSKI in Polish 19-21 Sep 80 p 3

[Interview with Dr Jan Mujzel of the Institute of Planning, Planning Commission of the Council of Ministers, by Jerzy Jagodzinski and Marek Rapacki]

[Text] "An indispensable factor for improving our economic situation and for a continual increase in management efficiency is the execution of broad changes in our methods of planning and management of the national economy. We are in the process of preparing a plan of comprehensive reform in this area." The above words come from a Sejm expose delivered by Premier Jozef Pinkowski on 5 September. The KURIER requested an interview on this subject with the distinguished specialist on problems of economic systems, Dr Jan Jujzel of the Institute of Planning, Planning Commission of the Council of Ministers.

[Question] Professor, the study of Polish economics is facing new, difficult, but exciting tasks...

[Answer] Often a little too much is expected from scholarly study. The study of the workings of the socialist economy is still in a state of infancy. Moreover, there are many aspects and problems of the system of operation of an economy about which research in general cannot make unequivocal judgments. These are those problems about which scholarly positions cannot help but include a value judgment. And it is known that value judgments belong to the category of subjective opinions. Consequently, it is only natural that the views of economists are diverse on these questions.

Our limited knowledge and the controversiality of views have always stood in the way of systems changes to a certain degree. The politicians faced decisions which were attended by many basic uncertainties, not only from an economic viewpoint, but also from a sociopolitical point of view.

[Question] But people have a right to ask why systems changes have been discussed for 25 years without visible results, don't they?

[Answer] Indeed, society is not happy with the operation of the traditional system of planned economy which was instituted in Poland at the end of the 1940's

and the beginning of the 1950's. This system is sharply criticized in circles of professional economists and practitioners as well. Despite this we have not succeeded in extricating the economy from its logic. Two major attempts were made in the second half of the 1950's and in the first half of the 1970's, several lesser attempts were made in the interim. Unfortunately all of these were fundamental attributes of the traditional system.

[Question] And now we are embarking on a third great attempt?

[Answer] Let us say we would like to believe that we are moving toward our next attempt at dispensing with the traditional system. Our guiding principle is the hope that this time we will succeed notwithstanding numerous sceptics in various circles who hold that every such attempt must eventually run up against insurmountable obstacles in our situation and must finally end with a return to traditional methods.

Perhaps a science of economics which does not provide an unequivocal guidepost for progressive systems transformations is partly at fault. On the other hand, as many times as decisionmaking centers in Poland have seriously begun to tackle the problems of economic reforms, Polish economics and Polish social thought have furnished plans, ideas, and original, valuable analyses, all of which were not without certain defects.

A basic factor in the explanation of our failures is the fact that the system of operation of the economy is an extremely complex phenomenon and this is why its successful transformation demands a so-called comprehensive approach. This is extremely difficult because of the necessity of operating across an exceedingly broad range, not only in an economic sense, but also socially, politically and educationally, while taking into consideration a very large number of diverse connections, counterconnections and the like.

What is also very important is the circumstance that upon closer analysis it becomes evident that even when these connections occur in some form, as when they assume a technical-economic shape, for example in the sphere of a financial system, a price system or incentive solutions, what in fact is underlying is the sociopolitical content. To put it another way, there is no basic solution in a systems field which does not violate someone else's group interests, or which does not affect the sociopolitical structure, the methods of exercising authority and the role played by various groups and circles. And in this way a multitude of passions is created, each systems approach immediately provokes defensive moves on the part of the threatened groups, which are sometimes very influential. When such a state exists in society that progressive tendencies and forces manage to break down these obstacles, which are, after all, very human and completely natural, then the opportunity will arise to effect a really fundamental change in the economic system.

[Question] We would like to think that we presently have such a state at hand...

[Answer] On each previous occasion we observed an otherwise understandable tendency on the part of decisionmaking representatives to limit themselves to small steps, in order not to jump into the unknown perhaps, and as much as possible to activate

other elements in the socioeconomic policy which could produce substitute effects in place of bolder tasks on the systems front. It became evident that this was an unsuccessful trend. Without bold enough systems changes, without mechanisms guaranteeing the efficient operation of the economy, other measures in economic policy, such as negotiating loans or submitting to growing inflation for the purpose of compelling dynamism are short term, deceptive solutions.

[Question] Very encouraging experiences in our camp are afforded by Hungary...

[Answer] Yes, I agree completely. It is difficult to overestimate the significance of the Hungarian reform. It is really the only example within the CEMA bloc of a successful, bold departure from a traditional system, the replacement of a directive-distributive model by a system in which elements of self-regulation, horizontal ties in the operation of the economy and releasing rank and file initiatives have been introduced and built in much more forcefully than in any other country. This does not mean that I am coming out in favor of imitating Hungarian solutions. I am of the opinion that under our conditions, particularly at present, this would not be good advice.

Certain problems encountered in the Hungarian experience would also have to be avoided. I will mention only two of these. The first: the choice of a managerial, relatively self-governing orientation. In principle the Hungarian reform began with a managerial orientation, but recently certain modifications have occurred in this regard. From the beginning, however, key positions and functions were entrusted to the managerial staff and the role of personnel in decisionmaking processes was not exploited.

In Poland the very situation that we have today predetermined in favor of the second, self-government orientation, in my opinion. Recent agreements and proposals carry far-reaching consequences for all forms of social participation in the operation of the economic system--not only the participation of trade unions, but also of workers' self-governments, national councils, the Sejm and other organs.

A second difference between the Hungarian experience and our experiments would relate to solutions in the field of organizational structures. The Hungarians have highly concentrated, highly monopolized organizational structures. These exist both in their industry and in other economic branches. Even they are not particularly enchanted with this anymore, and we should not remain insensitive to excessive concentration in our systems solutions either. It has been known for a long time, and Lenin wrote in his famous work on imperialism, that every monopoly is at its base the creation of a situation in which nonproductive income is collected. Whoever remains in a monopolistic situation can afford to be insensitive to the needs of management efficiency.

[Question] Is this to say that we would rather draw upon the assumptions of our own model developed during the years 1957-1959?

[Answer] Yes, I hold that the general directions of progressive systems solutions in Poland today are, generally, the same solutions as Polish progressive political and social thought and mass movements outlined during the second half of the 1950's. Our research, of course, has progressed, but the continuity of progressive socio-economic thought is clear.

[Question] What is the significance of recent governmental decisions concerning, among other things, wages and prices, as well as the restructuring of a portion of our production to serve the needs of the market?

[Answer] Naturally price increases complicate the problem of restoring market equilibrium and in this way hamper the systems movement. On the other hand, an inefficient system is a factor which increases the lack of equilibrium.

The immediate attainment of the greatest effects regarding supply is indispensable for the improvement of equilibrium both in the presence of the rapid growth of nominal income and of price stabilizing actions. Consequently, out of social necessity the economic policy is undertaking efforts both externally, to procure additional supplies of the market goods and raw materials necessary for market production, and internally, where it appears that the primary emphasis will be directed toward so-called conversion, or transforming production, when possible, from investment production to production for the market and for export. Particular emphasis will surely be placed on those products and groups of products which are universally felt to belong to the basic components of the living standard. There are rational actions, but...

[Question] With regard to long-term policy only systems solutions can really be successful?

[Answer] Yes, because enormous efficiency reserves are hidden within systems solutions. They are inherent in the possibilities of the full utilization of our production apparatus, the size and quality of which have increased in recent years. They are inherent in the improved utilization of the talents of work crews and cadres, which are more educated and more intelligent than ever before; in the effective use of reserves embedded in our scientific research facilities, which are not productive enough today, but thanks to their intensive former expansion, nonetheless represent very valuable capital for the future.

Positive reserves are also inherent in the fact of the broad internationalization of our economy. While this creates various problems, it also opens up excellent possibilities for deriving the benefits of worldwide production.

With regard to the question of so-called negative reserves, they issue above all from the enormous amount of waste, which grows apace at every turn--the waste of materials, the waste of direct labor, of initiatives and of human ideas. Opportunities have been lost and continue to be lost and the economy is burdened, the reaction to new possibilities and to the needs of people is slow, formal institutions are punctilious with regard to the share of working people in steering the economy. Moreover, there is disintegration within the moral-social sphere.

[Question] But is there not evidence that the situation with regard to the above is of late not as deplorable as we have come to believe?

[Answer] Of course, but the element of optimistic improvement primarily affects only the working class, and of these only large industries.

[Question] What about the issue of the scope of the anticipated reform?

[Answer] In my opinion, it should only be as broad as we can afford under present difficult conditions. For this reason I believe that the reform should be gradually accomplished, in stages. I do not think that in our situation we can be oriented toward a solution in the form of a one-time operation, as in Hungary. Overcoming all of the pressures and imbalances in our economy must be a process...In the scenario of systems changes, roughly speaking, we should set the following course: the execution of a systems movement coordinated with a series of regulatory tasks in socioeconomic policy; as a results of these measures a certain improvement in the market situation follows and puts us in a position to execute the next systems step, which, together with the accompanying actions, produces further positive results for economic equilibrium. And so, by executing these moves as if in "shifts" in the systems field and in other fields, we will be able to complete a progressive restructuring over a period of time.

[Question] And what should the concrete points of departure be? Can they be decisions handed down by premier Pinkowski on such matters as the question of the growth of autonomy of enterprises?

[Answer] In my opinion the principal points of departure are three. First, despite appearances there is the strengthening and social rationalization of central management. This does not mean an increase in directives addressed to economic units. The second point relates to the broader independence of enterprises. In my opinion, we will have to exploit the enterprise as the basic link of the system, the elementary organizational unit of rational management. As its autonomy is broadened, it should be made the primary agent of efficiency. We are becoming more and more acutely aware that the lack of rationality and initiative at the level of this basic unit cannot be replaced with the help of any sort of action from the top.

The third matter is the entire broad social dimension of the problem. To put it another way, the expansion of the share of society, of working people in various sectors in undertaking and implementing decisions in the whole economic process. These are perhaps are three mainstays on which the concept of a new system of economic operation must be based.

[Question] Are the problems of price regulation, of the creation of the appropriate price mechanism, a separate complex of issues?

[Answer] It is perhaps not a separate group, since these problems are intimately involved with the three main subject areas of reform of which I spoke above. The principal changes in the price area would have to be a sine qua non for the introduction of new systems solution in those areas. In the system which--I would like to believe--we will consistently develop, prices should play the role of the

basic parameter controlling the more and more autonomous decisions of enterprises, as well as a factor rationalizing central decisions.

The views that it is possible, by employing models of comprehensive planning, to arrive at the optimal solutions, virtually disregarding prices or using stipulated prices, have not withstood the test of time. The present system of prices with its numerous disproportions continues to be very bad; it does not provide true cost-effectiveness parameters, and consequently is lacking in the basic data for rational economic decisionmaking. It would enormously complicate the expansion of the powers of enterprises to make such decisions.

Actions on the price front cannot but be numerous, difficult to undertake, and very comprehensive all at once, since there are many areas of pricing--retailing, materials supply, foreign trade, procurement and various other prices as well. All of these areas are very specific, but at the same time they are linked through the principle of communicating vessels. Probably one of the most important issues should be restoring the health of the prices of supply for the means of production, which are widely separated from objective conditions today. Fortunately preparations are already underway for actions to rationalize this sphere of price ratios.

[Question] And what of the whole picture of preparations for systems changes?

[Answer] In the near future, groups of experts, decisionmaking teams and staff teams will be called together for the purpose of carrying out conceptual work. Among these people will be politicians, persons in the economics field and scholars. The approach of the authorities to these preparatory activities is ambitious and broad; the overall effort is being directed, as you know, by the chairman of the Council of Ministers. The first "packet" of changes is forecast for 1981.

The announcement that a plenary meeting of the PZPR Central Committee was devoted to the subject of systems changes says a great deal.

Work continues on the plans for a series of laws, which are to be voted on shortly by the Sejm. They will be laws concerning trade unions, workers self-government, and enterprises, and will perhaps include a law on planning. These legal documents, one way or another, have surely already become the expression of a broader concept of the systems changes about which we have spoken.

[Question] The role of the Sejm is visible here, is it not...

[Answer] In speaking of the social rationalization of central management, as one of the mainstays of the whole philosophy of reform, I had in mind the role element executing the selection of the major social tasks and proportions, and then effectively enforcing the execution of its decisions, the social rationalization of central management is impossible to achieve in our system.

[Question] Just as social rationalization at a lower level necessitates the setting in motion of a real self-government...

[Answer] Of course, they are symmetrical. What is needed, however, are conditions of intensive efforts for activating former and new mechanisms of operation of the self-government factor, the social factor, the partnership factor with reference to managers, of central strategists and successive economic decisions. Only then will Polish reform be able to become what it should be...

8536
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LONG-RANGE FERTILIZER PRODUCTION, UTILIZATION OUTLINED

Warsaw ZYCIE GOSPODARCZE in Polish No 43, 26 Oct 80 pp 8, 9

[Article by Lech Froelich: "Fertilize and Store"]

[Text] In the opinion of farmers, as confirmed by scientific research, mineral (chemical) fertilizers cause harvesting yields to increase by as much as 60 percent. Fertilization is a necessary but insufficient factor. We have written repeatedly on this subject, as we shall revert to it. In this article we shall chiefly attampt to answer the question of what is the state of the supply of chemical means of production to agriculture.

Fertilizers

The revised 1980 plan provides for a fertilizer output consisting of 1,28 million tons of nitrogenous fertilizers (in terms of the pure ingredient N_2), 845,000 tons of phosphoric fertilizers (in terms of P_2O_5). In the first half of the year the chemical industry produced 641,000 tons of nitrogenous fertilizers, or a little more than 50 percent. It thus should produce 320,000 tons each during the remaining third and fourth quarters in order to meet the planned targets. Despite strikes and emergency stoppages in certain factories--in Wloclawek a production section has been shut down for longterm repairs--in the third quarter our output will fall about 318,000 tons short of the goal, but this shortage can be offset if an adequate supply of raw materials is assured. This concerns chiefly gas, and coal too. If the chemical industry is provided with gas, and if fertilizer production is indeed to be given priority, the industry can fulfill the plan-set targets for nitrogenous fertilizer output.

As regards phosphoric fertilizers, the plan for this year specifies 845,000 tons in terms of P_2O_5. In the first half of the year 449,000 tons, or more than one-half, has been produced. Some 200,000 tons are yet to be produced during each of the third and fourth quarters. The fulfillment of these seemingly easier tasks may, however, be difficult. The plants in Police and Gdansk, though located in the neighborhood of seaports, underwent stoppages owing to strikes, while the plants in Lubon, Ubocze, and Bonarka had production shortfalls owing to lack of phosphoric raw materials, which stayed on board ships. Thus the problem is to deliver these raw materials as soon as possible to those plants and to assure their most efficient and smooth operation until the end of the year.

Chemical industry men comment that this does not, of course, mean that this output and these supplies satisfy completely the demand of agriculture. Farmers always want more. But chemical industry as a producer is bound by the plan. But in their capacity as citizens, chemical industry men are concerned about the manner in which agriculture utilizes chemicals--fertilizers, crop protectants, feed supplements, premixes, vitamins, and antibiotics.

It is obvious besides that chemical industry has other vital tasks to accomplish in addition to helping agriculture. Hence, the necessary developmental proportions in the structure of that industry must be maintained. In the last 15 years (1963-1978) the supply of chemical fertilizers (NPK) [nitrogen, phosphorus, and potassium] to agriculture has grown from 56.4 to 190.3 kg per hectare, that is, by a factor of 3.5 times. This has required considerable investment outlays. It is estimated that in view of the considerable capital-intensiveness of investments in the nitrogenous and phosphoric fertilizers industry every additional kilogram of these fertilizers per hectare on the nationwide scale requires 1.5 billion zlotys in investments in the fertilizer industry! How were these fertilizers utilized? In the last 15 years the average grain harvest increased by a factor of 1.6 times; the potato harvest, by a factor of 1.3; and the sugar beet harvest, by a factor of only 1.1.

As for potassic fertilizers, we import them. Until 1978 it was thought that we had a surplus of potash, and dumps of potash salt had lain on depots of state farms and PR. Scientists have shown that the proper proportions between the supply and application of nitrogen (N_2), phosphorus (P_2O_5) and potassium (K_2O) should be 1:0.8:1.2. Agriculture in 1980 will receive enough fertilizers to reach the ceiling of 192 NPK per hectare of arable land. This is much less than envisaged in the 1973 Program for the Chemicalization of the National Economy, and less than the 1976-1980 Five-Year Plan. Even so, however, during the 1973-1980 period application of chemical fertilizers will have increased by 26.5 kg per hectare.

An Exchange of Views

Between chemical industry and agriculture a fairly lively exchange of opinions occurs on the manner in which fertilizer production should develop in the next few years and on the amount of fertilizers that should be given to agriculture in order to attain the anticipated harvests. Agriculture (in its postulates of August 1980) expects the fertilizer industry to develop on a scale assurinf the supply of 1.8 million tons of N_2, 1.2 million tons of P_2O_5 and 170,000 tons of K_2O to agriculture by the year 1985; altogether this amounts to 4.7 million tons of fertilizers and it would serve to improve the degree of fertilization by 58 kg per hectare compared with the current year, that is, to raise the level of fertilization to 250 kg NPK per hectare. -

The Ministry of Chemical Industry is very optimistic about the possibility of raising the level offertilization fo 230 kg per hectare in 1985, that is, by 38 kg more per hectare than at present. The supplies would then amount to 1.7 million tons of N_2, 1.1 million tons of P_2O_5 and 1.55 million tons of K_2O, or a total of 4.35 million tons. Assuming that every additional kilogram of fertilizers per hectare on the national scale costs 1.5 billion zlotys in investment outlays,

the implementation of such a program would cost 57 billion zlotys! At any rate, more than 50 billion zlotys. This year the Ministry of Chemical Industry expects to spend 7.6 billion zlotys(including 2.2 billion zlotys on the [fertilizer plant] in Police) on all investments relating to the food economy.

Farmers base their claims on the following arguments: the lower fertilizer output and smaller application doses proposed by the chemical industry will result in an application shortfall of 1.46 million tons of fertilizers during the 1981-1985 period. Since it is recognized that each additional kilogram of fertilizers applied per hectare results in a average increase of 6 kg in grain harvest per hectare, the overall grain harvest during that 5-year period will be 8.7 million tons lower, or on the average 1.7 million tons lower each year!

This reasoning cannot, however, be accepted without law of diminishing returns reservations. A certain degression rather than direct proportion exists between the increase in amount of chemical fertilizers applied and the increase in yields. Thus, it is believed that for the first 100 kg NPK applied per hectare every 1 kg applied results in an increase of 5.8 kg in grain yields, but within the 100-200 kg per hectare range every kg applied results in an increase of only 3.5 kg in grain yields, while within the intensive 200-300 kg per hectare range every kg applied results in an increase of only 2.0 kg in grain yields, so that achieving higher harvests in this way becomes increasingly costly. Moreover, the calculations of "decrease" and "increase" in yields should be limited to the approximately 14.6 million bectares of tilled land alone, rather than covering the whole of arable lands--about 19 million hectares.

If agriculture in 1985 were to receive 38 kg NPK per hectare more than it does at present, it should harvest 228 kg of grain more per hectare, or more than 4.3 million tons on the national scale.

Crop Protectants

Will chemical industry supply them in the quantities needed?

Since the production of crop protectants is to some extent based on imported semi-finished products or concentrates of the active substance, their supply is lower than the demand of agriculture. The extent of satisfaction of that demand as regards herbicides and fungicides is estimated at 40-50 percent. Although there are quite a few original new technological solutions and even design documents on the shelves of institutes, the program for developing the pesticide base has been imprlemented only minimally. It had been expected that 6 billion zlotys would be spent for that purpose during 1976-1980, but only 600 million has been spent.

Moreover, a "humorous" dialogue between chemical industry and agriculture recurs every year. Farmers need crop protectants for the brief spring-summer vegetation season and it is always then that they clamor about the scarcity of these chemicals. On the other hand, it must be borne in mind that most of the chemical industry's production facilities operate continuously and without any large margin of reserve. Thus during individual months and quarters of the year the scale of output and supply does not vary much. Farmers demand multiplied deliveries during the several "active" months. The crop protectant factories,

which operate more or less smoothly throughout the year, can only provide about one-twelfth of annual deliveries each month. Hence this relationship between "smooth" production and "activity" of utilization of crop protectants should be taken into account in the system for receiving orders and purchases.

This year, during the period of its "action" [drive]--because the drive for combatting pests and weeds begins and ends at definite periods--agriculture received 99 percent of the plan-envisaged potato beetle pesticides, 112 percent of grain herbicides, 105 percent of sugar beet herbicides, 95 percent of corn herbicides, and only 55 percent rape pesticides. It should be noted, however, that this year climate anomalies and floods destroyed large areas planted with rape which had to be plowed back, so that the demand for rape crop protectants has diminished. As for the supply of crop protectants for orchards, it reached 105 percent.

For a long time now opinions have been differing about whether priority should be given to fertilization, that is, to yield-increasing operations, or to a broader application of preparations reducing losses and protecting the harvests on the field and in granaries and silos.

Last year the aggregate harvest of the four cereals amounted to 15.3 million tons, reaching 27.7 billion zlotys in value. When applied in accordance with the rules of agrotechnology, crop protectants reduce harvest losses by 10-15 percent, which means that it is possible to gain at least 1.5 billion tons more of grain having a value of nearly 3 billion zlotys. The cost of producing crop protectants (or importing them) or the eventual investment outlays on the construction or expansion of the necessary facilities is much lower than in the artificial fertilizers industry. This also applies to the so-called preservatives--preparations serving to protect what has already been grown. In this country storage losses reach 15-20 percent. These figures should serve as a basis for answering whether investments should be concentrated in the capital-intensive and energy-intensive production of fertilizers or whether the needed increases in yields should be achieved in another way. By eliminating these storage losses we could gain at least 3 million tons of grain annually. This does not, of course, mean thta the chemical industry's fertilizer program should be abandoned. It is simply that both possibilities should be borne in mind.

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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2075

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EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

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CONTENTS

BULGARIA

Report on the Fulfillment of 9-Month Economic Plan
(RABOTNICHESKO DELO, 25 Oct 80) 1

CZECHOSLOVAKIA

Minister Explains Set of Measures in TV Interview
(TV, 23 Oct 80) 7

GERMAN DEMOCRATIC REPUBLIC

Order on General Traffic Planning Published
(GESETZBLATT DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK, 1 Oct 80). 9

Management To Be Responsible for Improved Patent Rights System
(Hans Kuegler, et al.; EINHEIT, 11 Sep 80) 13

Past Decade's Aid for Developing Countries Reviewed
(Various sources, various dates) 19

Liberal-Democratic Daily's Summary
'EINHEIT's' Facts, Figures

HUNGARY

Third Quarter Economic Results Published
(NEPSZABADSAG, 12 Nov 80) 22

Progress in Industrial Restructuring Noted
(Mrs Ferenc Nyitrai; NEPSZABADSAG, 5 Nov 80) 24

Growth in Export of Animal Products Noted
(Mrs Istvan Benda; MAGYAR MEZOGAZDASAG, 29 Oct 80) 28

Situation of Incompleted Investments Discussed
(Peter Keresztes; FIGYELO, 5 Nov 80) 33

POLAND

Need for Intensified Land Reclamation Stressed
(Franciszek Nasinski; DZIENNIK LUDOWY, 4 Nov 80) 37

Farmers Receive Aid for Purchase of Machines
(CHLOPSKA DROGA, 12 Nov 80) 40

Coupons for Potato Deliveries, by A. Jar
Credit for Young Farmers

ROMANIA

Socioeconomic Value of Self-Management, Self-Administration
(Victor Dinu; ROMANIA LIBERA, 29 Oct 80) 42

Efforts of Trade Network To Satisfy Needs of Consumers
(Ana Muresan Interview; ROMANIA LIBERA, 24 Oct 80) 45

Successes, Requirements in Standardization of Production
(Ion Hera-Bucur; ERA SOCIALISTA, 20 Nov 80) 50

Law Regulates Development of Small Industry
(BULETINUL OFICIAL, 22 Oct 80) 56

YUGOSLAVIA

Serbian Opstinas Seek To Retain Aid to Underdeveloped Areas
(NEDELJNE INFORMATIVNE NOVINE, 26 Oct 80) 68

Appeal From Leskovac, by Dragan Jovanovic
Statistics on Underdeveloped Opstinas

REPORT ON THE FULFILLMENT OF 9-MONTH ECONOMIC PLAN

Sofia RABOTNICHESKO DELO in Bulgariar 25 Oct 80 pp 1, 2

[Information by the Committee on the Unified System of Social Information at the Council of Ministers Regarding Fulfillment of the Unified Plan for Socioeconomic Development of the People's Republic of Bulgaria During the 9-Month Period of 1980]

[Text] During the past 9 months the workers embarked on a nationwide socialist competition and met the 36th anniversary of the 9 September Revolution with new achievements by fulfilling the 1980 as well as the Seventh Five-Year Plan. The July Plenum of the BCP Central Committee (1980) gave the impetus for mobilizing the creative forces and energy of the people to work further for a stable and intensive development of the national economy and for a worthy welcoming of the 12th Party Congress.

As a result of applying the economic approach and the new economic mechanism, the plan for net production, social productivity, profits, and cost price has been fulfilled.

The plan for scientific research and applied engineering, which contributed to better utilization of the scientific-technical achievements, has also been fulfilled.

Building and improving the material-technical basis of the national economy continued. For the 9-month period 3.8 billion leva capital investments were adopted, of which 1.8 billion leva were used up for renovation, modernization and expansion, i.e. 56.8 percent of the anticipated sum by the yearly plan.

A great number of labor collectives reported fulfillment of the Seventh Five-Year Plan as a result of the nationwide socialist competition, of the introduction of a new type brigade labor organization all along the line, and of wide application of exemplary achievements.

I. Industry

The economy complexes, ministries and other departments, the economic enterprises and their branches in industry, fulfilled the 9-month plan for monetary revenues by 100.7 percent regarding realization of commodity production and 101.0 percent regarding produced commodities.

All okrugs fulfilled the plan for produced commodities. The okrugs of Blagoevgrad, Varna, Mikhailovgrad, Pernik and Smolyan did not reach the required results of monetary revenues from realized commodity production.

Some economic organizations did not obtain the expected monetary revenues from realization of commodity production either, as for example: Bulgarplod [Bulgarian Fruit], DSO [State Economic Trust], Dimitrovgrad Chemical Combine, SK [Economic Combine] for household electric appliances, Yambol Dimiter Dimov chemical combine, and others.

Per basic economic ministries and departments the plan fulfillment for the 9-month period stands as follows:

	Percent of the plan fulfillment for 9-month period	
	Produced commodities	Monetary revenues from realized commodity output
Ministry of Energy	100.2	102.3
Ministry of Chemical Industry	100.3	100.9
Ministry of Machine Building	100.0	102.1
Ministry of Electronics and Electrical Engineering	101.2	101.6
Ministry of Light Industry	102.9	102.5
Ministry of Metallurgy and Mineral Resources	102.9	100.5
Ministry of Transportation	99.8	97.1
Ministry of Internal Trade and Public Services	103.8	102.5

Overfulfilled was the 9-month plan for production of electric power, rolled ferrous metals, electric hoists, electric telfers, power transformers, soda ash, nitrogen fertilizers, and others.

Some economic organizations and departments did not fulfill their plan for production of cast iron, lathes, electric motors, shoes and some other commodities, and, thus, did not supply the consumers with the contractual consumer goods.

Use of machines and equipment expanded in many fields of industry. In some workshops and plants the new technology and techniques have not been adopted and the expected technical-economic indicators of installed machines and equipment in industry have not been reached.

A greater growth of net production in industry has been reached by smaller material expenditures and by improved rationalization of production and better utilization of the existing resources during the 9-month period.

The production of some basic goods is characterized as follows:

	Unit	Produced Output	Percent of Plan Fulfillment
Electric power	million kWh	25,200	100.2
Cast iron for processing	tons	1,162,213	99.0
Rolled ferrous metals	tons	2,302,301	100.2
Lathes	units	6,798	99.7
Electric hoists	units	33,536	103.7
Electric telfers	units	86,635	101.6
Electric motors	units	920,314	99.9
Internal combustion engines	units	10,550	100.0
Power transformers	units	5,658	103.9
Soda ash	tons	1,109,516	102.4
Nitrogen fertilizers (including carbamide)	tons	549,777	100.9
Cotton fabrics	thousand meters	252,919	103.4
Shoes	thousand pairs	12,585	98.9
Meat	tons	332,871	101.1
Butter	tons	16,505	100.3
Sterilized canned vegetables	tons	169,507	85.1

II. Agriculture and Livestock Husbandry

In the past 9 months of the year the material-technical basis of agriculture and livestock husbandry continued to expand. For this purpose 576 million capital investments were used up. The plan for supply of chemical fertilizers is progressing successfully. Agricultural work was done under unusual meteorological conditions, i.e. high precipitation and low temperatures in spring and significant hot spells and drought in June and July. Not all areas designated by the plan were seeded. Normal vegetation of some crops was delayed and interrupted. Some other crops, however, are expected to give good yields.

Good conditions were created for balancing off part of the losses caused by the unfavorable meteorological conditions.

Average yield per cow increased by 26 liters compared to 1979, or 1.1 percent. Average egg-laying capacity decreased, although egg production increased due to a greater number of layers.

The number of animals and fowl at the economic enterprises and departments is as follows:

	1 October 1980	1 October 1980 in percent compared to 1 October 1979
Cattle	1,447,328	99.9
Of which--cows	493,971	100.2
Pigs	2,989,221	99.5
Sheep	6,674,313	96.8
Fowl	27,744,249	103.1

In the same 9-month period a smaller number of cattle and fowl designated for meat and milk production was bought out from all categories of farms, while the number of eggs bought out increased.

III. Construction

The construction and assembly organizations fulfilled their 9-month plan by 95.4 percent and their yearly plan--by 69.5 percent.

The 9-month plan for putting into operation the fixed assets was also fulfilled.

In the 9-month period many important projects were still faced with shortcomings in their organization of the work, and could not obtain sufficient number of skilled labor and adequate construction technology. Some construction projects were not put into operation on schedule, as for example: the Radomir plant for heavy machinery, the first technological line of Temelkovo V. Kolarov DTsZ [state cement plant], the expansion of Lenin SMK [construction and installation combine], and the renovation and modernization of Kremikovsti SMK.

The plan for completing and putting into operation housing projects, day care centers and kindergartens was not fulfilled.

IV. Environmental Protection

Over 142 million leva were used in the 9-month period for different undertakings and for construction of projects with the purpose of meeting the environmental protection standards. New electric filter systems were put into operation in the agglomerate production at the Sofia Kremikhovtsi SMK, and in the V. Pik DTsZ in the village of Beli Izvor, in the purifying station of the Gabrovo D. Blagoev plant, in the reproduction bases in the villages of Byala Rada and Kalchevo, in the slurry pond in Rosen, and others.

The program for application of nonpolluting technologies in production and for water recycling systems continued to expand.

V. Transportation and Communications

The 9-month plan for revenues from transportation, loading and unloading as well as shipping by the general transportation system was fulfilled 101.1 percent.

The transport economic organizations fulfilled their freight plan 93.5 percent.

The plan for passengers transportation was fulfilled 102.6 percent.

The plan for revenue from postal, telegraph, telephone, radio and television services was fulfilled 101.4 percent. The postal system was expanded by 20 PTT [posts, telegraphs and telephones] stations. Some 88,521 new telephones were installed, 72,279 of them in private homes. A total of 193 new telex connections were put into operation.

VI. Foreign Trade

In the 9-month period foreign trade increased by 13.6 percent, compared to the same period of last year.

Structural changes in the export system were introduced with very promising results. The share of high-quality processed goods increased considerably. Machines and equipment represent the largest share of the total export, i.e. 44.9 percent.

In the 9-month period the People's Republic of Bulgaria was visited by 4.7 million foreigners from 149 different countries. The number of visitors increased 10.6 percent over the same period of last year.

VII. Standard of Living

In the 9-month period commodity production designated for the domestic markets was expanded, as well as the everyday regular services of the people.

Trade organizations were granted 2.6 percent more goods of domestic production than the contractual allocations. More food (1.3 percent) and nonfood (3.9 percent) products were supplied than the contractual quantities.

The retail turnover plan was fulfilled 102.2 percent.

Larger quantities of the following goods were sold to the people: poultry, sugar products, milk, eggs, wool fabrics, silk fabrics, ready-made clothes, knit outerwear, shoes, furniture, radio sets, sewing machines, passenger automobiles. Due to lack of commodity funds, some goods in some districts were missing from the market.

The plan for services for the same period was fulfilled 102.0 percent. Servicing does not meet the increased needs of the population in spite of the good results in the upkeep and renovation work of the radio-television system and in furniture and carpentry services, as well as in the shoe, leather, haberdashery, textile, knit and clothing businesses.

The plan for upkeep and repair of appliances, motor transportation means, dry cleaning, and construction-repair services was not fulfilled.

About 35 thousand dwellings were built during the 9-month period of the year.

Considerable sums were spent for development of education, cultural life and health services. The school and kindergarten system was expanded. New premises were built as follows: kindergartens for 3,768 children, daycare centers for 480, and schools of general education for 4,661.

In this same period of the year the average monthly salary reached 186 leva in industry and 203 leva in construction.

The achieved results in the past 9-month period, the political and labor upswing involving all the people are a promising guarantee for a successful conclusion of 1980 and the seventh 5-year period, for a worthy welcoming of 1981, the year of the 12th BCP Congress.

1010
CSO: 2200

MINISTER EXPLAINS SET OF MEASURES IN TV INTERVIEW

Prague TV in Czech 1740 GMT 23 Oct 80

[Summary] Ladislav Supka, the CSSR minister for investment and technological development, gave a TV interview to a number of reporters from the major dailies who questioned him on the implementing procedures for the next five-year plan which is to be based on the Set of Measures starting on 1 January 1981. In the course of the interview, the minister noted some shortcomings such as non-implementation of the results of the Research Institutes' findings and inventions in practice, often because of the lack of investment planning. For example, very significant improvements were designed for the UZ-2 and UZ-3 tractors in 1977; however, the production planned for the 1978-79 period could not be started because the required Kcs 5 billion in investment was not available for the production line changeover to the new model UZ-1 tractor, causing large indirect losses to the CSSR economy, since the tractors would have been of exportable quality and could have earned foreign currency.

Another problem mentioned was the aging construction labor. The minister allowed that a foreman needs broad experience, yet the young people were not being afforded opportunity to train for and advance into such positions because of their "lack of skills" and there is presently no personnel available to "step up into their shoes."

On the question of licensing policy, the minister stressed the advantages of exchanges and quoted 91 purchases of licenses from, and 85 sales to, the Warsaw Pact countries while there were 163 purchases from, and 94 sales to, the Western countries during the 1976-79 period; however, foreign currency earnings are a problem. "Each case," the minister said, "must be evaluated in terms of required expenditures not only for the foreign licenses but also for certain materials, parts, and specialized machinery not available domestically, so that even if the final product is exported, these costs must be balanced in terms of expenditures vs. earnings of foreign currency."

On the question of capital investments, the minister noted the shortages of labor to man the new factories and stressed instead the improvement of the existing plant and equipment by installation of automated mechanisms and robots on the production lines to make them more productive; although, as Mr Supka qualified, this may require some switching of personnel and retraining them to make these new mechanisms.

Another problem, according to the minister, is an excessive number of different engineering products being made in the CSSR, nearly twice as many as in the United States. This is complicated by the fact that decisions will have to be made as to which lines of products should be dropped, a measure which will also cause some restructuring of the industry. In this context, the minister noted that most of these industries are concentrated in just a few population centers (or engineering production concentrations, as Mr Supka referred to them) which account for a high proportion of the CSSR manufactured products and any changes could require populations shifts.

Mr Supka also touched on the difficulties in the field of electronics where, as he pointed out, CSSR is quite competent and is producing competitive quality Large and Very Large Integrated units, except that the quantities are so insignificant that they do not even cover the needs of the country.

Commenting on a question about the housing situation, the minister explained that, even though the next five-year plan calls for a construction of 550,000 housing units as compared with the present five-year plan of 650,000, it is expected that 100,000 fewer units which have outlived their usefulness would be torn down so that the net result would be the same in both five-year plans. In reply to the last question, the minister compared the old concept of "Key Development Projects" in the fuels and energy industry to the new concept of "State Goal-Oriented Programs" which, under the new criteria, will place much greater emphasis on energy conservation. He also said that there will be about 30 percent fewer of the new programs than of the "Key Projects" and they will be more realistic. He also indicated that the CSSR industry was 30 percent more energy intensive than that in the West and that improvement there was imperative to survival. Standards in this field must be brought up to the Western levels within the next five-year plan.

CSO: 2400

ORDER ON GENERAL TRAFFIC PLANNING PUBLISHED

East Berlin GESETZBLATT DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK in German Part I No 27, 1 Oct 80 pp 270-272

[Official text of "Order on General Traffic Planning, dated 28 July 1980," signed by State Secretary Dr Schmidt for the Minister for Transportation, East Berlin]

[Text] In agreement with the heads of the competent central stage organs the following has been ordered:

Article 1

Field of Validity

(1) This order regulates the tasks, rights, duties and responsibilities of the state and economic management organs as well as of enterprises, combines, cooperatives and institutions in the context of general traffic planning.

(2) This order applies to the general traffic plans of

--the GDR bezirks,

--the GDR capital, Berlin, in the framework of the general plan,

--the bezirk towns and those towns and areas designated by the bezirk councils in agreement with the Ministry for Transportation.

Article 2

Principles of General Traffic Planning

(1) General traffic planning is effectuated on the basis of legal prescriptions, decisions of the Council of Ministers, on determinations of the minister for transportation and proposals of the local councils. The development programs of CEMA are to be given special consideration in this context.

(2) The general traffic plans are instruments of the Ministry for Transportation, of the local representative institutions and of their councils for the comprehensive planning and preparation of general traffic development in each territory in harmony with the overall traffic development of the GDR.

(3) The general traffic plans must comprise a time span of at least 15 years. The measures for the development of traffic installations conceptualized in these plans are to be ordered according to ranking and sequencing, in a manner such as to indicate utilizable subcomponents. Every bezirk general traffic plan is to be harmonized with the general traffic plans of the neighboring bezirks. The general traffic plans of towns are to be prepared on the basis of the development of the transportation system determined in the general traffic plan of the respective bezirk.

(4) In the preparation of the general traffic plans the planned spatial distribution of productive forces is to be taken as the point of departure, taking into account that in the process of general traffic planning an influence is to be exerted on the conceptions for the spatial distribution of productive forces in the interest of effective development possibilities of the traffic system. Beyond this, the mutual and reciprocal relations with the general development and buildup plans and other plans of territorial development are to be taken into account.

(5) The general traffic plans are to be elaborated in complex cooperation with the state and economic management organs, enterprises, combines, cooperatives and institutions. In particular, the collaboration of the organs of territorial planning, construction, of the German People's Police, the regional military commands, the energy supply organizations, environmental protection and water economy, and of the German Post Office is to be secured, as is the inclusion of the competent commissions of the local representative institutions and of the social organizations.

(6) The general traffic plans are to be updated and qualified continuously in dependence on the course of social development. General traffic plans require the agreement of the minister for transportation with respect to the basic lines of traffic policy before they are submitted for decision to the local representative institutions or their councils.

(7) In the preparation of general traffic plans it is to be taken as point of departure that claims on agriculturally utilized land must be excluded to the largest extent possible. The Order of 17 December 1964 for the Protection of Agricultural and Forestry Lands and for the Securing of Socialist Land Utilization--the Land Utilization Order (GESETZBLATT Part II, 1965, No 32, p 233) is to be observed in this context.

Article 3

Content of General Traffic Planning

(1) Taking their point of departure from the societal and scientific-technical development, the general traffic plans have to cover the following foci:

(a) traffic policy target setting for the territory at issue;

(b) development of passenger and freight transportation requirements;

(c) maintenance and expansion of transportation infrastructure;

(d) development of passenger and freight traffic systems, including short-distance [commutation] traffic systems, individual traffic and intraplant traffic;

(e) development of the division of labor in passenger and freight traffic;

(f) development of traffic organisation;

(g) listing of areas to be kept unencumbered for the construction and expansion of transportation infrastructure and other traffic installations;

(h) evaluation of the traffic solutions conceptualized in the general traffic plan.

(2) In the preparation of general traffic plans, the requirements of socialist intensification and rationalization, of socialist economic integration, of national defense, of the development of mining, energy and water economy, of environmental culture and protection, of the German Post Office and of traffic safety are to be given specific attention. One of the requirements of traffic safety is the special protection of children on the roads from their homes to children's institutions and schools.

Article 4

Tasks of the Local Councils

(1) The local councils prepare the general traffic plans for their territories and implement them. In this context, the orientation in the general traffic planning of towns is to be toward an especially close collaboration with the development of building planning, on the basis of uniform assumptions and time scheduling. The local councils submit the general traffic plans to the competent local representative institutions for decision.

(2) The member of the local council responsible for transportation matters guides the preparation of the general traffic plans and their translation into the framework of 5-year and annual planning and exercises control over the execution of the measures decided upon.

(3) The member of the bezirk council responsible for transportation matters has to submit the general traffic plans to the minister for transportation for his approval of the basic directions of traffic policy in good time prior to the intended passage of a decision by the bezirk diet or the assembly of town deputies.

(4) The local councils insure the maintenance of open areas to the degree required for the realization of the general traffic plans.

Article 5

Tasks of the Ministry for Transportation

(1) The minister for transportation lays down principles for the formation of general traffic planning. He guarantees that the specialized organs of the bezirk councils responsible for traffic are guided and controlled in the preparation of general traffic plans.

(2) The Ministry for Transportation guides the institutions for the traffic planning of bezirks and towns in general traffic planning regulates the principles for the determination of their missions and their working procedures and organizes the exchange of experiences for this purpose.

(3) The Ministry for Transportation guarantees that the management organs, combines, enterprises, offices and institutions of the centrally managed transportation system collaborate in the elaboration, updating and specification of the general traffic plans.

(4) The minister for transportation makes arrangements for the evaluation of the basic principles of traffic policy of the general traffic plans which have to be submitted to him for approval and transmits these evaluations to the respective bezirk councils together with recommendations and indications within 6 months.

Article 6

Binding Force

(1) Taking into account their ranking and sequencing in the framework of state plan indicators and other binding targets, the determinations and targets of the general traffic plans are a basis for the preparation of the 5-year plans and the annual economic plans.

(2) A binding obligation for all state and economic management organs, enterprises, combines, cooperatives and institutions in the given territory to implement determinations of the general traffic plans which require material and financial expenditures is given by the passage of the resolutions on the national economic plans.

Article 7

Concluding Regulations

(1) The present order assumes validity with its publication.

(2) At the same time the order of 10 January 1976 on General Traffic Planning (GESETZBLATT Part I, No 3, p 41) loses validity.

9108
CSO: 2300

MANAGEMENT TO BE RESPONSIBLE FOR IMPROVED PATENT RIGHTS SYSTEM

East Berlin EINHEIT in German Vol 35 No 10, signed to press 11 Sep 80 pp 1030-1034

[Article by Hans Kuegler, engineer, director, Patent Rights Office, VEB Carl Zeiss Combine, Jena; and Prof Dr Klaus Muetze, engineer, director of combine's Research Center: "Top Performance Requires Purposeful Patent Rights Work—Experiences in the VEB Carl Zeiss Combine, Jena"]

[Text] Inventions crucially control the degree of novelty and the use value of the products, represent the status of development in science and technology, and affect the developmental level of industrial production. An essential management task amounts to promoting invention efforts and, with it, protecting their results in accordance with legal principles. The authors are reporting on how, through various measures, invention activities are purposefully directed and stimulated. Experiences with patent rights work are presented, and necessary conclusions are drawn from them.

Attaining the requisite higher level of scientific-technical work on behalf of significantly improving our economic efficiency, reaching and economically utilizing top performances at a much broader scope, make growing demands on the creative work of the working people, mainly the researchers, scientists and engineers. Here it is becoming increasingly important to achieve an emphatic impetus for producing and using inventions and providing legal protection for them, whereby to perform a greater contribution to economic efficiency and quality improvements.

Inventions decisively and measurably reflect the developmental status of science and technology. They crucially control the degree of novelty and the use value of the desired products and the scientific-technical level of procedures and technologies, hence, the developmental status of industrial production. It thus is in the interest of our society to make extensive use of these inventions in our own country and make them available, on the basis of state agreements, to our fraternally allied CEMA countries. At the same time it is important to protect them against uncontrolled grasps from capitalist states and corporations.

To protect the interests of our state and of the inventors, our socialist patent right was established, the economic patent, which goes back to the principles formulated by Lenin as long ago as in 1919 in the decree on inventions and discoveries. It grants the socialist state an unrestricted authority to use protected inventions, creates protection form competitors in the capitalist economy, and insures inventors of their adequate recognition. The economic patent encourages creative achievements, places the use of protected inventions under state control, and thus makes possible their systematic utilization. The norms by which the patent rights work is to be organized and realized and integrated with the planned reproduction process are set down in legal regulations in which also are included the tasks resulting from the patent rights agreements among the socialist countries.

Clear Requirements

The responsibility of the combines and enterprises for organizing the reproduction process includes the task of managing invention activity and patent rights work and use its results so that it conforms with economic expectations. That calls for concrete tasks with regard to economic use in terms of producing and using patent information and documentation, the planning and management of invention activities, the registration, defense and enforcement of our own patent rights and their contest with foreign ones, the use, secondary use and licensing activity in a national and international framework, and the moral and material recognition of the working people's creative achievements.[1]

The basis for managing invention activity and patent rights work in our VEB Carl Zeiss Combine is the scientific-technical and economic development which--proceeding from international trends and governmental prognostic and longe-range considerations--is being planned for optimizing precision equipment construction in our economy. Our point of departure is the task our combine has to produce top products of precision equipment in optics, 70 percent of which determine or codetermine international standards, most of which are being exported, which are legally without fault and have a high degree of novelty and use value and have stood up through a marketing period of from 3 to 5 years. That calls for scientific-technical and economic requirements for developing new products oriented to high qualities and performance efficiency and to greatly reducing the time frame of R&D, whereby they also challenge the personnel's pleasure of work, dedication and creativity. When tasks are not clear, corrections are needed and poor results are the consequence. In any event, we are losing time then, and that is harmful to us in our international competition.

Clear requirements for the future call for accurately determining our position at present as it can only come from implacable comparisons with international standards. To that end we must ascertain present international standards extensively--not only by looking at the equipment made by the competitors but also, thoroughly, at the literature--and compare the results we seek in our products with them. It is largely thanks to our rigid and purposive management activity and our indefatigable political-ideological work that our combine now has practically accepted as an axiom not only to compare, for preparing correct objectives, the new product to be developed with what is now the best foreign product and with our own product that is to be superseded by it, but also with

the kind of product which, as determined by trend analyses, might presumably be offered by the competitors at the time that our own product is put on the market. In the outcome of all these comparisons, those requirements are laid down, at the start of our own development, that are, with respect to the use value factors and the costs of the new product, apparent when looked at in terms of when the product comes on the market.

Even when we set down these objectives for a product under development we must place correct and concrete major emphases for invention activity and patent rights work. Being the part of the R&D process that most strongly affects creativity, the strictest attention must be paid to invention activity in the preparation of R&D themes, the derivation of scientific-technical and economic targets, the demands for use value characteristics and the quality and the materials economy of a planned product.

As practice has confirmed, the use value of a product depends, not last, on how those who are working in R&D, especially the managers, are able to make inferences from what they know of descriptions of previous inventions, can process it creatively, and themselves obtain solutions qualifying for patent protection. Thoroughly studying patent literature often proves most valuable when one is looking for new solutions because the description of inventions must indicate how the invention is to function and such a description in many countries is published by the patent office as soon as 1 1/2 years after the patent was registered, at a time, in other words, when the equipment under development has normally not yet led to sales products.

That is why, in managing scientific-technical work, we focus on conducting patent rights analyses while carefully exploiting research results from the patent literature. Such analyses have in our combine increasingly been integrated with the process of target assignments, especially with the derivation of technical requirements, in order to obtain parameters that control international standards and R&D results legally without fault. Patent rights measures were set down in patent rights conceptions which are, in principle, being elaborated in our combine today for the initial defense of any R&D theme.

The starting point, contained in these conceptions, for the task to be solved by invention is the scientific-technical task set down on the basis of information from the literature, especially patent literature, and of what is known about competing products and about the desires of our customers. Quite a number of demands for new solutions arise here where what is known and the facts ascertained are not likely to be adequate. And these precisely are the tasks that are to be solved by invention. They are set down in the duty notebook and already play a role in the initial defense and thereafter all through the further course the theme undergoes. On behalf of continuity for the work process, the solutions one expects also have to be specified in terms of time and accounted for.

In solving scheduled tasks in the R&D areas inventions are being suggested for which the patent rights bureau conducts the innovation tests the law requires. If the inventions appear protectable, it is necessary, for the sake of later sales and exports, to do everything needed for their comprehensive protection

as early as possible. To that end, from the vantage point of our country's economic interest, the proper patent rights applications are prepared jointly between the R&D areas and the inventors. As any protected invention clearly presents a solution exceeding our state of technology and is a source for a novel or improved use value, the GDR can then make extensive use of it as soon as the patent registration was made. To fully utilize all possibilities free from patent restictions in the country by using our patents, we seek their widest possible application not only right after they were registered but also through annually recurring controls. The value estimated from the use of an invention, furthermore, is an essential criterion for whether or not it is worth applying for patent rights abroad.

Among all the measures and conditions that serve stimulating invention achievements is that these achievements are morally and materially recognized. That starts with including invention activity in socialist competition which is given moral and material recognition and is accounted for monthly. It continues in a diversified type of payment for recognition when a patent is registered in the GDR that has been tested for its innovative quality, in publicly handing the documents for tested patents over before the entire collective of the research center or the enterprise, in the payments for confirmed and used economic patents, together with an appreciation letter from the general director of the combine, and in the payment of legally admissible compensations for giving out licenses.

Rigid Management, Planning and Organization

Beginning with the planning process, all possibilities must be used to manage systematically and rigidly the work of invention or the patent rights work needed for the development of new products and new procedures. That is why these processes are being prepared in a target-directed manner in the combine in coordination with long-term and annual management and planning documents. That includes that clear tasks are assigned in the development areas and that the tasks of inventions are planned for processing any R&D theme.

Basic objectives for inventions and for patent rights work are elaborated on the basis of the scientific-technical and economic objectives for the development of the combine or the research center. Through our intensification conception, their lead-time provisions are envisaged for the long-term planning period. The priority within such objectives goes to the assignments for the development of feasibility studies to be prepared with special attention to the major tasking areas in the product and procedure development. In conformity with our intensification conception, more specific objectives are also set down for inventions and patent rights in the more long-range development conceptions of the product groups. Through these conceptions we elaborate and determine for any given products group (or cross-sectional area) the R&D targets and tasks for the next 5 to 10 years and the ways and means, measures and decision proposals for implementing those targets. We always see to it here that analyses carried out on the state of our technology, based on patent rights literature, will faciitate and improve the foundations of the elaboration of the scientific-technical and economic objectives for the various product groups.

While preparing and elaborating annual plans--related to areas and themes--, parameters and qualitative demands are assigned, especially with regard to the fruitfulness of inventions, the level of the inventions, and the patent rights analyses and conceptions. Such assignments notably focus on fundamental inventions with crucial functional parameters and on completing the tasks within assigned schedules.

Patent rights work in the combine is the responsibility of the director of the research center, the director responsible for the R&D of the Central Bureau for Patent Rights. This creates the prerequisites for uniform management combining with the R&D processes, making the function of the combine all-inclusive. The Central Bureau is responsible, in particular, for the planning and coordination of patent rights work in the combine, its effective organization and the development of creative work on the part of inventors and of the originators of industrial models.

The combine's enterprises have their industrial bureaus or patent rights agents. Whereas the industrial bureaus are responsible almost for all the patent rights work, except for activities in other states, the agents exercise exclusively intra-plant functions.

So that skilled decisions can be made on patent rights problems and appropriate measures be purposefully enforced, patent rights collectives are working in the development areas. It is up to them to elaborate appropriate analyses and conceptions, prepare decisions on patent rights applications abroad, test the usability of patent rights and make recommendations for their utilization.

Future Focal Points

If inventions and patent rights work have developed positively in our combine between 1976 and 1980, most of the credit has to go to our continuity in management which led to increasingly more systematic working methods in the whole field and, especially, to a systematic implementation of assignments. Managerial focal points clearly lay on invention activity and on the economic utilization of protected knowledge.

The following table presents a survey of some of the results of our work (data in percentages, always with reference to 1976):

	1977	1978	1979
Invention proposals	100	116	129
Invention proposals per number of employees	95	112	118
Patent registrations GDR	98	148	141
abroad	104	83	199
Patent inventory GDR	111	124	145
abroad	111	115	103
Use	248	315	310
Patent rights analyses and conceptions	245	463	1,041

With all the advances made, we seek further to increase in the future our productivity in patents and to register as patents more of the patent proposals

submitted in the GDR. To that end, we must further improve the level of management in invention activity and patent rights work altogether. To that end it is imperative to combine that still more closely with R&D and to deepen the existing interaction.

Above all, inventions and patent rights work ought to exercise a stronger influence still on the R&D process early in the game. Even when basic and preparatory research is done these problems ought to be given the greatest attention. This involves in particular our cooperation with academies, universities and colleges for systematically elaborating inventions that determine fundamental and total lines of development. Patent rights analyses and conceptions must become still more effective mainly in preparing requirements for R&D themes. They must affect our scientific-technical level and guarantee a no-fault legality as required on behalf of an unlimited market efficacy of new products. Altogether it is necessary to take into account in the management of patent rights work more than we have done in the past that it is to make a greater contribution to improving foreign economy results. A precondition for that is, not last, a more active patent rights activity abroad based on good familiarity with the competition and market situation. On that premise, proper inferences can be drawn with regard to the importance of an invention, the range of its use, the export countries envisaged and the economic benefit resulting for economic activity from maintaining our patent rights. This patent rights activity includes our carefully watching the patent rights activities of our competition. Growing attention also is warranted for permanently organizing an extensive use and secondary use of inventions aiming at a better economic utilization of them.

In placing higher demands on patent rights work in the future, we are convinced that this way the efficiency of our whole reproduction process, from R&D via production to sales on the world market, can be decisively improved and our combine can make a greater contribution to increasing our republic's national revenue.

FOOTNOTE

1. The Patent Rights Decree for R&D, Production and the Foreign Economy (GBL, Part I, No 15, 1974) provides the details on these measures--from the analysis of patent rights literature, the elaboration of patent rights analyses and conceptions, all the way to acquiring and maintaining patent rights as well as on the work with patent rights within the scope of economic contracts on scientific-technical achievements.

5885
CSOP 2300

PAST DECADE'S AID FOR DEVELOPING COUNTRIES REVIEWED

Liberal-Democratic Daily's Summary

East Berlin DER MORGEN in German 11-12 Oct 80 p 3

[Unattributed report: "Infrastructure and Industry: Main Focus of Our Trade With Developing Countries." A translation of the East Berlin EINHEIT article cited below follows this report]

[Text] GDR trade with developing countries has tripled from 1970 to 1979 and has thus developed faster than foreign trade at large, the major weight placed on installations and equipment for infrastructure and industrial development. GDR turnover with developing countries in 1979 came to a total of just about M 10 billion.

These data were supplied by the most recent edition of the journal EINHEIT, which submits a number of revealing facts: Approximately 39,000 citizens from developing countries during the period referred to got vocational training and advanced training in the GDR; roughly 10,000 graduated from our universities and technical schools; 2,300 spent time as patients in the GDR, many of them wounded persons from the ranks of the liberation movements. In turn, the GDR made possible the training of another 55,000 young people in their own countries, sending annually 300 members of friendship brigades, and in the period referred to 15,000 specialists, into developing countries.

In solidarity donations, the FDGB and the Solidarity Committee of the GDR have provided services at a value of more than M 1.4 billion since 1970. Humanitarian aid and charity during the same period came to just about M 65 million, of which the German Red Corss provided more than 35 million.

'EINHEIT's' Facts, Figures

East Berlin EINHEIT in German Vol 35 No 10, Oct 80 signed to press 11 Sep 80, pp 1081-1082

['Facts and Figures' report by Dr Siegfried Buettner, sector chief, SED Central Committee: "GDR Aid for Developing Countries"]

[Text] The trips by party and state delegations headed by SED Central Committee General Secretary and GDR State Council Chairman Erich Honecker to African and

Arab countries have contributed to developing our alliance relations with the progressive states at new dimensions and qualities.

Economic and Scientific-technical Cooperation

True to our internationalist policy, the GDR's confident cooperation with the states of Africa, Asia and Latin America has steadily been further developed in recent years. Examples of it are the GDR's friendship and cooperation treaties with Angola, Mozambique, Ethiopia and the People's Democratic Republic of Yemen. Above and beyond that, many agreements were made with these and other developing countries on economic, industrial and scientific-technical cooperation. Between 1 January 1970 and 31 December 1979, the GDR concluded 141 government agreements with 59 developing countries. They included 58 trade agreements, nine payment agreements, 27 agreements on scientific-technical cooperation and 47 agreements in the fields of economic, scientific and industrial cooperation. To implement these agreements and strengthen our cooperation, a total of 15 joint economic commissions have been set up since 1970 between the GDR and those countries.

The GDR's economic and scientific-technical cooperation with the progressive Afro-Asian and Latin American states serves the consolidation and further development of the socioeconomic construction in those countries, the support of those states' desire for a new international economic order on an equal, democratic foundation, the protection of their sovereign right to the use of their own natural resources, and the support of their struggle for economic independence and against imperialism, neocolonialism and reaction.

Compared with 1970, the GDR's foreign trade turnover with developing countries has more than tripled. In 1979 it came to 9,591 million valuta mark. The GDR's foreign trade turnover with the developing countries has grown faster than the GDR's overall foreign trade turnover.

In its deliveries and services the GDR concentrated in particular on supplying installations and equipment for the infrastructure, especially for the transportation and communication systems, for electrification, construction material production, the textile industry, machine building, the printing trade and the processing of agricultural products. Since 1970 the GDR has completed more than 650 projects in developing countries, 53 of them in 1979 alone. The GDR set up more than 100 small-trade enterprises in Vietnam and Laos alone.

Training and Dispatching of Personnel

In the consolidation of political power and the struggle for economic independence, in industrialization and the development of a modern agriculture, and in the development of the infrastructure and of new democratic foreign trade relations, increasing importance attaches to vocational training and advanced training for citizens of developing countries and to the training of university, technical school and leadership personnel from those countries.

Since 1970, the GDR has provided circa 39,000 citizens of developing countries, 9,000 of them in 1979 alone, with vocational training and advanced training, principally in such areas as farm technology, crop and animal production, health,

health and labor safety techniques, the building trade, metal working, finance and industrial management. In the same period circa 10,000 citizens from those countries attended a university or technical school in the GDR. In 1979 alone, 2,650 citizens from developing countries completed their university or technical school studies in the GDR.

The fields in which training and advanced training were provided included technology, the natural sciences, medicine, education, agriculture, the cooperative system and industrial management. In connection with the establishing of installations and the supplying of means of agricultural production, approximately 55,000 citizens of developing countries were trained between 1970 and 1979 in their own countries, 23,000 of them in 1979 alone.

This development is supplemented by our dispatching GDR specialists to those countries. Within the scope of relevant government agreements and in connection with our deliveries in installations and equipment, circa 15,000 specialists--technicians, agricultural experts, scientists, physicians, pedagogs and other specialists--have operated in developing countries since 1970. In 1979, there were 2,200 GDR specialists working in those countries. The friendship brigades dispatched by the FDJ enjoy high recognition. More than 300 young people have since 1977 been operating, mainly in Afro-Arab countries, each year.

Solidarity Donations

The services of the FDGB and of the GDR Solidarity Committee have been an inseparable component of the GDR's cooperation with the progressive Afro-Asian and Latin American states and the struggling national liberation movements. From 1970 to 1979, the FDGB and the GDR Solidarity Committee donated more than M 1.4 billion. These donations by the GDR working people have financed care shipments of different sorts including clothes, foodstuffs, baby food, medicines, study and instruction materials as well as medical care for citizens of developing countries. Over M 300 million was spent on that in 1979.

Humanitarian aid and charity given the developing countries and their liberation movements by the GDR is something that occupies a solid position. Between 1970 and 1979, that alone came to M 64,493,225. The German Red Cross of the GDR had a share of M 35,743,300 in this aid. During the same period, 2,300 patients from developing countries, many members of national liberation movements engaged in struggle among them, received free medical care in the GDR.

Solidarity in word and deed continues, as it is deeply rooted in the thoughts, sentiments and conduct of our people. In shaping its alliance relations with the developing countries and militant liberation movements, the GDR lets itself be guided by the thought that the peoples' anti-imperialist and antineocolonialist struggle is an inseparable component of the worldwide struggle for the safeguarding of peace in all regions on the earth and for the national and social liberation of the peoples in Africa, Asia and Latin America.

5885
CSO: 2300

THIRD QUARTER ECONOMIC RESULTS PUBLISHED

Budapest NEPSZABADSAG in Hungarian 12 Nov 80 p 10

[Text]

1st to 3d Quarter, 1980
(as a percentage of the corresponding period of the preceding year)

Socialist Industry	
Volume of gross production value	98.0
Employment	97.1
Gross production per employee	100.9
Average monthly wage including supplementary payments	103.1
Construction Industry	
Construction industry output	96.5
Number of employees	95.8
Average wage of employees including supplementary payments	106.1
Foreign Trade (at current prices)	
Imports	98.9
Exports	104.9
Retail Trade Turnover (at current prices)	111.0
in particular:	
food and nonessential beverages and tobacco	110.8
clothing	106.0
miscellaneous industrial goods	112.9
Procurement	103.2
in particular:	
plant products	107.1
live animals	101.1
animal products	100.9

Performance of Transportation Enterprises

Freight transportation (in freight ton km)	100.5
Long distance passenger transportation	101.0
Cash receipts of the population from central sources	109.5
Consumer Price Index	111.0
of which:	
1980 price changes	102.4

According to data from the Central Statistical Office, the level of industrial production and sales in the first three quarters of 1980 was slightly below last year. Trends in the sales of industrial products developed in accordance with the plan's goals. The volume of foreign trade sales and deliveries to wholesale and retail trade each grew by 3.4 percent. Sales for investment purposes declined by 12.6 percent and sales for production purposes were 5.8 percent lower than a year ago. The number of industrial employees declined at a more rapid pace than calculated, by 47,700 or 2.9 percent relative to the same period a year ago. The decline in employment was especially pronounced in the light industry and machine industry. Production per employee was 0.9 percent above last year's level.

The output of the construction industry declined, in accordance with the plan. In particular, the output of state construction enterprises was lower than a year ago; construction by cooperatives was essentially the same as last year. As a result of the slowdown in investment activity, the greatest decline occurred in the civil engineering industry (7 percent), but it was also quite substantial in architectural engineering (3 percent). Specialized and assembly activity rose slightly. Construction industry employment was 14,300 or 4.2 percent less than in January-September of last year. Output per employee rose 0.7. percent. Almost 45,000 residences were completed nationwide in 9 months: this is 4.3 percent above last year's level.

Purchases of plant crops in the first 3 quarters of 1980 were 7.1 percent above the first 9 months of last year. This was mainly the result of increased sales of wheat and rye. Purchases of fruits and vegetables were lower than last year. Sales of hogs and poultry rose while sales of beef cattle declined.

Cash receipts by the population from central sources were 9.8 percent above the January-September 1979 level. Income supplements related to the price measures introduced in July of last year also played a role in this increase.

Retail trade turnover rose at current prices and remained unchanged at comparable prices relative to a year ago. The volume of retail turnover of food and nonessential beverages and tobacco is approximately 2 percent above the level at this point last year while catering industry turnover is 4 percent lower. Sales of clothing and miscellaneous industrial goods were the same as a year ago.

109.9 billion forints were spent on investment by socialist organizations in the first 3 quarters of 1980. At current prices this is 9.2 percent less than in the same period of 1979. (The decline in investment is in line with the plan guidelines). Investment spending on state controlled projects was 7.1 percent below last year while spending was 10.9 percent less.

9164
CSO: 2500

PROGRESS IN INDUSTRIAL RESTRUCTURING NOTED

Budapest NEPSZABADSAG in Hungarian 5 Nov 80 p 10

[Article by Mrs Ferenc Nyitrai, chairman of Central Statistics Office: "On the Road to Modernization of Industrial Structure"]

[Text] Modernization of the structure of the national economy and, in particular, industry, is one of the most important factors in improved efficiency. The 20 October 1977 resolution of the MSZMP Central Committee on this issue defined the direction and most important methods of change. A mere 3 years have passed since the resolution. The first of these, 1978, was still a year of instilling new attitudes, trying out new methods and comparing our existing product structure with that of similar or more advanced countries. A number of our large enterprises carried out such comparisons, leading to results that will be useful in the years to come. At the present time, in the closing months of the Fifth Five-Year Plan period, we are in a position to survey the road we started on, the progress we have made and the opportunities and tasks facing us.

The First Phase of the Work

The pace of product structure changes is variously evaluated by many people. Enterprise professionals who are most intimately involved with the task often tell us of rapid change as soon as the preparatory work gets beyond prototype acceptance and pilot production, but the change is hardly perceptible when we look at statistics. The public at large and consumers consider the pace of change sometimes excessive when they are unable to find familiar domestic products in retail shops because production was stopped due to "product change" and no replacement is available. In fact, structural transformation is a long process. We are now in the first phase when progress is also helped by the price mechanism introduced this year.

The international experience with structural transformation shows that the process of technological innovation in advanced industrial countries during the 1960's was accompanied by an increased role of research and development intensive sectors. A look at the data for countries belonging to the Organization of Economic Cooperation and Development (OECD) shows that their production and foreign trade were concentrated in sectors which fully utilize the fruits of research and development. This was accompanied by strong specialization in the production of investment goods, increased proportion of high quality, automatic products creating new

demand in the area of consumer durables, appearance of more electronic products in markets and increased percentage of valuable products, incorporating more human labor in the chemical industry.

These trends may also be seen in the changes happening in our country.

Within the extracting industry, growth in bauxite mining output was above average. This is undoubtedly beneficial in terms of the opportunities for extracting and utilizing our domestic raw material reserves.

In the machine industry, the output of telecommunications and vacuum technology grew at an above average rate, with the overwhelming majority of products satisfying the criteria set by the system of technical and economic requirements pertaining to product shift inasmuch as they incorporate the results of domestic research and development or purchased licenses, their added value is high, most of them can be sold on favorable terms even under increasing international competition and they satisfy increased domestic consumer demand. The output of the instrument industry also grew more rapidly than the machine industry average in 1979. This activity slowed down during the current year.

Calculated at comparable prices, the instrument industry and telecommunications represented 22.8 percent of total machine industry output in 1975 while employing 28.8 percent of the total machine industry work force and 22.2 percent of its productive fixed assets. In 1979 these two sectors, considered dynamic even on an international scale and relying on adequate domestic conditions, produced 26.3 percent of total machine industry output using 31.2 percent of the machine industry work force and 24.5 percent of productive machine industry fixed assets.

It is well-known that over the last decade the growth rate of our chemical industry output was more rapid than the average for industry as a whole: the chemical industry was also one of the leading industrial sectors. In 1979, output grew at a slower rate than before and an important structural change took place in the chemical industry. This year is highlighted by a 3.5 percent growth in pharmaceutical production while the output of the chemical industry as a whole in the first 3 quarters remained approximately at last year's level. Within the chemical industry, the production of plastics is increasing at a rapid rate every year. 294,000 tons of plastic were produced in 1979, i.e., 38.1 percent more than in 1978. Production grew by another 10.2 percent in the first 8 months of this year.

In the light industry, structural change took place in sectors which were able to adapt flexibly to rapidly changing fashions. One such sector is the silk industry. While in earlier years the product scale of the silk industry was not very competitive in more demanding markets, and in fact was unable to fully satisfy domestic requirements, in more recent years it came out with a number of new, modern, competitive products based on a successful combination of various raw materials which can be marketed on much more favorable terms. As a result, silk industry was able to increase its output by more than 10 percent in the first 3 quarters of this year while the production of silk materials made from synthetic fibers increased by almost 18 percent relative to last year.

In line with international trends, an increasing percentage of agricultural products is being delivered to domestic and international markets in the form of processed food industry products. The percentage of processed foods and consumables now represents 8.3 percent of the output of state-owned industry. The role

of traditional milling industry is declining within food industry as a whole while the role of milk processing, meat, canning and brewing industries is increasing. As a result, production and export of poultry, bone-in raw meat and various types of sausages is increasing every year while the production and output of safflower seed oil is also growing at a rapid rate.

The Direction of Product Change

Transformation of the industrial product structure has also begun. Of course, rapid adaptation to changing demand is easiest in the processing industry where there are a number of examples indicating the start of a process of renewal. For example, aluminum foil is a popular product of the aluminum industry. In 1979 our production of aluminum foil grew by 50 percent relative to last year; rapid growth continued this year.

Production of a number of uneconomic products has been stopped in the machine industry while the volume and percentage of some up-to-date products has increased. These changes are reflected in the following statistics:

Production of Certain Machine Industry Products (percent)

Name of Product	1978/77	1979/78	1st half of 1980/ 1st half of 1979
Elevators, total	104.0	110.9	113.1
Semi-automatic lathes	71.0	205.6	184.6
Automatic lathes	18-fold	106.8	156.5
Program controlled lathes	80.6	376.0	248.8
High precision lathes	42.8	258.9	106.0 a)

a) based on production by KGM [Ministry of Metallurgy and Machine Industry]

There has also been some realignment within the product groups included in the table, mainly as a result of adjustment to foreign market demand. Similar trends are appearing in the production of a good number of consumer goods. For example, demand for high capacity refrigerators produced under license is growing especially fast. As a result, production of refrigerators was up 9 percent in the first 8 months of the year, compared to last year. There is increasing interest in color television sets: production from January to August of this year was up by 88 percent relative to last year. Production of stereo record players in the first half of the year was 84 percent above last year's level. Production of computer and control technology products also grew at an above average rate.

Development of new, up-to-date products often requires technological modernization. This is indispensable in the case of products which compete with similar goods produced by other countries in foreign markets and in areas where cost savings and acceptable prices are predicated on modern technology. Another important consideration is to ensure that new products are more energy efficient in order

to encourage consumers to replace obsolete machines and appliances. There are some good examples of this: new models of black-and-white television sets are more energy efficient.

Another favorable sign is a significant decline in the use of imports in implementing product change: this trend is continuing this year. Credit measures aimed at import savings are also helpful in continuing toward this goal.

The Percentage of Unskilled Workers

Finally, positive changes may be seen in the area of the most important cost: manpower utilization. In the beginning and middle of the 1970's the use of auxiliary and, in particular, unskilled workers in industrial production was very high. Even as late as September 1976, the number of employees performing unskilled work represented 14.1 percent of all blue-collar employees within socialist industry. By September 1979 this ratio declined to 11.5 percent. In contrast, the number of employees performing skilled work increased from 46.7 percent to 50.1 percent. This change is occurring in almost every branch of industry. For example, the number of unskilled workers in the machine industry declined from 10 percent in September 1976 to 7.8 percent in September 1979. Still, we have considerable reserves in the area of efficient manpower utilization, as shown by the slow rise in industrial productivity during this year; we are still significantly behind countries of comparable size and level of development.

Thus, promising trends toward structural change are visible in production and related aspects of material, energy and manpower utilization. The present conditions of economic regulation contribute to the acceleration of this process and exemplary activity by enterprises ready to take the initiative may further accelerate progress.

9164
CSO: 2500

GROWTH IN EXPORT OF ANIMAL PRODUCTS NOTED

Budapest MAGYAR MEZOGAZDASAG in Hungarian, Nos 43, 44, 22, 29 Oct 80

[Article by Mrs Istvan Benda: "The Export of Animal Products Is on the Increase"]

[22 Oct 80 No 43 p 21]

[Text] TERIMPEX [T. Foreign Trade Enterprise of Livestock and Crops] is one of the most important enterprises of the Hungarian economy for generating capitalist exchange. The animal products it handles are the result of the work of tens of thousands of men in agriculture and the food industry, and for decades it has produced about one-fifth of our income from capitalist export.

Our country is among those practicing intensive livestock husbandry and there are few countries in the world delivering to foreign markets such a large fraction of 4 branches of animal husbandry products as ours: 45 percent of cattle, 20 percent of swine, 90 percent of sheep and 65 percent of dressed fowl.

Our annual export of animal products (live and slaughtered) is between 350-400 thousand tons amounting to about 4 percent of all of the livestock and meat reaching international markets. This is an outstanding ratio in comparison to our animal stocks.

The year 1980 started favorably with respect to the possibilities of international trade. However, it appeared that much less product would be exported than the year before and a dollar income exceeding that of the previous year would be possible only by sharply raising the prices. In response to various measures aimed at increasing the amount of production and purchase, it became clear already by the second quarter that we would be able to export more than projected earlier in the year and the income--in forints--would exceed the 1979 income at least by 4 to 6 percent.

The results of the first half of the year provide a basis for estimating the anticipated annual export trade. In forints, our achievements were 12.5 percent higher than during the first half of last year.

Only Good Quality Beef Cattle Can Be Sold

During the first half of the year, only about half of our last year's export could be delivered from beef cattle. The types of available product were

rather mixed. It contained a rather high percentage of crossed (example: Holstein-Friesian x Hungarian spotted varieties, in general less favored by our markets. In spite of this our selling prices, in dollars, were increased by 20 percent.

We succeeded in raising the beef export by 30 percent but this was not enough to completely balance the loss in beef cattle. Considering the price increases, beef cattle and beef export amounted to one-fourth of the capitalist export trade organized by TERIMPEX during the first half of the year. In spite of the considerable decrease in the amount of goods, this produced only 4 percent less income to the national economy than last year.

The prospects for selling products of the cattle branch are in general very good: purchase is not hindered by customs of consumption; moreover, cash-based demand for it is expanding. In addition to already existing markets, we could involve new countries in the trade if more products suitable for export would be available.

Outstanding Marketing Possibilities

Our sheep export produced exceptionally good results last year. Both amounts and prices were raised to an extent never before seen. This represented 45 million dollars in export income. Compared to the first half of last year, the average weight of the exported animals was lower this year and there was an increase in the ratio of suckling lambs which could have been developed into a fattened product by the second half of the year.

The income of producers was considerably lowered by the drop in the value of the Italian lira. Even raising the export prices could not balance the unfavorable exchange rate.

The marketing possibilities for products of the sheep branch are outstanding.

Based on the results of the first half of the year, the expected--in general not worsening--market conditions, and the amount, composition and quality of goods available to us during the second half, we can expect our annual accomplishment to be outstanding in the history of TERIMPEX. However, both in the production of live animals and in the course of industrial processing, every producer must pay maximal attention to the demands placed on export goods.

Twice the Amount of Pork to Western Markets

We exported 20 percent more live swine and doubled our deliveries of bacon sides and cut-up pork to capitalist markets. The export of these products amounted to about 27 percent of the dollar income of TERIMPEX. This noteworthy achievement was due not only to increased quantities but also to price increases. Making up the highest ratio of goods, the price of pork sides could be raised to a level not seen since the memorable Europe-wide scarcity of pork in 1976. The excellent timing of marketing also played a considerable role.

Pork products can be marketed to a much more limited market than those of cattle. Swine on the hoof almost exclusively, can be sold only to the Soviet Union or to another socialist country which happens to be struggling with a pork scarcity. Pork sides primarily serve to satisfy the demand in the Soviet Union. The Western countries are self-sufficient, and conditions arise only occasionally--for instance in Italy and France, in some years also in Spain and Greece--under which they can pay us favorable prices.

Of products of the swine sector, processed pork--chops, spare ribs, fresh ham, shoulder with or without bone--can be easily and regularly sold to West European countries. We are trying to exploit this possibility by means of the increased productivity of new meat processing plants.

During this half year, there was a 10 percent increase in the export of dressed fowl and a 20 percent increase in income compared to 1979. We hope that the results of this year will contribute to the recovery from the unfavorable effects suffered by this branch in 1978 when, because of bad international marketing conditions, lower prices and the accumulation of unsold goods caused great losses to the fowl processing plants and also had a negative effect on the will to produce by the agricultural enterprises and the household plots.

We closed a successful 6 months in the export of goose liver, hare and fish. Among dairy products, butter should be emphasized since it has increased considerably this year and good world market prices have developed.

[29 Oct 80, No 44 p 21]

[Text] On the occasion of this brief accounting, it might be useful to summarize those tasks which the growers and all those who influence food production ought to consider in the interest of successful export in the coming years.

Beef Cattle: The Soviet Union Is the Largest Purchaser

Earlier--before 1974--more than 90 percent of our export went to Italy. This consisted almost exclusively of Hungarian-brindled young steer which fetched a good price because they were rated as outstanding quality. Since then, both the ratio of the market and the absolute amount of export have fallen back and, within the latter, the purebred Hungarian brindle products have decreased.

We still have goods in small amounts originating from the crossing of Hungarian-brindled with [du] limousin [a French breed of steer] or with charolais (meat type). These fetch the highest price followed by goods from Hungarian-brindled cattle. Since the export is divided approximately as follows: 40 percent to Arabic, 20 percent to Italian markets and 40 percent to the Soviet Union, the demands of these markets are described in the following.

Italy: Hungarian-brindled cattle with a minimal weight of about 550 kg are the most sought after. The Hungarian-brindled x [du] limousin crossbred cattle fetches $150-200 more per ton while the Hungarian-brindled x Holstein-Friesian F_1 young cattle can be sold for about $150-200 less, occasionally and only in small quantities.

We can find buyers at a comparable price for Hungarian-brindled crossed with Herford young steers with a weight of only 450-480 kg, because it is still not too fatty. Purebred Hereford is not marketable because of its high suet content.

The Italian buyer wants uniform prices and prefers cattle from large-scale enterprises (agricultural cooperative or state farms).

The Soviet Union wants slaughter steer between 500-560 kg weight, fattened in stables. It pays a good price for Hungarian-brindled cattle raised on household plots and is willing to buy the Hungarian-brindled x Holstein-Friesian F_1 crossbreed for $100 less per ton.

Libya is the only noteworthy market where we can deliver 30 to 40 percent Holstein-Friesian x Hungarian-brindled F_1 products. However, because of considerable--mainly Irish--competition, it [Libya] has limited demand for the Hungarian product.

Lebanon is almost mostly interested in Hungarian-brindled cattle; The 450-480 kg weight Hungarian-brindled x Hereford F_1 can also be marketed [there] in smaller amounts, be they stabled or pasture animals.

Sheep Branch: More Attention to Quality

In the opinion of specialists, because of the high export prices prevailing for several years, a negative selection has been practiced on the farms. Good quality, outstanding stock was exported and the lesser quality was often retained for breeding. As a result, the Hungarian combed Merino can be termed obsolete today because it tends to become fatty at a relatively low weight.

With the size of animal stock Hungary has, an increase in the export income of the sector can only be achieved by increasing the rate of reproduction and the average weight. Young lambs should be exported to the least possible extent; at the most, 10-12 percent annually and preferably the females--of course, the problem of selection ought to be worked out. Fattened, these are not accepted at all by our markets or are accepted as only a small fraction of the total, and the price is decreased by 5-7 percent. Rumania and Poland, two much larger sheep exporting countries than we are, will hardly or not at all export young lambs.

The "express lamb" should preferably be fattened to an average of 30-32 kg. It would be best if stock under 30 kg would not at all be sold to the purchasing companies because, for livestock shipped over greater distances, we have to allow for 10-12 percent losses. In the case of 30 kg lambs, this represents 27 kg in purchase weight. However, if stock between 27-30 kg is purchased, it would be very important to segregate these because higher prices can be gotten for this cateogry than the bulk price for stock weighing 27-35 kg each.

Recently, the importance of Arabic markets has increased. These countries and also the GDR and Belgium expressly demand heavier (35-40 kg) goods and pay a good price for them. Based on data from our partners in production, we calculated the profitability of fattening. It was shown that fattening to weights higher than done currently would also considerably increase the profit of the producer.

Swine Branch: More Uniform Products

Much more uniform products are produced for export today from domestic swine stocks than a few years earlier. Nevertheless, quite a bit of undesirable crossbreeding still occurs producing a so-called pigmented swine, which is not expressly a meat producer. The pigmented swine is unsuitable for the production of unskinned products (for example of our frequently exported Parma ham) even if it has an adequate bacon layer or fat content.

The 110-115 kg weight swine is desirable for live export. The 95-105 kg swine is suitable for the production of pork sides with bacon, the 105-120 kg swine is good for the production of processed pork sections although, in some cases already at this weight, the characteristics of the strain and the feeding method may produce a thicker layer of bacon and more fat content than desired by our markets (for instance, bacon thickness can be no more than 3 cm). Among others, this has the result that the Hungarian lean bacon has more fat than the Western markets are used to and relatively small amounts of it can be sold.

Fowl Branch: Continued Price Fluctuations Must Be Expected

To satisfy the quality and weight demands of foreign buyers, live fowl must definitely be delivered to the purchasing sector within the following weight limits according to types: chicken 1.35-1.50 kgs, turkey 4.20-4.50 kgs, guinea fowl 1.30-1.40 kgs, roasting duck 2.40-2.60 kgs, and roasting goose 4.20-4.80 kgs.

Because of future fluctuations in world market prices, even though within narrower limits, to reduce fodder expenses it is especially important to decrease the amount of fodder needed to produce 1 kg meat.

Every producer must also know that there are limits to increasing production dictated by the possibilities of selling on foreign markets which must be adapted to. Otherwise we are faced with plummeting prices and unsold stocks.

In general, production increases (according to the prevailing, specific contracts with the buying sectors) are possible for the most widely marketable chickens. Only a negligible expansion in the export of other types of fowl is possible because

--geese and ducks are demanded by only certain markets and in limited amounts. The producer circle is traditional and no one else can take over in the case of increased exports;

--turkeys are produced and consumed in large amounts worldwide. Their share on the world trade is minimal and competition is fierce;

--the production of fattened geese livers and the possibilities of expanding the liver export are limited because such geese can only be sold to limited markets. If the goods are low in fat, some of them can be sold dressed to capitalist countries. However, there is no way to try to double the goose liver export.

After having produced the products in the desired weight range and at a suitable time, the possibilities of marketing are, of course, very much influenced by good management of processing and export.

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CSO: 2500

SITUATION OF INCOMPLETED INVESTMENTS DISCUSSED

Budapest FIGYELO in Hungarian No 45, 5 Nov 80 p 7

[Article by Dr Peter Keresztes: "Background to Incompleted Investments"]

[Text] Among the statistics of the past decade we will not find many columns which show an almost threefold increase in 10 years. Among these few are incompleted investments, which have increased with particular rapidity in the first 4 years of the Fifth Five-Year Plan. From a distribution of sources point of view, the economists and economic politicians explain this unprecedented climb of incompleted stocks, which are evident as "frozen assets," basically by the increase in the average magnitude of the investments, the lack of organization in savings and investment activity, the fragmentation of implementation capacity, and in the final analysis the tensions of the investment market.

This reasoning is appropriate to the past decade, but to a certain extent one sided. Its starting point is the outlook that regards incompleted investments merely as "frozen assets" and does not consider that at the same time it is the prior condition of the incompleted investments. We can carry out effective and even investment activity only in case of incompleted investments of appropriate size and structure.

Not Only Frozen Assets

The concept is growing stronger both in economic literature and practical economic policy that investment policy should concentrate not merely on the annual investment outlays and the purchasing power related thereto, but must also regulate the series of individual investment decisions by striving to assure a steady balance on the investment market.

Without trying to be complete, I shall introduce in the following some methods related to incompleted stocks, the use of which would help in the effective guidance and planning of the investment process, and an appropriate influence on decisions.

It is foreign to an outlook which concentrates not only on annual outlays but on the investment process as a whole to approach the problem of incompleted investments by relating them simply to annual achievement. Such an approach makes sense only if we regard this ratio as the starting point for estimating average realization time. Unfortunately, this has not been the practice up to now. At present

the majority of the economists as well as mass communications grade the investment situation according to how the ratio of incompleted stocks and annual expenditures is developing. We need a deeper analysis before forming a value judgment. For example, a decline in the above-mentioned ratio may in itself represent a big investment upswing, or its conclusion.

I am convinced there is no absolute index which could grade the global magnitude of the incompleted investments, but the following method, which is still not widely enough employed, can be used more consistently for orientation than by relating to annual achievement.

Let us assume that there are enough investments in process for us to state that the total cost estimates of investments at the 1 percent and the 99 percent degree of completion are the same, and the same is true of the 2 percent and the 98 percent investments as well, and so on. Consequently the average degree of completion of the investments is 50 percent. And thus a total of one-half of the cost estimates for the investments in process has been expended on the investments thus far. We still need to know the volume of parts in operation, which is frequent particularly in the case of large investments. According to various calculations, these investments in process make up about 30 percent of the cost estimates.

A Possible Yardstick

Thus we can calculate the desired magnitude of incompleted investments by deducting the value of the parts in operation, that is, parts which are already a completed investment, from one-half of the cost estimates. Following the 1978 example, the calculation is as follows: at the beginning of the year the total cost estimate of all the individual investments with a value over 5 million forints came to 710 billion forints in round numbers. Putting the vaoue of parts in operation at 30 percent, the "desired" incompleted investments (710 x 0.5-213) is 142 billion forints. On the other hand the observed incompleted investments of the socialist sector is 175 billion forints, more than 20 percent higher.

I shall note that this calculation in itself cannot form the basis of some kind of value judgment. Its advantage is that it is better than the earlier practice of relating to annual payments, and it can be the starting point or the supplementary method for further analyses. On one hand, neither the data nor the estimate procedures are exact in calculation. With the development of the statistical information process which follows the investment process, it may be assumed that at the same time the calculations from this point of view will become more reliable. On the other hand, even behind the globally optimum, "desired" magnitude of incompleted stocks gained as a result of possibly exact calculations, there may be serious structural tensions which will later disturb the process.

For this very reason, in my opinion, we also need further examinations at least according to decision category, material-technical composition and economic branches. It is not my goal now to describe the implementations in detail or to review the results, but let me give several interesting examples from past experience.

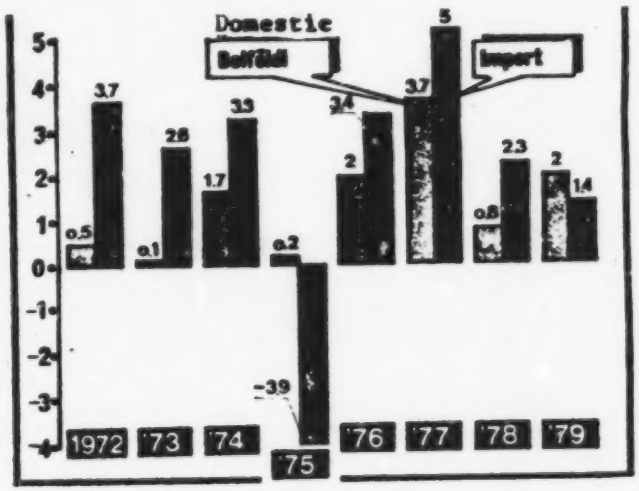
The incompleted stocks of domestic machinery investments is essentially the same size as the similar index for import machinery. At the same time, in the last

decade the change of incompleted stocks of import machinery, in absolute value, exceeds the similar domestic figure. On basis of the relationship between the Five-Year Plan and the investment decisions we can arrive at the conclusion that the nonsocialist machinery deliveries are closely linked to contracts signed on the basis of investment plans. The same can be said of socialist imports. The investments are generally delayed, and therefore these machines cannot be put into operation for a long time. At the same time the domestic machinery deliveries are better linked to the actual completion of investments, and to actual creation of the machine receiving capacity.

The result is that it is the capitalist import machinery, which represents the greatest burden to the economy, that stands idle for the longest time, waiting to be fitted in. We will be able to reduce losses to the minimum in the future if the construction and machinery aspect of realizing the investment proceeds in a coordinated way, and we are ready to receive the capitalist machinery imports and put them to the earliest use possible by technical parameters.

It is evident from the accompanying graph that 1979 was the first year in the decade when the growth in the incompleted stocks of import machinery was smaller than the similar index for domestic machinery. This was apparently caused not only by the decline in imports but some improvement was already evident on the investment market and thus the organization of investment activity also improved.

Graph. Changes in the Incompleted Investments of Socialist Organs as Compared to the Previous Year (in billion forints)



Tensions in the Parts

The other example is to be found where branch and decision category tensions are concealed behind the economic index for incompleted investments. For example, the changes of incompleted stocks in industry can be linked with the Fifth Five-Year Plan, but this is counterbalanced somewhat by other economic branches, and thus the interrelationship at the economic level can hardly be shown. A similar

example is the following: in the Fourth Five-Year Plan period the increase in incompleted stocks changed in a contradictory manner. On the other hand, the economy's incompleted investments are outstandingly high for 1977, and its increase of about 24 percent can be ascribed to the fact that by the means of various economic political constructs we forced the enterprise investment decisions as well to travel a path similar to that of state investments.

As a result of the regulation which brought about a restrained investment decision activity in the past two decades, this year will see an end to the increase of incompleted investments at a high level, and even something of a decline may occur. This in itself favorable phenomenon, however, also calls attention to the fact that those who guide the investment process must avoid the development of a situation where investments are in process for the most part at a low completion level, and it becomes impossible to put them into operation at a desired and even level. On the other hand, the development of the above situation can be avoided, the development decisions must be kept in a channel that will hinder the development of the investment cycle.

Perhaps it can be felt that in this article I was not only seeking to call attention to an unjustified distortion of the importance of incompleted investments. At present, the most important task in investment policy is the effective regulation of the process in harmony with our economic political goals as realized through individual investment decisions. This would also have an advantageous effect on the magnitude of the incompleted investments. At the same time, a deeper analysis of the latter category could also provide useful information for those responsibly interested in the guidance of the process.

6691
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NEED FOR INTENSIFIED LAND RECLAMATION STRESSED

Warsaw DZIENNIK LUDOWY in Polish 4 Nov 80 p 3

[Article by Franciszek Nasinski]

[Text] If we do not produce the amount of grain needed by our country ourselves, we must supplement our own production by importing grain. Farmers in the United States or in Canada can produce grain for us. This is what is happening now. Of course, we must pay for this grain. If we do not have ready cash, we buy on credit. Then we must add the interest on the negotiated loan to our outlay for the grain purchase.

We have imported grain for many years. Recently our imports have risen alarmingly to more than 8 million tons of grain and fodder yearly. The capital outlay for this purpose amounts to $1.3 billion a year. Grain is becoming more expensive.

Grain purchased abroad must be transported across the ocean, we must pay the freight and insurance charges, it must be unloaded in Polish ports and then it must be transported to mills and fodder plants, and from there it must be taken to its destination, i.e., Gmina Cooperative (GS) warehouses. The costs keep mounting. Would it not be simpler and cheaper, instead of transporting imported grain to, let us say, the Wloclaw and Suwaly voivodships, to produce it and process it into fodder on the spot?

There are many reasons why our grain imports, instead of declining, have increased. One of these is the price paid to Polish farmers for their grain. It is more profitable for farmers to cultivate grain and then use it for fodder on their own farms than to sell it at GS purchasing centers. There are also extraeconomic causes imposed by the system.

A major factor in agricultural production, besides man--his dilligence, resourcefulness and ingenuity--is the earth. There are situations--which are by no means extraordinary--in which even an increase in mineral fertilization will not bring about the desired increase in grain harvests. This increase is contingent upon the regulation of water ratios. If the construction of protective embankments along rivers and the possibility of draining excess water from precipitation are not considered in time, then, as was the case last year, all of the farmers' outlays will come to naught and their work will be of no avail.

The regulation of water ratios, including the drainage of arable lands, is thus a necessary condition for progress in agriculture. Outlays for land reclamation are costly, without a doubt. But importing grain is even more costly, not to speak of the dependency of the state on foreign nations in such a basic matter as feeding the nation.

Grain harvests on drained lands show an increase of 10 to 15 quintals per hectare. During wet years drainage is the decisive factor for harvests in general. Experts calculate this year's losses as a result of flooding caused by an excess of precipitation water at 20 billion zlotys. On the other hand, outlays for land reclamation this year, together with expenditures for supplying villages with water and for construction in this area, amount to 12.8 billion zlotys. A comparison of the two figures is shocking. They represent a very strong argument for increasing outlays for land reclamation and for the expansion of the range of efforts to regulate water ratios on lands in use.

Outlays for land reclamation during the 10-year period now coming to a close increased on the financial score. However, as a consequence of price and cost increases their range was narrowed. Experts have cried out in protest against this situation. Farmers have brought up this issue many times. However, as Majakovsky said, their voices were barely a squeak.

Thus the scope of such efforts narrowed at a rapid rate. In 1968, 215,000 hectares of arable land were reclaimed in general; in 1976--194,000 hectares, and last year scarcely 90,000 hectares were reclaimed. The figures with regard to drainage are the following: 164,000 hectares in 1968, 146,000 hectares in 1976, and 84,000 hectares in 1979. With regard to land reclamation efforts on grassy lands in use the decline was even more drastic. The figures for the same years are respectively: 120,000; 57,000 and 26,000 hectares in 1979. A similar decline has been noted in the bringing into cultivation of grassy lands in use: from 133,000 hectares in 1968 to 55,000 hectares in 1976 and 34,000 hectares in 1979. Work on rivers and canals calculated in kilometers decreased during this period: from 1,620 kilometers to 875 kilometers to 609 kilometers last year. Embankments built against flooding decreased from 162 kilometers in 1976 to 75 kilometers last year.

We must assume that losses in grain harvests last year, by comparison to 1968, of approximately 1 million quintals, and in harvests of good quality hay of approximately 4 million quintals are the result of the decreased range of land reclamation efforts.

According to expert opinion, lands drained in the final years of the current five-year plan did not even compensate for the decline in reclaimed lands estimated at 100,000 hectares. These losses are the result of the depreciation of land reclamation equipment manufactured before World War II. This is primarily in reference to the western and northern regions of the country.

It is a fact that gradually, implemented land reclamation efforts have undergone a sharp decline. As a rule, in such cases the reason that is given is the lack of so-called processing capacities. In this case, however, the reason is a different one. This decline occurred despite the fact that the production capacity of enterprises specializing in efforts of this type was not fully utilized.

For example, enterprises joined together to form the Central Administration of Marine Construction and Land Reclamation had 866 drainage machines, with which they laid 39,300 kilometers of pipeline. The full use of this machinery could complete 60,000 kilometers and could lay 105 pieces of modern machinery for non-groove drainage. Pipeline of 80,000 kilometers in length could have been laid, but only half as much was laid.

Taking into consideration the fact that the materials-intensiveness of land reclamation construction is low--only 24 percent of investment costs--while in construction in general and in agricultural construction, materials absorb nearly half the cost, exactly 49 percent, the limited nature of outlays and of the dimensions of land reclamation cannot be justified rationally even in a period of the general reduction of investment outlays in the nation.

One of the basic factors fostering an increase in farming has been the installation of water pipelines on farms. Water in homes and barns has raised the living standard of the farm population. It has also fostered an increase in work productivity. Less time is lost on tending livestock. Farmers can grow more, because the work is easier and the lack of help does not represent an insurmountable obstacle. While it is true that the scope of efforts in this regard has not been reduced, only a small proportion of villages has water pipelines. Barely 24 percent of farms use water from pipelines of various types. Of these, 11 percent have been constructed by state enterprises, and 13 percent have been built by individual farmers at their own expense, as a rule using surface flooding waters of poor quality as a basis. This puts the Polish village in one of the lowest places in all of Europe.

A decision cannot be put off in this situation. Outlays for land reclamation guaranteeing a real increase in implemented efforts must be increased. The utilization and conservation of equipment and the land reclamation system must be improved.

In the 10-year period now ending, agriculture has received a sharp dose of properly directed programs of development and promises. Unfortunately, it has all been just talk. The situation must change. The unsatisfied food needs of the nation are exerting pressure in this direction.

8536
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FARMERS RECEIVE AID FOR PURCHASE OF MACHINES

Coupons for Potato Deliveries

Warsaw CHLOPSKA DROGA in Polish 12 Nov 80 p 1

[Article by A. Jar]

[Text] The Peasant Information Service. The poor harvest of potatoes has seriously limited their sale at purchasing centers. The purchase of eating potatoes, which are so important for supplying the market for the winter, is significantly less than projected. Given this difficult situation, the Central Union of Agricultural Cooperatives, in order to encourage farmers to sell their potatoes to meet the needs of markets in larger cities, have undertaken to tie in potato deliveries with the possibility of issuing farmers the right to accelerated purchase of farm machinery which they need.

Those suppliers who deliver extra large supplies of eating potatoes are to receive coupons for tractors and other machinery. Local authorities in individual regions will determine the minimum size of the delivery meriting a coupon toward equipment which is in short supply.

This system of rewarding large suppliers has been tried for several days in Poznan Voivodship, as well as in several others. Authorities in Poznan have determined that a farmer who wishes to receive a coupon for a tractor must supply not less than 40 tons of eating potatoes. This unusual system of incentives, which has been created under the present conditions of exceptional difficulty, has already brought results. The first priorities for potatoes purchased now are to supply hospitals, workers' cafeterias and other institutions of collective life. A portion of the total purchase goes toward supplying the populace via collective orders at places of work. These orders are much higher this year than in the past. In this way, the supplying of stores suffers. Current deliveries can never meet the need in cities, and for this reason in front of stores there are queues of people waiting to buy potatoes.

Credit for Young Farmers

Warsaw CHLOPSKA DROGA in Polish 12 Nov 80 p 2

[Article by M.D.]

[Text] Peasant Information Service. No one has to be pursuaded of the fact that for a young farmer to undertake to run his own farm is to open the proverbial

Pandora's box of troubles. The many suggestions and requests that reach the Main Administration of the Union of Socialist Polish Youth [ZSMP] attest to this fact. They refer to such subjects as the introduction of installment buying of machinery and tractors, an increase in rebates for the purchase of land, providing young couples who farm with individual credits and facilitating the securing of credit for housing construction in the country.

As a result of agreements between the Main Administration of the ZSMP and the Ministry of Finance it has been proposed that young farmers (up to 35 years of age) be allowed to purchase a tractor on credit, provided that they have been allotted one, of course. The cooperative banks will serve as creditors for up to 90 percent of the cost of the tractor for a period of 8 years at an annual rate of 6 percent. Young farmers taking over a farm or setting up a new farm will receive priority treatment for buying on credit.

In order to be considered for credit, both young couples and individual farmers must meet a set of requirements which were formerly applicable only to those employed in socialized places of work. In other words, those young couples in which one spouse is not over 35 years of age and the other is not over 40 years of age, and not more than 5 years has elapsed since the couple was married may be eligible for credit; or, those young couples in which one spouse is not over 35, the other is not over 40, and not more than 5 years has elapsed since they acquired their first independent place of residence may be eligible for credit. Persons rearing children alone are also eligible for credit, provided that they are not over 30 years of age, or 35 years of age if not more than 5 years has elapsed since they acquired their first place of residence. Young couples may also receive credit during a period of military service or study, if their parents act as co-signers. The amount of credit will be 70,000 zlotys, the waiting period will be 9 months, and the repayment period, 5 years.

Young farmers have gained significantly with regard to undertaking the construction of their housing. Previously, in order to be eligible for credit for housing construction the applicant had to make use of his own funds for 40 percent of the estimated total cost. At present, in justified cases, the cooperative bank may reduce this personal share to 10 percent. The Ministry of Finance has also proposed issuing a recommendation that the number of loans made available for housing construction in the country not be limited.

A demand submitted by young farmers for increasing a partial refund of the purchase price of land from the State Land Fund from 30 percent to 50 percent will be forwarded by the Main Administration of the ZSMP to the Ministry of Agriculture for consideration.

8536
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SOCIOECONOMIC VALUE OF SELF-MANAGEMENT, SELF-ADMINISTRATION

Bucharest ROMANIA LIBERA in Romanian 29 Oct 80 pp 1, 5

[Article by Victor Dinu]

[Text] The new economic-financial mechanism is, beyond theory, of vital importance to our development. Its application was necessitated not as a result of someone's wish but by the dialectics of the development of the productive forces and the relations of production. Moreover, in this intricate system, self-administration is a factor.

Our party's concern for the scientific organization and management of the economy has significantly increased after the Ninth Congress of the Romanian Communist Party. From then on, for 15 years, measures were constantly taken to create a modern system of economic-financial organization, management and planning. As for the democratic forms of management, even though they were specified in the same period, they rooted more rapidly and operated on an overall scale in the entire socioeconomic sphere in this country. This did not apply to our economic-financial mechanism whose components were not promptly geared to the natural changes that took place in the development of the productive forces.

This phenomenon was timely and excellently pointed out by Nicolae Ceausescu. As early as in 1977, at the general assembly of working people at the Bucharest Heavy Machinery Enterprise, the party secretary general stated: "The democratic forms of management in our economic system did not proceed at the same rate as the upgrading of the system of economic-financial management (....) Unfortunately, some economic and financial cadres find it difficult to detach themselves from what they learned in the past, from old procedures, from what no longer corresponds to the new realities in Romania. That is why firm measures are needed to organize this sector as well, to bring the economic and financial mechanism to the level of development of the new forms of collective leadership, to do away with all that does no longer correspond."

Followed the Decision of the March 1978 Plenary Session of the Central Committee of the Romanian Communist Party, of outstanding importance in specifying the goals of the new economic-financial mechanism. The requirement

of switching to a new quality of economic activity necessarily involves upgrading the economic-financial mechanism so that the economic units, their bodies of collective leadership may have the adequate leverages for best possibly fulfilling their role and duties, in order to stimulate greater economic efficiency and material incentives for working people in better utilization of exisiting resources and obtaining of superior economic results.

For the achievement of these objectives regulations were adopted such as the law on the organization and management of economic units, the law on planned socioeconomic development of Romania, the law on finances, the law on the formation, planning, appropriation, and payment of profits, the law on economic contracts, and so forth. A sound basis has thus been created for the application of the new economic-financial mechanism and also favorable conditions for the firm promotion of the principle of economic self-management and self-administration.

What actually does it mean for the economic unit to conduct its activity on the basis of the principle of self-management and self-administration? There is nothing more simple and more logical: paying its expenses from its own incomes. It means not working purposelessly, as, unfortunately, is sometimes the case, and then appealing to the state budget. Self-management means returning the sums advanced by society and actively participating in the formation of the central sources of the state. In this context, the budget of incomes and expenses, a tool on which we shall dwell again, is an outstanding factor.

In 65 days, including today, we shall enter the new five-year plan period. Are we now certain that all economic units have finalized their self-management system? If we wish to fool ourselves, our answer is affirmative. But we are realists and are aware of the actual situation in enterprises. Hence, we must state that self-management, this "gear" in the comprehensive economic and financial mechanism, is still moving rather slowly and hesitantly.

Naturally, there is the question of why are some enterprise managers delaying to organize production on the basis of the new economic-financial mechanism. Simply because the new economic mechanism requires a new, revolutionary, specific style of work. One felt better under the warm protection of overall production. Hence, responsibility, also, was on an overall plane. The new economic-financial mechanism has a merciless attitude against half-measures and red tape.

The manager of the enterprise, the collective which he heads, are assessed by the physical output and the net output, by the profits which they achieve, profits evidenced by the local budget. The collectives of working people already are familiar with the economic plan of their own unit for 1981. As is normal, the plan incorporates the basic ingredients of the budgets of incomes and expenses: the volume of output, the volume of investment funds, the level of operating costs, the remuneration fund, other financial assets for completing social projects, and so on. The rigorous, detailed implementation of the budget of incomes and expenses actually means wise management of the material assets entrusted by society to the collective involved,

it means concern for greater labor productivity, integration into the consumption rates for materials, fuel and energy. In other words, self-management means greater responsibility in work and order and discipline in all the sectors of activity.

It is clear that only in this way we can assure the harmony between socialist worker democracy and the economic mechanism, with the bodies of collective leadership in enterprises and centrals thus having the necessary tools for promoting greater economic efficiency and material incentives for working people in obtaining the best possible results.

In this context, the preparation of the budgets of incomes and expenses for 1981 is a decisive factor in strengthening economic-financial self-management. It is normal for each enterprise to create its own funds for meeting the current needs of production, for payment of work, meeting the investment requirements for expanding the enterprise and housing construction.

Undoubtedly, self-management coupled with economic-financial self-administration enables ministries, industrial centrals and enterprises -- all together and each individually -- to plan and achieve the entire output in conformance with the actual needs of the domestic and foreign markets. Now the guide no longer ought to be overall output, because we produce not for the sake of producing but for the products involved to assure the satisfaction of the real needs of production and consumption of the population and for meeting the export requirements.

Dwelling again on the budget of incomes and expenses, a basic tool for strengthening economic-financial self-management, it must assure the financial balance, which is of vital importance to all economic units. In other words, one should not reach the point of consuming more than one produces. This principle will certainly result in promoting in day-to-day work a greater drive to wisely utilizing the material and financial assets and labor. Rigorous evidence of expenses and of the results of production by the body of collective leadership will help to stimulate every member of the enterprise to work better, to be a better administrator, to make every effort for his factory, construction site to be profitable.

The question also arose whether self-management and self-administration do not contradict the basic principle of our party and state, democratic centralism. We already have many examples and practical results which prove that worker self-management and self-administration create actual prospects for the best possible fulfillment of the increased assignments given to the basic units and their bodies of collective leadership. The dovetailing of democratic centralism with the increased duties of economic units only results in greater initiative in implementing the laws and decisions taken on a central scale, for the exemplary completion of the uniform national plan for socioeconomic development of our country.

11710
SO: 2700

EFFORTS OF TRADE NETWORK TO SATISFY NEEDS OF CONSUMERS

Bucharest ROMANIA LIBERA in Romanian 24 Oct 80 p 2

[Interview with Ana Muresan, minister of domestic trade, by Mircea Scripca]

[Text] [Question] At the recent plenary session of the Central Committee of the Romanian Communist Party great emphasis was placed on the problems of production and marketing of consumer goods. What steps will the trade sector take to implement the tasks outlined, for the purpose of better supplies of commodities to the population?

[Answer] The proceedings of the plenary session of the Central Committee of the Romanian Communist Party held on 14-15 October 1980 marked a special point in the life of our people. In his speech party secretary general Nicolae Ceausescu made a profound, scientific analysis of the accomplishments under this five-year plan and gave the guidelines for 1981, the first year of the next five-year plan. The instructions given at the session by the party secretary general are an outstanding support to the consumer goods industry and also to trade, in guiding their activities for the purpose of better supplies of commodities to the population.

In the context of the significant achievements obtained in the overall economic growth, trade -- as an important component of the improvement in the standard of living and the quality of life -- has developed correspondingly. Compared with 1975, the sales of retail goods now are 50 percent higher and the structure of supply has continuously expanded, reaching approximately 320,000 products and brands. Moreover, the socialist trade network under this five-year plan has increased by about 2 million sq m. Department and general stores, with ample facilities for using modern marketing forms, were built in almost all Romanian counties.

The conditions ensured provide a sound basis for upgrading trade, for better meeting the consumers' needs.

[Question] What is being done during this quarter --in the fall-winter period -- to ensure proper supplies to the population?

[Answer] In the first place I would like to point out that -- as a result of the concern displayed by the leadership of our party and state -- this quarter will see an extra output of consumer goods valued at about 3 billion lei and next year will see an extra output of 10 billion lei, which will add to the existing resources and will upgrade the supplies to the population.

During this period much attention is paid to supplies of farm foodstuffs. In spite of adverse climatic conditions this year, adequate amounts are ensured in terms of potatoes, vegetables and fruit, for both current consumption and winter supplies. During the 1 September-15 October 1980 period the socialist trade units sold to the population 120,000 tons of potatoes, 181,000 tons of vegetables (onion, cabbage, peppers, and so on), 33,600 tons of fruit, and 41,600 tons of grapes. A significant factor in this area involved the organization of the "Month of Horticulture," sponsored by the General Economic Directorate of Hortiviticulture in the Ministry of Agriculture and Food Industry. The assuring of supplies continues to run smoothly. Marketing provisions for this quarter -- versus the corresponding period of last year -- envision increased quantities: by 35.8 percent for potatoes, by 32.3 percent for vegetables, and 13.6 percent for fruit. Furthermore, steps are taken to store the vegetables and fruit needed for marketing in the first half of 1981. Because there are lags in this area in some counties, the produce transportation and storage procedures must be accelerated.

Quantitative increases are anticipated in this quarter -- versus the fourth quarter of 1979 -- also for other products, such as: 14.8 percent for bread, 10.2 percent for pasta, 3.2 percent for cut meat, 30 percent for meat products, 24.8 percent for animal fats, 19 percent for canned vegetables, 13.2 percent for tomato paste, 13.5 percent for rice, and so forth.

[Question] During the cold season, also other products are in demand with the population, such as warm fabrics and garments, knitted goods, fuel, and so on. What steps were taken to ensure proper supplies of these commodities?

[Answer] In the textile-footwear sector we ensure supplies of a larger amount of season items to the stores. Compared with the same period of last year, in this quarter we are marketing 8.5 percent more overcoats for adults and children, 6.2 percent more knitted goods, 5.9 percent more footwear out of substitutes, man-made material and rubber, and greater quantities of warm fabrics (twilled cotton, flannelette, and velveteen). Moreover, we ensure supplies which are 5 percent greater for heaters that use solid fuel, 6-8 percent greater for housewares for the cold season, and so on. Furthermore, we continue to ensure the supplies of firewood and coal for the winter, in the amounts needed for sensible consumption; in case of adverse weather, season warehouses will be opened.

For the full implementation of the provisions in the marketing plan for the fourth quarter, just as of the provisions for the entire winter period, the supplier units must strictly meet their contractual obligations and take steps to eliminate the backlogs in terms of some specific cold season items.

[Question] What are the provisions for 1981?

[Answer] According to the Uniform National Plan for Socioeconomic Development of Romania in 1981, the total volume of retail sales of goods through the socialist trade units will be 225.5 billion lei, with a significant increase over the level for 1980.

In light of the instructions given by party secretary general Nicolae Ceausescu, for next year the product structure of commodities was determined according to classes of quality: lower-priced products, representing 50 percent of the total of consumer goods, which are specifically meant for people with lower incomes, and some products of higher quality. Based on this new orientation of the production and marketing of consumer goods, we ensure the firm application of the principles of socialist ethics and equity and also create greater facilities so that the population may find, according to their incomes, products conforming to their needs.

Also, an important factor will involve the increased input of counties in establishing the fund of goods, by achieving a supplemental output, as a result of purchasing extra amounts of produce from the available resources of the population and by expanding small-scale industry. For the purpose of assuring balanced supplies throughout the country's territory, the 1981 plan assignments were determined for the various counties -- in addition to the total volume -- also in terms of a number of important products.

[Question] Please give us a few details on contracting for the fund of commodities for 1981.

[Answer] From the outset I would like to point out that special attention was paid to the projects of contracting for the fund of commodities for next year, based on the broad consultation of the county councils of consumers' representatives conducted at the 11th Consumer Goods Fair. The better substantiation of the needs for goods of trade units was achieved through the various forms of surveying the needs of the population, which involves a new and vigorous manifestation of the democratic nature of our socioeconomic life.

In light of the specific character of each group of commodities, the nature of production and of consumption, the procedures of contracting for the fund of commodities for 1981 developed in phases for nonfoods. For farm foodstuffs, contracts will soon be finalized, at the conclusion of agricultural balances. In the textile-footwear sector, contracts were concluded, valued at more than 20 billion lei. They mostly involve -- in accordance with the specific nature of these items -- the merchandise which will be delivered to trade units in the first half of next year. I must point out that -- from the displays at the fair -- contracts were concluded for about 5500 styles of garments, knitwear, footwear, notions and leather items, and other goods, largely new and modernized products.

In the metalochemical sector, firm contracts with industry involved commodities totally valued at 28.3 billion lei, with more contracts in the process of being concluded, designed to fully cover the fund of commodities planned for next year. For instance, in the furniture sector, contracts involve a

fund of commodities valued at more than 800 million lei, in a range of products that was renewed 35 percent. Moreover, the contracts concluded for 1981 -- in comparison to 1980 -- will result in significant increases for the products in higher demand on the market, such as: 18 percent for detergents, 15 percent for compressor refrigerators, 10 percent for earthenware tiles and bathroom items out of earthenware, 12 percent for bathroom fixtures, 10 percent for electrical batteries, 15 percent for tires, and other items, for the purpose of better meeting the needs of the population for these goods.

While by and large, adequate quantities were ensured under contracts for most products, there still are some commodities for which the manufacturing enterprises are required to make supplementations. These must be made as part of the 10 billion lei supplementation for next year established by the party and state leadership. This actually also is a central concern of ours, the workers in the area of trade, namely fully ensuring the fund of commodities envisioned under the plan and its smooth transfer from the furnishing units, for the purpose of the proper supply of stores.

[Question] However, there are cases when some kinds of merchandise are harder to find in the stores. Why?

[Answer] There are complex causes. One of them involves unsmooth delivery of some products, a fact that creates temporary hiatuses in supplying the stores. Of course, in conjunction with industry, we try to avoid these situations and make efforts to assure continuity in supplying the entire trade network.

In other cases, the situations which you mentioned result from some deficiencies in the transfer of goods from warehouses to the trade units and from the dishonesty of some trade workers who -- instead of putting up for sale the entire range of merchandise received -- promote sales of some products only to special buyers, in exchange for material benefits. It is an attitude which we totally disapprove, because it contradicts the principles of socialist ethics and equity. We take firm action against these attitudes, by various educational procedures and, when appropriate, by disciplinary measures.

For the purpose of providing civilized, correct and prompt service to shoppers, as part of recent projects, conferences were held in some towns in the provinces and in Bucharest -- organized in conjunction with the Union of Trade and Cooperative Trade Unions -- with the executives and active of local trade. These conferences were geared to highlight the good results obtained in this field and also to discuss violations of trade regulations and laws of our state by some workers and to take appropriate measures.

Under the guidance of party organizations, the efforts to educate trade workers in the spirit of socialist ethics and equity and the country's laws will be stepped up.

In this program to eliminate negative phenomena from trade, citizens ought to more firmly speak out and protest against the buyers who purchase quantities

that far exceed their needs and thereby prevent other buyers from satisfying their needs. The Ministry of Domestic Trade, through its central and territorial apparatus, has taken -- and will continue to take -- measures of severe punishment, going as far as removing from the trade sector the workers who promote such actions. However, it is the duty of all shoppers to take immediate action whenever buyers show tendencies toward excessive purchasing.

By acting on this line at all levels in the trade sector, in close cooperation with the consumer goods industry, by most intelligently using the existing trade network and completing new trade facilities -- the minister concluded -- the trade sector will better implement its highly responsible tasks in the area of providing supplies and serving the population.

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SUCCESSES, REQUIREMENTS IN STANDARDIZATION OF PRODUCTION

Bucharest ERA SOCIALISTA in Romanian No 22, 20 Nov 80 pp 8-10

/Article by Dr Eng Ion Hera-Bucur/

/Text/ As we know, more than a year ago at the Working Conference with Technological and Construction Designers Comrade Nicolae Ceausescu outlined a new plan for the content and organization of typification activity in Romania that will make it an effective instrument for rationalizing production, reducing material inputs and improving product quality and reliability. As Comrade Nicolae Ceausescu said at the Plenum of the RCP Central Committee of 14-15 October 1980, "Steps must be taken to finish up operations for typification and setting material consumption norms more rapidly, because the 1981 plan and the five-year plan are based upon rational norms, rational inputs, and typification of the products, materials, and various assemblies and subassemblies, and that means we must provide for the proper technical level, quality and productivity."

A Source of Great Savings

In its general sense typification means the activity of developing technological, organizational, structural and other measures accepted as best suited technically and economically to the given purpose and the respective stage and specifying them in the technical documentation. The scope of typification in the Romanian economy is so broad that it can be said without exaggeration that industrial progress is now impossible without development of this activity and large-scale application of the technical norms and standards for sectors, consumption norms and other regulatory documents resulting from the process of typification and standardization.

Typification is one of the activities that have received the necessary recognition and full support of Romania's leading authorities. This encouraging statement is made by all specialists in plants, research laboratories or technological engineering and design sections, who are aware of the powere of typification and standardization for socioeconomic change and have devoted much labor over the years to promoting the theory and practice of this applied discipline.

In the last period Romanian typification and standardization were urgently confronted with the dilemma of diversification-specialization, in view of the necessity of meeting all demands of the domestic and foreign markets with economical manufacture

and a greater contribution on the part of typification to conservation of materials, energy and fuels.

The effort to typify construction operations was intended, in the first place, to restrict the number of procedures that are designed, which often contain duplications, on the basis of a detailed analysis of the entire supply of designs, and in the second place to extend the scope of typification to new fields of construction because standard designs had not been prepared in the past or existing designs covered too limited a field to meet the needs of the economy. Study of over 1,500 construction designs in 1979-1980 and correlation of the most technically and economically successful solutions resulted in about 700 standard designs (more than 50 percent less) that are now in use, including 144 models and standard designs for capacities common to several sectors such as water tanks and sedimentation tanks, boiler rooms for steam-generating stations and heating stations burning solid fuel for heating housing subassemblies, cooling towers (with forced or natural draft), water supply and sewerage projects etc. The preliminary estimates indicate that application of the standard designs will save nearly 600,000 tons of cement in the next five-year plan, about 130,000 tons of steel, over 600,000 tons of conventional fuel and almost 5 billion lei in construction-installation operations compared with the procedures in use before typification.

Outstanding results were obtained when typification was based on interdisciplinary and multidisciplinary studies such, for example, as corroboration of the studies made in construction and the construction materials industry for designs of light structures of allied materials and extended use of precompressed concrete, economical profiles of sheet steel etc. Wide-scale application of new structural systems has been recommended, with simplified joining and intensive industrialization of the designs, with spaces and compartments limited to dimensions strictly necessary for the industrial functions of the buildings. Further use is being made of local materials and and by-products as, for example, ash slag from heat and electric power stations, phosphoric gypsum, gypsum plaques and strips, and fiberboard. To rationalize use of fuels and to reduce energy consumption, effective measures (triple windows, double skylights) have been recommended to improve thermal insulation of buildings, as well as use of less energy-intensive materials, rationalized systems of heating installations, recovery of heat, use of solar energy, etc.

The foregoing data bear out the correctness of employing major planning and development forces in enterprises and institutes to prepare studies, designs and other technical-regulatory documents for typification in construction, and especially the necessity and advantages of continuing typification work in this production sector on a higher level in the next period. The main improvement in typification in this sector consists of integrated examination of manufacturing methods, industrial equipment and the structural design of the buildings, as opposed to the methods previously in use when typification was confined solely to construction properly speaking.

Application of the methods of typification and standardization to design of machines, equipment, assemblies and industrial installations provides great possibilities for rationalizing production. The number of more than 700,000 standard sizes of products in manufacture in metallurgy, machine building, chemistry, construction materials, light industry etc. can be reduced by about 50 percent, with expected savings of almost 1.1 billion lei in 1980 and over 5.1 billion lei in the next five-year plan. The savings will be made by simplifying production and lowering its costs, introducing new industrial processes, using more efficient producer goods, reducing costs of preparing manufacture per unit of output, etc.

Upon examing the methods of typification used in various economic sectors, we shall note that in metallurgy, for example, the emphasis was on output of a limited range of standard sizes of iron and steel products to meet a wide range of requirements. By improving the quality of the metal and intensifying studies of the beneficiaries' real needs, the number of standard varieties of ferrous products was reduced from about 180,000 to nearly 90,000, and that of makes of steel from 700 to 166. Henceforth ferrous metallurgy will produce strictly necessary varieties and standard sizes, according to the lists, standards and other technical-regulatory documents prepared and approved at the start of this year. This will permit reduction of the number of methods of steel processing and greater production capacities through more rational use of metallurgical machine tools and a constant product quality. Estimated savings in the metallurgical sector thanks to the recent typification program are expected to exceed 140 million lei by the end of 1980 and to reach about 600 million lei for the next five-year plan.

Typification of the products of the machine building sector required analysis of more than 300,000 standard sizes of machines and equipment, resulting in suggestions to stop manufacture of about 42 percent of the standard sizes and varieties, which suggestions will lead to expected savings of almost 800 million lei in 1980 and over 3 billion lei in the course of the 1981-1985 plan. Efforts were made to reduce the number of obsolete products with outmoded structural and functional parameters or those with different structural characteristics although they were intended for the smae manufacturing process. The effort was also made to manufacture in Romania as many products as possible that are now imported, as well as some very common materials and supplementary subassemblies. One important result of the typification operations in machine building was the final determination of the basic structures of the systems of machines and equipment for the main types of manufacturing processes. This will make it possible to rationalize their design and manufacture and, ultimately, to completely mechanize the production sections and buildings.

Comparable results were also obtained in the other economic sectors, such as light industry, the forestry and construction materials industry, transportation, the enterprises of the Ministry of Electric Power, the mines, petroleum and geology sectors etc., where typification activity has recently acquired qualitatively new dimensions and aspects compared with what had been previously initiated and accomplished in this field.

All these sectors as well as the ones mentioned above still have great potentials for expanded typification and its greater effectiveness in the future. For example, typification must be intensified in road construction and cement consumption must be reduced through wide-scale use of slag and ashes from heat and electric power stations, traditional local materials etc. Development of standard designs for small electric power stations and hydroelectric power stations to exploit the entire energy potential of Romania's inland rivers shows great promise. In agriculture, it is rational to continue making low-capacity units according to the needs of each county, and light industry has great potentials for making many construction materials to replace the scarce and expensive ones. This applies especially to the light and cheap materials used in manufacturing some construction elements, those needed for high-quality thermal insulation, etc. In the construction materials sector it is possible to assimilate a larger assortment of materials, sections and simple space elements, to introduce domestic materials into the production cycle, to make better use of the natural resources in each geographic area, etc. And

finally, efforts must be made everywhere to reduce the inputs of energy-intensive materials and to use more cheap local materials.

Requirements for Better Activity

Analysis of the experience acquired in typification of constructions and industrial products in Romania in the past year especially brings out the great possibilities of this activity, which are far from exhausted, for a more active contribution to rationalization of production and its greater economic effectiveness. In the construction sector, for example, this possibility lies in better correlation of typification operations with setting scientific norms for the material inputs, so that any standard design will be accompanied by lists specifying ceilings on the quantities of materials (cement, metal, wood etc.) neededfor the respective construction, just as the standard prices are set in the general estimate of any new investment capacity. In this way typification can become an efficient instrument for applying the new economic-financial mechanism based on growth of net physical production or of the newly created value in the production process along with reduction of material inputs. In connection with the above-mentioned point, specially formed collectives must prepare the designs for typification of all construction materials, wherein special emphasis is required on development of production of the materials which call for limited inputs of fuel and energy and which are plentiful in Romania.

Since in most cases the machine building industry has emphasized typification of the finished products more than unification of the structural components of the various types of products with the same structural and functional characteristics, it would be desirable to shift the emphasis in typification there henceforth to the latter consideration. Intensified typification and unification of the structural elements of the products (assemblies, subassemblies and parts) will accomplish the present most important objective of Romanian typification, namely the greatest possible diversification of the products along with the greatest possible reduction of the number of their components. As a matter of fact, advanced experience in the field of typification indicates that any new product or any variant of an existing product must be manufactured with 90-95 percent typified elements and no more than 5-10 percent particular, original elements. This increases the series manufacture of the parts and subassemblies and guarantees application of advanced working methods as well as minimal losses of materials and energy inputs. Party Secretary General Nicolae Ceausescu stressed this point on his visit of 26 June 1980 to the Bucharest Machine Tool and Aggregates Enterprise, when he requested "measures to be taken for more rapid transition to the program for typification of subassemblies and to manufacture of production lines and machine tools on that basis." But the comment applies to most of the subsectors of the machine building industry and not just to the machine tools group, where this shortcoming was found.

Great possibilities for more effective typification, so far insufficiently exploited, are offered by better combination of that activity with the measures and principles of specialization and cooperation. In this respect there is no technical or economic justification for situations where production of the same group or family of equipment (for example, machines and equipment for metal processing by hot or cold plastic deformation) is fragmented from the standpoints of research, design, assimilation and manufacture among several planning and development institutes, enterprises and industrial centrals. Similar cases are also encountered in the case of other groups of machines. A problem that has been underemphasized so far and one which I think should receive more theoretical and practical consideration henceforth

is that of typification of manufacturing methods, as a natural corollary of typification of the products in machine building and other fields. And finally, it is vitally necessary to promote rationalizing calculations in typification-standardization activity, based upon use of objective criteria indicating how far unification and restriction of types of makes and products do not affect the output of the sectors that are beneficiaries of the standard varieties demanded by the technological requirements and those of economic effectiveness.

Of course maximum economic effectiveness is the final criterion for justifying any typification operation, since the output produced with typified equipment and materials will be reflected in the lowest possible production and especially material outlays in all the economic and other sectors that use the typified product. This calls for complete quantification of economic effectiveness throughout the production-exploitation (consumption) cycle and not in one area of it alone. Generalization of the measures based on rationalization and of the calculation of the integrated economic effectiveness are qualitative considerations that should govern typification, as well as major requirements with which practice confronts typification and standardization in the present stage of development of the Romanian economy.

It is becoming increasingly clear that the new forms of typification and standardization advanced in recent years by modern science and technology must be promoted, such as systemic treatment of typification, overall standardization, and preliminary standardization. In considering in depth the last concept alone, that of preliminary standardization, we note that under the conditions of accelerated technical-scientific progress the technical-economic indicators adopted in the planning stage of a product often cease to be competitive in the course of assimilation and reaching the stage of industrial production, even if it was originally based on the latest studies and advances in science and technology. Therefore when the products are designed the specified indicators must be calculated to guarantee that they will be viable in time. To this end typification and standardization must be oriented not only toward regulation of the existing output but especially toward the products in the designing stage or even in that of ideas and development, where technical and economic forecasting calculations are used.

From the standpoint of coordinating typification operations, the collectives in enterprises and institutes that are responsible for that activity feel the effects of inadequate methodological training and guidance, as indicated especially by the absence of any uniform or clear subject matter or conception of the work. As a result differing viewpoints have often been adopted, operations have been repeated several times, important subjects of typification have been undertaken very late (imports for example), etc. Such defects can be eliminated in the future by more attention to the theoretical and methodological aspects and guidance of typification and by closer collaboration among the elements with such responsibilities on various levels. These points were discussed at the National Symposium on Typification in Machine Building held between 3 and 5 July under the auspices of the Ministry of the Machine Building Industry and Brasov University, where the necessity of developing the science of typification and standardization was urgent on the agenda.

The standard and effectiveness of typification can be greatly improved in the light of the older and newer experience acquired in Romania and on the basis of more regular information concerning progress in other countries. This objective calls for persevering efforts on the part of highly qualified specialists who also have sufficient flexibility of thought and action. The training of such specialists clearly

begins in college, and then the first years after graduation are critical. For the foregoing reasons, we note with satisfaction the recent regulations on direct assignment of well-trained and gifted graduates to research and design. It now depends upon good organization and management of the new graduates' apprenticeship on the part of those who work in the research and design sections to which they were assigned, so that while mastering the technological innovations in the field they will enhance their skills acquired in college at learning thoroughly and permanently. Experience shows that the youths in this category are highly receptive to design procedures based on the principles and methods of typification and unification, something that does not always come easily to engineers in the older classes who have practiced designing by classical, traditional methods all their lives.

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LAW REGULATES DEVELOPMENT OF SMALL INDUSTRY

Bucharest BULETINUL OFICIAL in Romanian Part I No 89, 22 Oct 80 pp 1-7

[Law Regarding the Development of Small Industry]

[Text] On the basis of article 57 of the Romanian Constitution, we sign and order to be published in BULETINUL OFICIAL of Romania, Law No 2 of 17 October 1980, regarding the development of small industry.

Nicolae Ceausescu
Chairman of the Socialist Republic of Romania
Bucharest, 21 October 1980

Law Regarding the Development of Small Industry

The fulfillment of the program for building a multilaterally developed socialist society imposes the most efficient use of all material resources and of the labor force available in the national economy, and a sustained increase in the value derived from them.

In this context, an important role is played by the material and labor resources existing in communes and towns, which can be utilized in small industry.

Small industry conducts its activity under the direct leadership and guidance of peoples' councils; its major goal is to contribute to the development of material production in society, mainly through the exploitation of natural resources, secondary animal, vegetal, and industrial products, reusable materials, as well as other resources of raw materials and local materials.

Similarly, small industry must seek development and diversification in the production of consumer goods and services, so as to properly satisfy the demand of the population and other needs of the national economy. A special role in these activities must be played by the production of craft and folk art items, so as to substantially increase the proportion of small industry products for exportation.

Small industry must help create conditions for including in production and service activities, the available labor force throughout the year, assuring for those who work in this domain, incomes that correspond to their production.

For this purpose, the Grand National Assembly of Romania adopts the present law.

Chapter I. General Provisions

Article 1. Small industry, an integral part of the socialist economy, constitutes an important domain of the society's material production which must make an increasingly large contribution to the general development of the economy and the continued improvement of the population's standard of living.

Small industry includes the production and service units of peoples' councils, crafts cooperatives, consumer cooperatives, the industrial activities of agricultural production cooperatives, as well as the activity of authorized small craftsmen and other production and service activities organized according to law.

The principal objective of small industry is the production of consumer goods, household and housekeeping articles, toys, textiles and clothing, folk clothing, rugs, other craft and folk art items, food products, construction materials, fabrication, repair, and reconditioning of parts, assemblies, and subassemblies for the needs of the population and industry, housing maintenance and repair, production of goods in cooperation with other economic units, milling, and other services, so as to satisfy the demands of workers and socialist units, as well as exportation needs.

Article 2. All small industry activity is carried out under the guidance and coordination of peoples' councils, independently of the affiliation of the units in which it is conducted. Peoples' councils are responsible for the good organization of activities in production and service units, the efficient utilization of material resources and the labor force, and the most satisfactory fulfillment of the population's demand for products and services.

Article 3. Small industry units operate according to the principles of worker self-management and economic-financial self-administration, on the basis of their own income and expense budgets, assuring a sustained growth in income and the most efficient utilization of all their material and financial means.

In keeping with the economic-financial mechanism, small industry units must achieve a high economic efficiency through a superior utilization of raw materials, and the production of inexpensive items with the highest possible degree of processing and value, low production costs, and corresponding profits, according to law.

Small industry must assure increased production and services, so that each unit will contribute to the general development of society, and form its own funds for self-financing and for covering other expenses stipulated by law.

At the same time, the activity of small industry must assure a judicious stewardship of goods, the exercise of rigorous control, as well as heightened responsibility, order, and discipline in the labor process.

Article 4. Small industry must contribute to the exploitation of all material and labor resources available in communes and towns, and to increased production of goods and services through the introduction into the economic traffic, of all available raw materials and local materials, assuring primarily:

a) The production development of some construction materials through the extraction and processing of quarry and river gravel, sand, marble deposits, calcareous rock, volcanic tuff, clay, and other similar materials;

b) The organization of extraction and exploitation from small deposits and deposits with reduced reserves, of coal, peat, iron, copper, gold, and silver ores, as well as other low-grade metallic and non-metallic resources for the steel, metallurgical, and chemical industries, and of semi-precious and similar stones;

c) The most extensive possible use of cane, straw, sorghum, corn leaves, cattails, reeds, sedge, and other similar local raw materials, so as to produce items for domestic consumption and exportation, as well as a substantial expansion in the exploitation of medicinal plants, and of vegetal and mineral raw materials to obtain chemical products, paints, cosmetics, and so on;

d) The production development of canned, semi-preserved, and other food items derived from the processing of available agricultural products, secondary vegetal and animal products, mushrooms, forest harvest, and other similar raw and other materials;

e) The organization of the exploitation of wood resulting from windfalls and forest clearings, in inaccessible locations, with the approval of the Ministry of the Forestry Economy and Construction Materials, and the use of these materials to produce consumer, craft, and other goods;

f) The production development of tool kits and small tools, highly processed, small scale sports and travel goods, small and complex machine tools for technical, radio, physics, and chemistry applications, small-run products for teaching, and so on.

Small industry will also assure the collection and utilization, as a function of plan tasks, of raw materials and reusable materials, parts and subassemblies obtained from the dismantling of used fixed assets, durable, and personal goods, metal resources, chemical products, wood materials, textiles, leather, residual agroalimentary substances resulting from production and consumption processes, and so on.

Article 5. The development of small industry activity will be oriented so as to bring industrial production and services closer to the population, through the creation of a broad and diversified network of small, readily accessible units, which will provide varied, prompt, and high quality services, thus eliminating unnecessary transportation and displacements.

Article 6. The development of small industry activity will primarily use the space, machinery, tools, and devices available in their respective units of in other units of the economy, through redistribution, transfer, or rental under prevailing regulations, as well as through cooperative actions.

Article 7. The activity of small industry must be carried out with reduced energy consumption, making the largest possible use of secondary resources and lower grade fuels.

In order to satisfy their own power needs and those of socialist units and the population, small industry units will build micro-hydroelectric plants, installations for using solar and wind power, water power (mills, sawmills, carding stations, and so on), as well as biogas plants, and if need be, only some parts or portions of such plants and installations.

Article 8. The products fabricated by small industry are sold on the basis of contracts with socialist organizations, for domestic and foreign use, as well as directly to the population. In addition, some products can be sold through sales units of small industry at fairs, markets, and so on, according to prevailing regulations.

Article 9. Small industry units will make it possible to make use of the available labor force for the production of material goods and for services; cottage industry production and services will be expanded and diversified by employing women, retirees, the handicapped, and other similar categories of people.

All workers who are active in small industry will derive incomes on the basis of agreements, piece rates, or percentages, in direct ratio to the volume of their production or effective services.

Chapter II. Organization of Small Industry Activities

Section I. Organization of Activities in Peoples' Councils Units

Article 10. Municipal, town, and communal peoples' councils organize in accordance with prevailing legal provisions, small industry units within their own territorial-administrative areas, to produce material goods and services to satisfy the needs of the population, socialist units, and exportation. Some units can be organized according to law, subordinated to county peoples' councils.

Similarly, peoples' councils together with educational organs will develop small industry activities carried out as production practice for school, high school, as well as higher education students, so as to fabricate industrial products, and especially consumer goods.

Article 11. Units organized by peoples' councils will primarily assure the production of construction materials, household and housekeeping items, food products, and other consumer goods for satisfying the needs of the area's population; they will produce and restore parts, devices, and subassemblies in cooperation with units of the national industry and other socialist units; manufacture products and conduct projects required by units of local state organs; and render services, including milling, chemical cleaning and washing, housing maintenance and repair, and other activities for citizens and socialist units.

Article 12. Units subordinated to peoples' councils are established and organized according to legal provisions.

Article 13. The activity of peoples' councils units will consistenly seek to apply the principles of worker self-management and economic-financial self-administration, to develop production and increase economic efficiency, and to increase their contribution to local budget incomes.

Article 14. Peoples' councils will assure the development of the raw and other material basis necessary to the economic activities of the units which they organize, the collaboration and cooperation of these units with state or cooperative units, and will attract, train, and use the available work force in these activities.

Section II. Organization of Activities in Units of Crafts Cooperatives, Consumer Cooperatives, and Agricultural Production Cooperatives

Article 15. Small industry units are organized by crafts, consumer, and agricultural production cooperatives in accordance with legal regulations regarding cooperative activities, statutes of cooperative organizations, legal regulations regarding the development of economic and service activities in cooperative units, as well as other legal provisions.

Article 16. The activity of small industry units of cooperative organizations is conducted on the principles of worker self-management, economic-financial self-administration, and cooperative democracy, by drawing all cooperative members into the management of public affairs at general assemblies and within other management organs stipulated by statutes.

Article 17. Small industry units of crafts cooperatives are organized and conduct their activities primarily in urban areas. The major objectives of these units is to provide services to the population and socialist units; produce consumer goods, as well as folk art and craft items; and fabricate and repair parts, devices, and subassemblies by cooperating with state industrial enterprises and other socialist units, for domestic consumption and exportation.

Organizations of crafts cooperatives will develop the purchase, reconditioning, and resale of durable goods from the population, as well as the repair and reconditioning of assemblies, subassemblies, and other spare parts for their own needs and those of other socialist units.

Article 18. Production units of consumer cooperatives are organized primarily in rural areas. Their major objectives are to produce consumer goods, household and housekeeping items, crafts, bakery goods, preserves and semi-preserves of vegetables and fruits purchased from the population, and other food products; provide services of an industrial nature to the population and to socialist units; and produce and recondition parts, devices, subassemblies, and other goods, including through cooperation with industrial enterprises and other socialist units, both for the population and for exportation.

In addition, as part of their services in non-cooperative rural localities, consumer cooperative units can form specialized teams for housing construction, organize the transportation of goods using animal traction, and provide services of a non-industrial nature to the population.

Article 19. The major objectives of small industry in agricultural cooperative units are to process and industrialize agricultural products; extract, process, and sell minerals and wood; produce construction materials, consumer goods, and crafts from vegetal raw materials and other materials specific to the forestry and

agricultural sectors; fabricate and recondition parts, devices, subassemblies, and other goods, including through cooperation with industrial enterprises and other socialist units, for domestic consumption and exportation; and provide services to the population and socialist units, especially in rural areas.

In addition, as part of their service activities, agricultural production cooperatives can form specialized teams for housing construction in rural areas, and can organize the transportation of goods for the population's needs, using animal traction.

In organizing and developing the activities stipulated in paragraphs 1 and 2, the managements of agricultural cooperative units and county agricultural organs will seek consistently to increase their contribution to the economic consolidation of each unit; satisfy as fully as possible the specific needs of commune inhabitants, other needs of the economy, and exportation; better exploit the resources available in each unit; and assure that the labor force of peasants in cooperatives is fully and reliably employed throughout the year, and that the income of this labor force is increased.

Members of agricultural production cooperatives can usually work in small industry activities within the cooperative organizations to which they belong.

Activities are organized in agricultural production cooperatives and inter-cooperative economic associations of an agricultural nature -- as separate economic sectors with their own income and expense plans -- as well as in inter-cooperative economic associations of an industrial nature.

Article 20. In order to satisfy as well as possible the population's need for services in rural areas, agricultural mechanization stations will organize in their own mechanization departments and shops, activities for maintaining and repairing agricultural machinery, other mechanical, electrical, and automotive equipment, as well as radios, television sets, and other household and housekeeping items.

Article 21. All cooperative units must organize small industry activities according to economic and high efficiency criteria, fully cover their expenses from their incomes, as well as obtain and distribute profits in accordance with legal provisions and statutes.

Article 22. Those who are active in small industry units organized by cooperative units, can participate with monetary means in the development funds of the units to which they belong, and are entitled to receive from the profits of the units, annual incomes proportional to the sums contributed by them.

The rates for contributions and the rights created by these contributions are those regulated by law and by the statutes of crafts cooperative, consumer cooperative, and agricultural production cooperative organizations.

Section III. Activity of Small Craftsmen

Article 23. In order to most fully meet the population's demand for some services, products, and projects, small industry activities can also be conducted by small craftsmen authorized according to law.

The activity of small craftsmen is carried out in close association with crafts cooperatives, which support the development of their products and services, supply them with materials, tools, equipment, and so on, guide the proper performance of their services to the population, organize their inclusion -- according to law -- into the social security system of crafts cooperatives, and improve their working and living conditions.

In rural areas, the production of small craftsmen is recorded and reported through consumer cooperative organizations, and in urban areas through crafts cooperative organizations.

Article 24. Authorization to exercise a trade can also be issued to some retirees who reach the age at which units can request retirement according to law. In this case, the respective retirees are entitled to cumulate their full pension with the monetary income derived from their work.

In their activities, small craftsmen can be assisted by their families, and can train 1-3 apprentices in their shops according to prevailing regulations.

Article 25. Depending on the specific trade and size of shop, a number of 1-3 persons may work in small craftsmen's shops after finishing their apprenticeships. The pay rate for these workers is established on the basis of elements of the remuneration system that is used in crafts cooperatives for similar work.

Article 26. Small craftsmen are supplied with raw materials, materials, parts, accessories, tools, and so on, from local resources, as well as from units of the state and cooperative commerce that operate in similar specialties, according to prevailing regulations. To this end, small craftsmen will be supported through the distribution of reusable materials from state and cooperative units.

State and cooperative socialist units can conclude contracts with small craftsmen for the fabrication of parts, devices, and other products. In this case, the necessary materials can be provided by the customer unit, and payment is based on piece work rates.

Article 27. Authorized small craftsmen can associate with one another to fabricate products or execute projects, on the basis of contracts concluded with state or cooperative units, or with the population.

The incomes derived will be taxed individually for each associated craftsman.

Article 28. Small craftsmen must declare to financial organizations the incomes which they receive, and must pay the taxes established by law.

Small craftsmen are entitled to pensions and other social security rights as part of the crafts cooperative system.

Section IV. Other Activities

Article 29. Peoples' councils, other state organs, and cooperative organizations can turn over to physical persons, for administration and management, production and services units with a small volume of activities and with 1-3 workers, on a contract basis under conditions stipulated by law.

The money due to persons who have contracted for the administration and management of units, is prorated from net incomes, representing the difference between gross incomes and expenses, according to law.

Article 30. In order to exploit alluvial reserves of minerals, precious metals, and semi-precious stones, or those in zones that are not industrially exploitable, the appropriate state organs can authorize physical persons, including retirees, to extract these minerals together with their families.

The conditions for conducting the activities stipulated in paragraph 1, as well as the rights and obligations of the persons authorized to perform these activities, are those determined by law.

CHAPTER III. Joint and Final Provisions

Section I. Provisions of an Economic and Financial Nature

Article 31. The activity of small industry will be included in the unified national plan for socioeconomic development. Under conditions stipulated by law, some of the materials necessary for this activity will be provided from the state fund.

Article 32. In order to develop small industry activities, state and cooperative units will initiate and organize cooperation and association actions according to law.

For this purpose, ministries, other central organs, and peoples' councils will assist in providing the necessary space and equipment, and will organize and develop economic cooperation actions, so that the use of development funds for such activities will be as restricted as possible.

Article 33. In small industry units, remuneration is determined by the effective production or services provided, on the basis of agreement or piece rates, or of tariffs or percentages for services rendered, corresponding to the branch or sub-branch of the respective unit, as well as on the basis of receipt percentages. The incomes of small craftsmen and those obtained on the basis of receipt percentages will be taxed according to legal provisions.

Retirees who work in small industry activities organized according to the provisions of the present law, are entitled to cumulate their entire pension with the incomes obtained through these activities, with payment of the taxes stipulated by law.

Article 34. In small industry units, those responsible for the units, or the leaders of work teams, receive and issue customer orders, receive payment for products and services, maintain records, and conduct other such activities, while participating directly in production.

In small industry units, the persons who also fulfill the function of responsible party can receive in addition to their due for their own achievements, as much as 30 percent of the incomes obtained by all the workers in the unit, but no more than 25 percent of their own rate of remuneration.

Article 35. The determination of prices, rates, profits, and taxes, the constitution of funds, the granting of bank credits, as well as other financial and economic aspects of small industry activities, are subject to prevailing legal regulations.

Section II. Use of Work in the Home

Article 36. Small industry units of peoples' councils, crafts cooperatives, consumer cooperatives, and agricultural production cooperatives, can also use work in the home for their production activities, based on analyses and economic calculations which show that this form of production organization is adequately efficient.

The list of products, projects, and services which can be performed in the home is established by central organs and executive committees of county and the Bucharest peoples' councils for their subordinated units.

Article 37. Work in the home will be performed as follows:

a) Based on a civil agreement for the fabrication of products or performance of projects at home, with rights only to remuneration for activities performed. This agreement is made when the performance period for products or projects is of up to three months, or when the assured production volume does not justify a labor contract;

b) Based on a labor contract for performance of work in the home. This contract is written for a predetermined period for productions which require an uninterrupted activity of 3-12 months, or for an undetermined duration for productions which require an uninterrupted activity of more than 12 months.

The agreements and contracts stipulated in paragraphs a) and b) cannot be made with persons already employed in the labor force.

Those who make agreements or labor contracts for work in the home cannot use salaried persons to perform these activities.

Article 38. Contracts and agreements for work in the home will stipulate the conditions for raw and other materials supplies, the conditions for receipt and delivery of products, and rates for the work performed.

Article 39. The rights conferred by the status of person employed in the labor force, to which are entitled those who work in the home on the basis of a work contract written under the conditions of article 37, letter b), are granted if the person delivers a production volume equal to the one established for those employed and active at a unit's work site, according to standards established by the Ministry of Labor, with the approval of the General Union of Trade Unions.

Article 40. The provisions of article 86 of the Labor Code, regarding the remuneration of persons employed in the labor force in the case of production interruptions for technical or other reasons, do not apply to persons working on the base of work contracts for work in the home.

Article 41. The remuneration for persons who work in the home is established by agreement, depending on the work rates and tariffs used by the customer enterprise, corresponding to the remuneration level assigned to those persons, within the fund limits approved for this purpose, and according to law.

Article 42. Socialist units which organize work in the home must create and maintain current work and accounting records that will assure a rigorous control of work in the home activities. For this purpose, those who work in the home will receive from their unit "individual production and remuneration books," standardized for specific activities by prevailing legal regulations.

Article 43. Those who work in the home carry a material, civil, administrative, disciplinary, and penal responsibility -- as the case may be -- for the proper stewardship of the raw and other materials entrusted to them by units, as well as for their utilization in accordance with established technologies and for the exclusive performance of the work contract or agreement.

Depending on the value of the raw and other materials that are entrusted, contracts or agreements with those who work in the home will provide for material or personal guarantees from other workers employed in the labor force, under conditions stipulated by law for administrators.

Article 44. Under the current law, work in the home can also be used by units subordinated to ministries and other central organs.

Article 45. The Committee for Peoples' Councils Problems, ministries, and other central organs which are responsible for units that use work in the home, will formulate with the approval of the State Planning Committee and the Ministry of Labor, technical specifications of a methodologic nature regarding the organization of work in the home.

Section III. Coordination, Guidance, and Control of Activities

Article 46. The committees and executive bureaus of peoples' councils are responsible for guiding and controlling all small industry activities organized within their territorial administrative areas. To this end, they have the obligation of periodically examining the manner in which small industry units conduct their activities, and of assuring the satisfaction of the needs of the population and other customers, as well as the need to expand and diversify existing activities.

At the same time, through the county and Bucharest commissions for coordinating the production of consumer goods, and through councils for coordinating and guiding supply and service activities to the population, the committees and executive bureaus of peoples' councils will assure the orientation and coordinated development of these activities in each territory.

Article 47. The Committee for Peoples' Councils Problems, the Ministry of Agriculture and the Food Industry, the Central Union of Crafts Cooperatives, the Central Union of Consumer Cooperatives, and the National Union of Agricultural Production Cooperatives, will assure the guidance and support of peoples' councils and cooperative organizations, for the development and diversification of small industry production, under the conditions stipulated in the present law.

The collective management organs of cooperative organizations must take steps to develop and diversify production and services and assure their good quality, so as to satisfy under the best conditions the demands of the population and to increase contributions for exportation.

Article 48. The State Planning Committee will assure that all the production potential of small industry units is included in the draft of the unified national plan for socioeconomic development, so as to increase their contribution to production development in order to satisfy the demands of the population, of other needs of the economy, and for exportation.

Similarly, together with peoples' councils and other plan assignees, the State Planning Committee is responsible for the execution of the small industry plan, exercises sustained control over the fulfillment of assigned tasks, and initiates or adopts measures for the balanced and efficient development of small industry units, as well as the superior utilization of all material and labor resources.

The Ministry of Technical-Material Supply and Control of the Management of Fixed Assets, together with peoples' councils and other plan assignees, is responsible for proper supplies to small industry and for the collection and utilization, in accordance with plan tasks, of reusable materials and other local resources, and assures rigorous compliance with legal provisions regarding the formation and use of these resources.

The Ministry of Finances guides and controls the entire economic-financial activity of small industry units, assures compliance with legal provisions in the formulation and execution of income and expense budgets, and adopts or proposes measures to increase economic efficiency, responsibility in the management and use of funds, and plan and financing discipline.

Article 49. The committees and executive bureaus of peoples' councils, unions of crafts, consumer, and agricultural production cooperatives, county, municipal, city, and commune councils for coordinating the activities of cooperative organizations, organs for banking financial control, and price control inspectorates, will exercise a systematic control, or if needed, will periodically analyze in terms of their functions, the conduct of small industry activities, and will take steps to rigorously respect the provisions of the present law.

Article 50. The Council for Coordinating the Production of Consumer Goods, the Council for Coordinating and Guiding Supply and Services Activities to the Population, and the Central Council for Coordinating the Activities of Cooperative Organizations, will assure according to legal provisions and to specialization and territorial interests, the unified coordination of activities in small industry

organized in accordance with the provisions of the present law, will supervise the manner in which these provisions are being followed, and in each domain of activity, will take compulsory measures for state and cooperative organs, as well as for production units, so that they may accomplish the tasks assigned to them.

Article 51. Ministries and other central organs which are responsible for units that produce consumer goods, must assure the full completion of the tasks assigned in programs for the development of consumer goods production throughout the economy, and included in the unified national plan for socioeconomic development.

Similarly, ministries and other central organs will take steps to organize in addition to industrial units under their control, shops or special departments for the production of consumer goods, which will assure the superior exploitation of reusable materials and other resources derived from production processes, in order to satisfy the needs of the population or to obtain raw materials, materials, and other products necessary for the economy and for exportation.

Article 52. On the date on which the present law becomes effective, Decision of the Council of Ministers No 1956/1970, regarding the use of work in the home for the manufacture of craft items and other products or projects, as well as any other provisions to the contrary, are abrogated.

This law was adopted by the Grand National Assembly at its meeting of 17 October 1980.

Chairman of the Grand National Assembly, Nicolae Giosan
Bucharest, 17 October 1980
No 2

11,023
CSO: 2700

SERBIAN OPSTINAS SEEK TO RETAIN AID TO UNDERDEVELOPED AREAS

Appeal From Leskovac

Belgrade NEDELJNE INFORMATIVNE NOVINE in Serbo-Croatian No 1556, 26 Oct 80 pp 20-21

[Article by Dragan Jovanovic: "The South Is Knocking on the Door"]

[Text] Last week there were three reasons for NIN to speak once again about Serbia's underdeveloped south. First: the Executive Council of the Serbian Assembly, at the suggestion of the competent ministers, did not adopt the federal draft of the law on the underdeveloped regions of the republics and Kosovo, nor did this document make an appearance in sessions of the republic assembly last week. The second occasion was the debate on the republic fund for the underdeveloped in these sessions of the chambers of the Serbian Assembly. And the third and perhaps the strongest motive was the initiative from the Southern Morava region to obtain for this area "special treatment among the underdeveloped approximately equivalent to that afforded today to the province of Kosovo and the three underdeveloped republics."

In the spring of last year and again in the fall NIN took up the topic of the underdeveloped south which is knocking on the republic's door. At that time this reporter spent several days visiting that region and one local official made an acerbic joke: "It is a good thing that you have spent a few days here with us to see how poor this region of Serbia is, though you could have noticed it even if you had just sped through on the Simplon Express between Belgrade and Salonika."

Figures, Figures, ...

This October there are not many who feel like joking. Especially after certain reflections "up there in Belgrade," to the effect that Leskovac will drop out of the underdeveloped in the coming 5-year period. The Leskovac Opstina Assembly last month took up the Draft of the Agreement on the Bases of the Social Plan of the Socialist Republic of Serbia To Hasten the Economic Development of the Underdeveloped Region in the Period 1981-1985

along with suggestions concerning the agreement which had been sent by the Presidium of the Southern Morava Interopstina Regional Community. On 13 October the Presidium of the Leskovac Opstina Assembly submitted a written report in which it informed the competent people in the republic that "the proposal to omit Leskovac Opstina from the underdeveloped is untenable."

And it went on: "Leskovac Opstina has for more than a decade been pointing up its specific position, the concentration of problems and trends in economic and social development which necessitate special treatment in the republic. Probably the problems would have taken on less drastic form if the demands of Leskovac Opstina had received a responsible response in good time. In 1977 the competent authorities in the republic understood the seriousness of the situation in this opstina, the possible political consequences of such a situation and the importance of Leskovac' development to the faster development of the Leskovac subregion and the Southern Morava region as a whole."

Three years ago adoption of the law on the republic fund for the underdeveloped proclaimed the entire region an underdeveloped area, including Leskovac.

"Three years have passed since adoption of the law (on the fund)," the report goes on, "and the question arises: Has it been objectively possible in such a short period to overcome the problem of structure and underdevelopment in a large opstina that have accumulated for years and to create conditions for independent development? The fact is that this is impossible, and never has anything like that taken place in our economic history."

Then follow figures, not exactly new ones, but accompanied by the observation that even the republic authorities are using figures from 1978:

"In 1975 the per capita national income in Leskovac Opstina was 67.85 percent of the national income in Serbia proper, and in 1978 it was 67.18 percent. Or: the absolute difference in per capita national income between Leskovac Opstina and Serbia proper in 1975 was 6,399 dinars, and then in 1978 it reached 11,701 dinars, though during those 3 years the growth achieved was close to the relative growth in Serbia proper.

"One and only one conclusion can unambiguously be drawn from these figures: the relative decline of Leskovac Opstina's development had not been halted by 1978."

Then come comparative figures on (un)employment and the level of personal income, which also illustrate the "negative tendencies," and finally another warning of the "possibly very serious political repercussions" and "the engendering of a number of social problems."

In conclusion it proposes that when the executive council of Serbia and other authorities come to propose policy for stimulating the economic development of the underdeveloped regions in the republic they honor the demand that the Southern Morava region retain its status as an underdeveloped area for the next 5 years.

Why such great insistence that the entire region of 13 opstinas remain in the "club of 48 underdeveloped opstinas" out of the 114 opstinas in Serbia?

A Region at the Federal Level

"It is our assessment that the entire region has for years now been lagging behind the republic in its development, and the essence of our position is that those opstinas whose per capita national income is less than two-thirds of the republic average not be eliminated from the underdeveloped opstinas. So that even if Leskovac, Vranje or Vladicin Han should be a few percentage points above that limit, they should not be driven out of the group of underdeveloped opstinas, since these opstinas are the only thing that can pull the entire region out of its extremely unenviable position more rapidly. In any case this is a position in which all republic officials who have recently visited us have concurred," said Miroslav Zdravkovic, chairman of the Interopstina Committee of the League of Communists of the Southern Morava Region.

"We should not forget that this sensitive border region has a multinational population of more than 500,000 living in 698 settlements, that in 4 opstinas the national income is less than 25 percent of the republic average, which means that it is below the average of certain opstinas in Kosovo," Zdravkovic added.

"Does that mean that you believe that southern Serbia ought to be debated even at the federal level?"

"I really do not see why the Southern Morava region would not be debated in the Federation when the new criteria are established for measuring underdevelopment of regions within the republics and Kosovo," Zdravkovic answered.

Some of the figures presented last year by the republic bureau for social planning concerning per capita investments and the economic structure support Zdravkovic's thesis that the underdevelopment of southern Serbia in 1975 was "almost equal to the underdevelopment of Kosovo." The level of investment in 1971 was even lower than in Kosovo, and not much has changed since then.

The most responsible people in the Serbian Assembly understand the dissatisfaction of the southerners, but they feel that it is not realistic to "single out" a region in the republic and put it at the level of the underdeveloped republics and Kosovo, since this departs from the entire conception: "You cannot say that the underdeveloped are Bosnia-Hercegovina, Montenegro, Macedonia, Kosovo and ... the Southern Morava region."

What can be respected in the conclusion of agreements among the republics on financing the underdeveloped in the coming medium-term period is the "overall level of development of the republic." Then a specific estimate should be made of the size of the underdeveloped area in the republic. This area ought to be borne in mind when it comes to this republic's participation in the Federal Fund for Development of the Underdeveloped.

In the Serbian Assembly it is also felt that the conditions obtain for the present system of stimulation of the development of the underdeveloped to be amended in that direction. At this very time intensive talks are under way in the Federal Executive Council concerning the future development of the new system of stimulation, which is a continuation of the frank conversations begun this summer at Brdo near Kranj.

Thus even in the future the Southern Morava region can hope only for republic aid.

And what are the prospects at the moment in Serbia?

Contested Rates of Interest

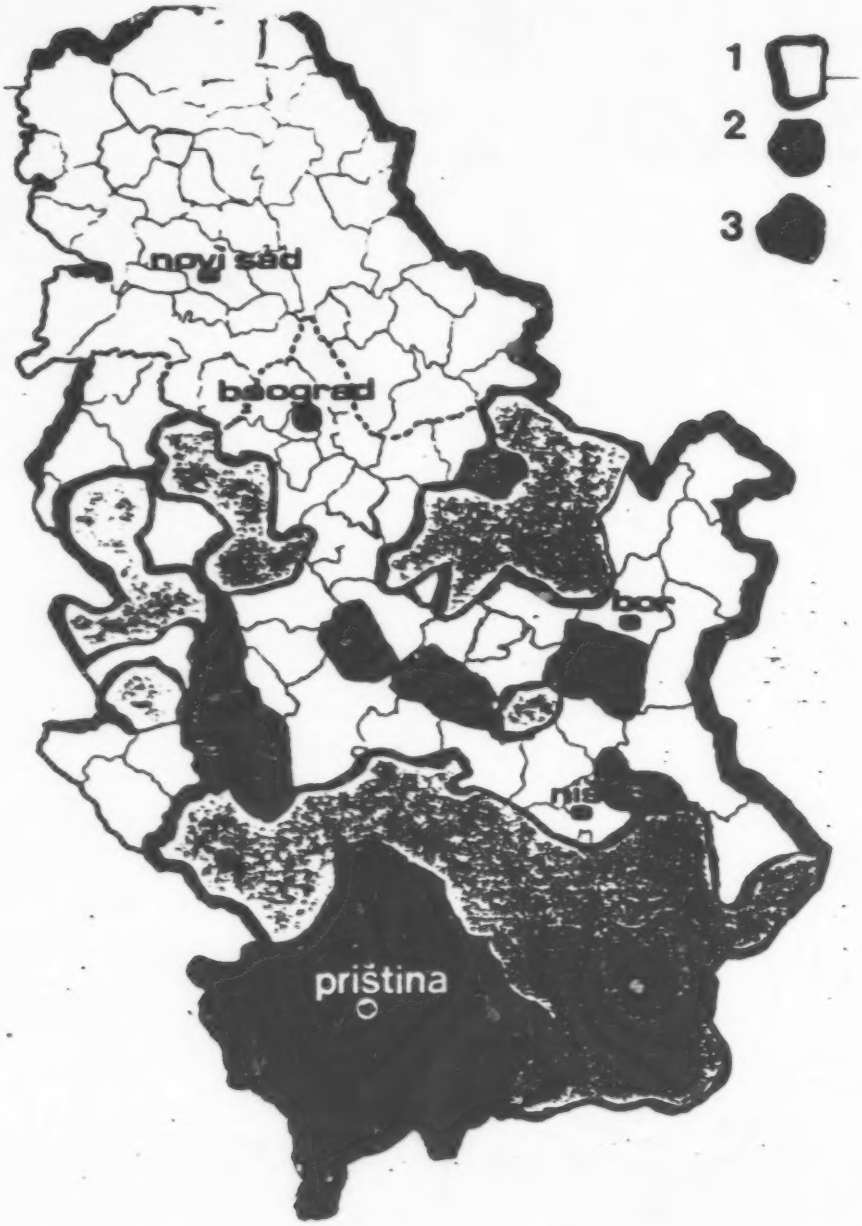
Last week's debate on the republic fund for the underdeveloped in Serbia confirms certain old truths. Not so much because the decision on transferring the surplus income from interest of the Serbian National Bank to the republic fund was postponed. (The sum involved is estimated at between 300-400 million dinars.)

But those who opposed that solution immediately emerged--among them the Executive Council of the Serbian Assembly. Branko Mirkovic, chairman of the Serbian delegation in the Chamber of Republics and Provinces in the SFRY Assembly, says:

"The reason why I am against that decision is the awareness that the time has come to move from temporary and short-term measures to those real long-term ones.... In my opinion, then, there is one and only one conclusion to be drawn: these funds taken from the economy through the rate of interest can only be returned to that economy."

Rodoljub Stanic, chairman of one of the standing committees of the assembly, who defended the proposal that the republic fund was entitled to the income of about 400 million, immediately responded that it would not be a good thing to be "overscrupulous" when it comes to financing the underdeveloped regions.

After all, we should mention that the republic's intervention in the amount of 1.5 billion dinars to cover the losses of the Smederevo Steel Mill, which have now become a regular thing, had been adopted with hardly a word as one of the prior items on the agenda.



Underdeveloped Areas in the Period 1976-1980

1. Underdeveloped areas of Serbia proper (48 opstinas)
2. Opstinas having the status of underdeveloped areas of Serbia proper but receiving stimulation funds (11 opstinas)
3. Underdeveloped areas of the Socialist Autonomous Province of Kosovo

Nevertheless, the "scrupulous arguments" prevailed, and the fate of the bank interest and of the treasury of the republic fund for the underdeveloped was postponed until the end of the year.

Whatever the case, the south of Serbia will again this fall be knocking on the door of the republic. For the second time, for the third time.

Statistics on Underdeveloped Opstinas

Belgrade NEDELJNE INFORMATIVNE NOVINE in Serbo-Croatian No 1556, 26 Oct 80 p 20

[Text] The economy of Serbia proper in the period 1976-1980 set aside a total of 30,481.6 million dinars to stimulate the faster development of the economically underdeveloped republics and the SAP [Socialist Autonomous Province] of Kosovo. In that same period the republic provided 8,756.5 million dinars to stimulate the faster development of the economically underdeveloped areas within Serbia proper and 3,242.1 million dinars of supplemental funds to opstina budgets.

If in the coming medium-term period the same proportions are maintained in appropriations for these purposes, the economy of the republic would be required to furnish more than 90,000 billion dinars for the faster development of the economically underdeveloped republics and the SAP Kosovo and about 15,000 million dinars to stimulate the faster development of economically underdeveloped areas within the republic and about 4,500 million dinars of supplemental funds to opstina budgets.

A study by the Economics Institute in Belgrade concerning the situation in 1975 said, among other things: Of the 84 underdeveloped opstinas in Yugoslavia 29 are in Bosnia-Hercegovina and have a population of 868,073. In Serbia there are 45 of the most underdeveloped opstinas, and their population is 1,550,039; 29 of these opstinas, with a population of 728,202, are in Serbia proper, and 16, with a population of 821,837, are in Kosovo. In Croatia there are 6 of the most underdeveloped opstinas, and they have a population of 173,163. Macedonia has 2 such opstinas, with a population of 32,340, and Montenegro also has 2, with a population of 27,928, while Slovenia and Vojvodina do not have any such opstinas.

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30 December 1980

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2076

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30 December 1980

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2076

CONTENTS

INTERNATIONAL AFFAIRS

East-West Economic Relations Since Helsinki Analyzed
(OSTEUROPA-WIRTSCHAFT, Sep 80) 1

CEMA Conferees Discuss Automatization of Government Plans
(V. Nikitin, Ya. Urinson; PLANOVOYE KHOZYAYSTVO, Oct 80) 41

GERMAN DEMOCRATIC REPUBLIC

Railway Network To Be Further Electrified
(INFORMATIONEN, Oct 80) 45

HUNGARY

Modernization of Enterprises Organizational System Discussed
(Istvan Lendvai; PARTELET, Nov 80) 48

Supplementary Activities of Large Farms Deemed Useful
(Magda Szekelyi; TARSADALMI SZEMLE, Nov 80) 54

YUGOSLAVIA

Agricultural Production Capacities to 1979
(Danilo Tomic; GLASNIK POLJOPRIVREDNE PROIZVODNJE, PRERADE I PLASMANA, Oct 80) 62

Export of Food--Problems, Possibilities
(Milenko Nikitovic; GLASNIK POLJOPRIVREDNE PROIZVODNJE, PRERADE I PLASMANA, Oct 80) 78

EAST-WEST ECONOMIC RELATIONS SINCE HELSINKI ANALYZED

Stuttgart OSTEUROPA-WIRTSCHAFT in German Vol 25 No 3, Sep 80 pp 165-198

[Lead article (names of authors of individual studies given in text): "From Helsinki to Madrid: The Development of East-West Economic Relationships With Regard to the CSCE Basket II Resolutions." Passages in slantlines printed in italics]

[Text] Preliminary Remarks and Overview

In ratifying the Final Act of the Helsinki Conference on Security and Cooperation in Europe, the participant states agreed to hold at regular intervals successor conferences so as to facilitate an exchange of views on the implementation of the resolutions of the Final Act and on the overall development of the process of detente. Against the background of the considerable political and economic changes in East-West relations that have occurred since 1975, the second successor conference has been scheduled to convene in Madrid. However, in spite of the increasing difficulties that have arisen in the relations between the Western industrialized countries and the Soviet Union, efforts are being made--at least in the field of economic, scientific, technological and environmental cooperation, the so-called CSCE Basket II--not precipitately to abandon the principle of "business as usual" or at least to keep the other CEMA states out of the political aggravations affecting the trade relations.

Conversely, the East European states have likewise been signaling their continued interest in the maintenance or improvement of economic relations. The Soviet Union, too, is unlikely to wish for a deterioration of the economic relations between its CEMA partner states and the West, since in such a case it would have to make greater material contributions to the solution of these countries' politicoeconomic problems. Furthermore, the national economies of East Europe could assume the role of an intermediate importer, at least for certain Western products and technologies.

In view of these considerations, a review of the development of the economic relations between the individual CEMA countries and the industrialized West during the 4½ years after the ratification of the CSCE Final Act and the attempt to evaluate the developmental possibilities of these countries' trade with the West in the 1980's appear to be of considerable interest.

Regarding the Soviet Union, the CSSR, Hungary and Romania, the Politics and Science Foundation (Stiftung Wissenschaft und Politik, Forschungsinstitut fuer Internationale Politik und Sicherheit [Science and Politics Foundation, Research Institute for International Politics and Security, 8026 Ebenhausen]) ordered national analyses of this type, the results of which are presented in the following in abridged form. In addition to these national studies, the Foundation ordered three studies on the possibilities of scientific cooperation between the Federal Republic of Germany and the Soviet Union, on all-European cooperation in the energy sector and on the development of the transportation sector within CEMA. The abridged versions of these studies are presented here as well.

The individual studies were produced by the following authors:
Soviet Union: W. Beitel (Stiftung Wissenschaft und Politik)
Czechoslovakia: F.-L. Altmann/J. Slama (Osteuropa-Institut Muenchen [Institute for the Study of Eastern Europe, Munich])
Hungary: A. Inotai (Institute for World Economics, Budapest)
Romania: N. Danos (Stiftung Wissenschaft und Politik)
Scientific cooperation: J. Noetzold (Stiftung Wissenschaft und Politik)
Cooperation in the energy sector: F. Mueller (Stiftung Wissenschaft und Politik)
Transportation: W. Gumpel (University of Munich)

Economic Relations Between the Soviet Union and the Western Industrialized Countries and Possibilities Regarding Future Cooperation

The Soviet Union's military intervention in Afghanistan and the reaction of the United States endanger the results of East-West economic relations in Europe. These events also reactivated the question concerning the interrelationship between Eastern trade and Ostpolitik. Even in the past, East-West trade had been affected by the changes in the political climate between East and West; these impulses have had both an intensifying and a limiting effect. At present, the West is compelled to reexamine the basic positions of the policy of detente hitherto pursued and to ask itself whether this policy was possibly based on an illusory perception of Soviet objectives. For example, in regard to their view of the policy of detente, certain political groups in the West possibly cherished the illusion that the Soviet Union had abandoned the idea of a global enforcement of their model of supremacy. Consequently, the West is called upon to reformulate the rational foundations of this policy and thus to make it acceptable again to a broad range of the political spectrum.

The present study attempts to record the results attained in the past decade in the relations between East and West and also to point out the aspects that make a continuation of the normalization process between East and West appear desirable in the 1980's as well; the study ascribes to the economic relations--a field characterized by obviously identical interests--a function providing impulses and conducive to the continuation of the process of detente.

In the 1980's as much as in the preceding decade, the economic relations between the Soviet Union and the Western industrialized countries will depend on the partners' readiness to contribute to the solution of the acute political problems concerning East-West relations. The CSCE successor conference--scheduled to convene in Madrid in November 1980--offers them the opportunity to do so. Thus this conference can be said to be as important for the future economic relations between East and West as was the Helsinki CSCE for the economic relations of the 1970's.

During the 1970's, the Soviet Union rapidly expanded its trade with the West. However, the growth rates were not evenly distributed over this period: In the first 3 years, the annual commodity turnover stagnated at the R 5-6 billion level; subsequently, up to 1976, it developed at an unprecedented rate, showing a 3-fold increase. In 1976, there began a phase of consolidation--with an annual Western trade turnover of approximately R 19 billion--which was superseded only last year by another turnover increase.

Due to the rapid expansion of the trade with the West, the Western industrialized countries increased their shares of Soviet foreign trade. These shares increased from 25 percent in 1970 to a maximum of 38 percent in 1976, subsequently dropping back to 29 percent (1979). All told, during the 1970's the regional structure of Soviet foreign trade underwent changes favoring the West. In the course of this process of regrouping, the Federal Republic of Germany was able to increase its share of Soviet foreign trade. And conversely, the Soviet Union succeeded in the 1970's in doubling its share of the foreign trade of the Federal Republic of Germany.

The intensification of the Soviet Union's trade with the West during the period under discussion came about on account of the /difference in the dynamics of Soviet Western imports and exports/. While the first half of the 1970's was characterized by an increase in imports from the West, in the second half the Soviet Union was able to expand its exports to the West. Last year (1979), for example, the Soviet Union for the first time showed a trade balance surplus in its exchange of goods with the FRG.

Occasionally, the Soviet Union has been expanding its imports from the West far beyond the financing limits set by Western exports and has to this end taken up /loans/ in the Western credit markets. However, the increased borrowing by the Soviet Union should not be viewed as a sign of decreasing export capacities. The oil price rise of 1973--along with the nearly riskless projection of future price hikes--created the preconditions for growing export proceeds; consequently, the borrowing did not involve any unacceptable impairment of the Soviet Union's independence in the realm of foreign trade.

The borrowing was furthered by the Soviet Union's increased willingness to expand the export sector through extensive capital goods imports so as to

be able more comprehensively to utilize the international division of labor for its own growth policy. Finally, the changes in the political atmosphere between East and West created additional impulses for the credit financing of the technology transfer to the Soviet Union.

As regards the /extent of the indebtedness/, the only data available are the estimates of Western credit banks. According to these estimates, during the 1970's the Soviet gross hard-currency indebtedness increased from approximately U.S. $2 billion (at the end of 1970) to approximately $16 billion (at the end of 1979). The greatest increase occurred during the period from 1975 to 1977. The determining factor in regard to an evaluation of the foreign trade borrowing is the net indebtedness, the difference between the claims of Western creditors vis-a-vis the Soviet Union and the claims of the Soviet Union vis-a-vis foreign institutions. According to U.S. estimates regarding the gold and arms sales and the returns from services (e.g. marine and rail transport), there was a relatively minor net indebtedness of approximately U.S. $4 billion (end of 1978).

As regards the development of Soviet borrowing during the 1970's, the striking aspect is the consolidation that has been achieved since 1977: A few years after an enormous foreign debt increase, the Soviet Union has stabilized its imports at the level attained and has at the same time been able to increase its hard-currency export proceeds.

On account of the intensified efforts that have been made in the last few years so as to reduce the imbalance in the trade with the Western industrialized countries, the German-Soviet trade has been stagnating and German exports actually have shown a slight decline. However, due to the consolidation of the trade balance that was achieved by the end of the 1970's, there is the possibility that imports from the West may rapidly expand on the basis of new loans, without the Soviet Union having to abandon its goal of foreign-economic independence. Nevertheless, the question is whether the expansion of Western trade will be assured even if the West is not prepared to grant credit.

At the beginning of the 1970's, the Soviet Union's trade with the West was restricted by unfavorable /terms of trade/ for the Soviet export supply of raw and basic materials. Likewise, the reformist attempts within the Soviet national economy that were intended to intensify the orientation toward exports did not bring about any short-term improvement of the situation regarding export proceeds. It was only the sharp increase in the price of the most important Soviet export product, petroleum, that proved to be the turning point. The increase in the price of oil and subsequently, in the prices of other energy sources as well was considered irreversible in the Soviet Union. Thus, in the mid-1970's, the Soviet Union could justly expect a steady increase in export proceeds, even though the goal of gradually changing the export commodity structure by increasing the share of "intelligent" goods could be implemented only slowly. Consequently,

for the exploitation of energy deposits in Siberia, the Soviet Union increasingly drew on Western capital and know-how so as to speed up the start-up of new capacities, especially since the specific risks of capital import in the raw and basic materials sector could be reduced through long-term delivery contracts. However, the development of the /petroleum export volume/ has given rise to the question whether the capital invested will be sufficient--in view of the country's own needs and the requirements of the CEMA trade partners who are dependent on oil imports--to make available sufficient quantities for exports to the West, in order to be able to finance increased imports from the West in the 1980's.

The overall decline in oil exports notwithstanding, the Soviet Union has been obtaining annually increasing hard-currency returns. Since the Soviet Union can justly expect the prise rise to continue, this trend can in the medium term be maintained with the present export volume of approximately 90 million tons of oil. Should the Soviet Union during this period be able to follow the example of the Western industrialized nations and to sever the link between economic growth and oil consumption, its participation in the international division of labor would be conceivable even on the basis of oil exports.

On the other hand, a U.S. prognosis concerning Soviet oil production and the resultant export possibilities and import requirements is based on the assumption that it will be impossible--at least in the medium term--to make economic growth independent of oil consumption and that the Soviet Union does not have at its disposal sufficient oil substitutes. Thus, with demand increasing as a result of economic growth, the fact that oil production will be stagnating until 1985 is bound to make the Soviet Union--as early as the first half of the 1980's--a net oil importer. At present, it is difficult to tell whether the actual development will follow this forecast; in view of the Soviet Union's increasing awareness of the problem, it is likely to be less dramatic.

In the past decade, the Soviet Union and the Western industrialized countries developed new forms of international cooperation; in this respect, emphasis was placed--with a view to the trade volume thus attained--on long-term and comprehensive /compensation agreements/ modeled after the pipe-natural gas agreements, i.e. "compensation agreements of the Soviet type." These agreements represent an order volume of approximately U.S. $8 billion and will by the mid-1980's win the Soviet Union U.S. $4 billion worth of foreign currency per year, thus providing a certain compensation for the potential decline in oil export proceeds. For the current year (1980), the compensation commodity share of Soviet exports to the West is assumed to be as high as 35 percent.

The Soviet Union regards these agreements as an especially suitable form of international cooperation, since they permit--among other things--the credit financing of projects of national-economic dimensions and at the same time guarantee future export profits, thus from the outset insuring

repayment of the loans. The Western partner is primarily interested in the Soviet market for capital goods. Aside from the fact that these features offer certain advantages in regard to employment policy, the scope and the long-term nature of the agreements are problematic, since they impede adjustment to the rapid changes in the basic conditions on Western markets and since the agreements thus occasionally overtax the absorptive capacity of these markets. In the Western view, the applicability of these agreements is therefore restricted to fields such as the energy supply sector--fields characterized by continuing, long-term demand. The agreements are problematic also from the point of view of structural policy, since they are one-sidedly oriented toward big industry and require state support, e.g. in regard to credit insurance.

So far, the Soviet Union has not agreed to foreign /direct investments/, a proven instrument of the international technology transfer. On the other hand, the /cooperation/ between foreign and Soviet industrial enterprises represents an organizational form that does not run counter to the basic principles underlying the Soviet economic system. The implementation of concrete projects has so far been thwarted by the differences in production standards and by the risks resulting from nonobservance of delivery dates.

In the past, it was always safe to assume that the limitations of Soviet trade with the West resulted above all from the limited capacities of the Soviet export sector; at present, however, there is the danger that a stagnation of this trade may be brought about by the politically motivated economic sanctions of the Western industrialized countries. Thus the future economic cooperation between East and West depends on the success of the efforts toward solidarity, which would make obligatory for the Western industrialized countries the United States' /embargo policy/ vis-a-vis the Soviet Union.

The United States justifies the necessity to regulate the transfer of technology to the Soviet Union by pointing out that the export of goods of military applicability could boost Soviet armaments and that the technology transfer could improve the Soviet Union's economic capacity in general and thus indirectly support the country's war industry. According to this argumentation, the embargo policy serves security-related objectives. Likewise, the present wheat embargo is intended to demonstrate to the Soviet Union that the military intervention in Afghanistan will not be accepted. In this regard, it serves a political purpose as well.

The /differences of opinion/ among the Western industrialized countries concern the definition of goods of strategic applicability. While the United States holds that this category includes all goods that are apt to increase the Soviet Union's economic potential, the West European countries are inclined to subject to an embargo only goods distinguished by immediate military applicability. Even if the countries could agree on the desirability of categorically withholding certain goods from the Soviet Union as a potential military enemy, there remain differences of opinion concerning

the /practicability/ of a comprehensive export ban. To some extent, the disagreement between the United States and the Western industrialized countries is attributable to the differences in regard to trade interests vis-a-vis the Soviet Union. In the case of the United States, the interest is no more than marginal, thus allowing stricter export controls. The West European countries and Japan, on the other hand, are much more dependent on exports of capital goods and thus do not want to dispense with the potentially large Soviet market.

Even though an agreement of the Western industrialized countries on the basis of the United States' embargo policy is unlikely, some /potential consequences concerning East-West relations/ should be mentioned here. Such an agreement would result in economic losses for the West in regard to exports of industrial goods and--in the event of a Soviet countermove--in regard to imports of raw materials and energy sources as well. However, the economic losses would be unequally distributed among the United States and its partners. A consistent embargo policy would intensify the Soviet Union's present efforts toward self-sufficiency and direct the Soviet Union toward the "socialist world market", i.e. it would effect a reorientation of the trade flow, directing it to the CEMA countries. As a result of such an acceleration of CEMA integration, the CEMA's latitude in the field of foreign trade would be further reduced.

In participating in the international division of labor, the Soviet Union hopes to derive benefits in regard to time savings and cost reduction in the process of industrialization. The trade relations with the Western industrialized countries are of special importance, since the technology transfer from these countries can be expected to provide the most effective impulses for productivity improvements in the Soviet economy.

Technological progress must be promoted above all through reform measures in the country's own economic apparatus. The Soviet leadership has so far refrained from radical reform measures; consequently, the technology transfer from the West can be said to be economically significant as well. Nevertheless, foreign trade will remain just one among several instruments for improving the Soviet Union's economic capacity.

At present, the Soviet Union--like the other industrialized states--is confronted with a scarcity trend in regard to the production factors. The current problems in agriculture and in the energy sector are aggravating the problem concerning allocation of the investment funds, which are no longer expanding rapidly. In the 1980's, the Soviet Union will no longer be able to step up employment in the country's key industrial production regions. Thus the country will reach the limits of the traditional growth policy of annually increasing production factor utilization. Aside from the growing need for a more efficient organization of the economic apparatus, there will be an increased need in the 1980's to import labor- and material-saving technologies from the Western industrialized countries.

During the 1970's, the development of East-West trade paralleled the normalization of political relations between East and West. In retrospect, one can discern periods, in which political as well as economic factors were predominant and which thus document the /general interdependence of politics and economics/. The normalization of East-West relations began as a result of economic contacts in Europe. The United States joined in this process after some delay and tried to further the process of political normalization through intensified economic contacts. The present deterioration of the political climate in turn affects the economic relations and possibly restricts the possibilities concerning a future intensification of trade in the 1980's.

The Soviet Union, too, recognizes the interdependence of economic and political relations. Thus the economic objectives concerning modernization of the Soviet national economy have provided impulses in regard to an improvement of the political relations with the West. And conversely, it has been pointed out that political factors determine the direction and intensity of the trade relations. Thus, in the 1970's political detente laid the foundations for the rapid development of economic relations with the West.

On account of the interdependence of economic and political relations, there is a chance that along with the intensification of the economic relations with the Soviet Union it may also be possible to consolidate peace in Europe. But this interrelationship is not so narrow as to allow a one-sided enforcement of political objectives by economic means. If the various operational levels of international politics were given a maximum degree of mutual independence, the regional normalization that has been attained between East and West, e.g. in Europe, could be maintained and consolidated. The indivisibility of the policy of detente remains an international objective yet to be attained.

The Foreign Trade Relations of the CSSR With a View to East-West Cooperation

The present study presents the economic determinants of the CSSR's economic relations with the West in the 1970's and 1980's and evaluates them from the point of view of the Helsinki resolutions concerning the trade relations between East and West. The results of the study can be summarized as follows:

The military invasion by the Soviet Union in August 1968 interrupted a development in the CSSR that politically and economically could have made the country a vanguard of the policy of detente and of East-West relations. The subsequent so-called normalization policy greatly restricted Czechoslovak initiatives regarding expansion of the relations with the West. Official CSSR statements on the Final Act and on the problems concerning Basket II are in accord with the collective resolutions of the Warsaw Pact states.

During the second half of the 1970's, the CSSR's economy went through a phase of /steadily slowing growth/. The manpower utilization and investment growth rates declined, as did the rise in productivity. The increase in total factor productivity amounted to barely 50 percent of the level attained during the first half of the 1970's. Moreover, since 1975 the growth of the national income produced has clearly been exceeding the growth of the national income used--a phenomenon directly related to the deterioration of the CSSR's foreign trade position: Since the import price rise is more rapid than the increase in export prices, it is necessary steadily to expand exports so as to cover the cost of imports. In the last few years, it was only through extending its foreign debt that the CSSR has been able to prevent stagnation of consumption and investment.

During the second half of the 1970's, the CSSR's /foreign trade/ was clearly marked by the above-mentioned deterioration of the "terms of trade." Although the price increases included finished goods as well, the much more rapid rise in the prices of raw materials and fuel led to increasingly unfavorable trade balances, what with the CSSR's given dependence on imports in this sector.

In this regard, the most striking aspect is the fact that the "terms of trade" deteriorated not only vis-a-vis the hard-currency countries (Western industrialized countries and developing countries), but also vis-a-vis the CEMA countries--the principal suppliers of raw materials and fuel. In order to be able to pay for the increasingly expensive raw materials, the CSSR had to expand the machinery exports, its main source of income, and it had to expand these exports more rapidly than was justified in light of the real increase in raw material imports. The country's own production could not meet these growing demands to the extent desired; thus the export and domestic investment sectors were faced with a shortage of products of the machine building industry.

Consequently, the CSSR has been compelled--especially in its trade with the Western industrialized countries--to resort to exports of raw materials and consumer goods so as to be able to meet its liabilities. This situation has given rise to difficulties in regard to domestic supplies. At the same time, the CSSR has pointed out that as a result of the uncertain conditions in the Western markets the country is faced with increasing protectionism and complex import licensing procedures, especially in regard to its traditional export groups, and that its efforts toward expansion of trade with the West are thus severely restricted.

Aside from the expansion of the general trade relations, the Final Act of the Helsinki Conference made reference above all to the /more intensive forms of economic cooperation/. The pertinent basic conditions concerning the institutional and legal aspects are laid down in inter-state agreements on economic cooperation. At the time the Final Act of the Helsinki Conference was ratified, there were 10 such skeleton agreements between the CSSR and the Western participant states; among the CEMA countries, the CSSR

thus was in last place. Since that time, only two new inter-state agreements have been concluded (with the Netherlands and Spain); two agreements on economic cooperation already in force (with Belgium/Luxembourg and with France) have been revised and expanded.

At the beginning of the 1970's, a new law (1972) on economic /cooperation/ with foreign countries had resulted in the termination of 20 cooperative agreements between Czechoslovak enterprises and Western firms. Thus, at the time of the Helsinki Conference, only the GDR had fewer cooperative agreements on the company level than the CSSR. Shipments of goods carried out on the basis of cooperative agreements accounted for just 1 percent of the CSSR's total exports to the West. Although the stricter licensing procedure stipulated by the 1972 law was eased in October 1975 and although new material incentive measures were adopted for the cooperating Czechoslovak enterprises, even now there are no more than 40 cooperative ties, which in 1979 accounted for just 1.6 percent of the CSSR's exports to the West. Four West German companies account for nearly 50 percent of the total monetary value of the CSSR's cooperative transactions with nonsocialist countries. In all, FRG firms account for nearly four-fifths of the turnover resulting from the CSSR's cooperative agreements with the West. Another indication of the CSSR's low regard for cooperative relations with Western countries is the fact that only one compensation agreement (with an Austrian firm) has been concluded.

Foreign capital is barred from /acquiring shares/ in CSSR enterprises. Conversely, a government decree passed in 1973 allows CSSR enterprises to acquire shares in foreign firms. So far, however, participation in production enterprises has been limited to developing countries. Likewise, in regard to participation in commercial firms or the establishment of mixed companies, the CSSR has shown itself to be much more reserved than the other CEMA countries. In the years after the Helsinki Conference, there have only been two cases of cooperative ventures in third countries involving a Czechoslovak and a Western enterprise; in both of these cases, the Western partner has been an FRG firm.

The /slowing of economic growth/ in the CSSR is likely to persist in the 1980's. The manpower shortage will not be alleviated. In view of the large investments required in the 1980's in the energy and infrastructure sectors, compensation by increased capital investment will not be feasible. With world market prices of raw materials and fuel steadily rising, the relative scarcity of raw materials will not only greatly affect the CSSR's balance of payments, but also block growth insofar as cutbacks in energy and raw materials consumption become imperative. In the next few years, a large part of the investment volume will be needed for the accelerated expansion of the nuclear power plants. But it is not only domestic factors that account for the strong concentration on the development of nuclear power technology. Next to the USSR, the CSSR will be the biggest producer of nuclear power equipment in the 1980's and by 1990, the country is to supply approximately 50 percent of the nuclear power plants to be

established in the CEMA countries outside the Soviet Union. This will inevitably restrict expansion of CSSR industry in other sectors.

In view of the CSSR's unfavorable foreign trade position and the general slowing of economic growth in the CEMA countries and in the Western industrialized countries, a /marked decline in the growth rate of CSSR foreign trade/ is to be expected in the 1980's. The CSSR will continue its efforts to reduce its trade balance deficit vis-a-vis the West by imposing import restrictions, since its possibilities regarding expansion of Western exports are extremely limited.

Likewise, as regards the relations with the CEMA countries, above all with the Soviet Union, the CSSR is likely to try to reduce its liabilities. On the other hand, the CSSR must try to maximize its imports from the CEMA area, since in accordance with the sliding-price clause the country still enjoys here certain price advantages. Under these conditions, an increased economic and political dependence on the Soviet Union will probably be unavoidable, since the CSSR obtains most of its raw material and fuel supplies from the Soviet Union; moreover, the 10-year economic agreement that was recently concluded by the two countries provides for still closer cooperation in certain key industries.

In connection with the /Madrid successor conference/, the following factors appear to be significant in regard to the CSSR: On account of the above-mentioned developments, the CSSR does not have much latitude in regard to expansion of its trade relations with the West. Special activities in regard to the implementation of Basket II provisions are not and never were very likely. In comparison with the other CEMA countries, the CSSR has so far shown the least willingness to promote cooperation on the company level or to establish "joint ventures." Likewise, the changes in the economic control system that are to be made in 1981 are not indicative of any marked expansion of the enterprises' freedom of action, especially not in regard to the trade with the West.

The administrative inflexibility impedes even simple contra transactions, insofar as performance and counterperformance fall under the jurisdiction of different foreign trade organizations. Moreover, the regulations concerning establishment of permanent manufacturer's agencies are restrictive. The existing channels for establishing contacts on the intermediate administrative and company levels are likewise insufficient. The obligatory interposition of a frequently uninterested foreign trade organization impedes establishment of more intensive economic relations. The distrust toward simple market research has had an extremely inhibitory effect. Marketing in a broader sense is relatively underdeveloped in the CSSR. In the years since the Helsinki Conference, no progress has been made in regard to contacts with CSSR economic research institutes and individual economists. This impedes any objective evaluation and exchange of views.

The Foreign Trade Relations of the People's Republic of Hungary With a View to East-West Relations

In the growth process of the Hungarian economy, the foreign trade relations play an increasingly important role. In the last 10 years, the GNP increase (1 percent) was accompanied by a 1.75-percent increase in exports and a 2.5-percent rise in imports. While the economic relations with the OECD countries were extended, the CEMA countries will remain Hungary's principal trading partners. For the CEMA integration and the economic relations with the Western industrialized countries are interdependent elements of Hungary's foreign trade policy.

The divergent development of Hungary's imports and exports resulted in a /trade balance deficit/ that up to 1978 showed a rising /merchandise traffic deficit/. The foreign trade with the OECD countries accounted for 75 percent of the total foreign trade deficit. Whereas between 1970 and 1978 the OECD countries' share of Hungary's exports increased only by 3.2 percent (from 27.2 to 30.4 percent), the OECD share of total imports rose by 12.5 percent (from 27.1 to 39.6 percent). This development was due above all to the increase in the import volume, not to changes in the "terms of trade."

As regards imports from the socialist countries, on the other hand, the price increases accounted for over one-third of the appreciation and the increase in imports from developing countries is entirely attributable to price hikes. Here the trade deficit is reduced, since the volume of exports to the CEMA states and to the developing countries was expanded considerably.

As is the case in the other CEMA states, machines and equipment constitute only a small share of Hungary's exports to the OECD countries. This is due to the fact that in the past Hungary's developmental policy was not primarily concerned with the establishment of production facilities for commodities that could have been sold in the OECD market. To be sure, the modernization of Hungary's commodity assortment during the 1970's resulted in changes: The export share of industrial consumer goods increased considerably and since 1973, exports of machines and equipment have likewise been slowly expanding.

As regards the trade relations between the People's Republic of Hungary and the OECD countries, the /Federal Republic of Germany/ plays an increasingly important role. The FRG has for some time been the second most important supplier of the Hungarian economy and in 1978 it was the second largest buyer of Hungarian products. For a number of years, imports from the FRG have accounted for approximately 40 percent of Hungary's machinery imports from the OECD area. The FRG on its part receives over 30 percent of Hungary's exports of industrial finished goods and machines to the OECD area.

For many years, the bilateral exchange of goods has been marked by a considerable Hungarian deficit. The FRG accounts for one-third to two-fifths of the Hungarian foreign trade deficit in the OECD trade and for approximately 30 percent of Hungary's total foreign trade deficit.

The /share of finished goods/ of Hungary's exports to the FRG has been increasing steadily and presently constitutes 50 percent of total exports; however, the finished goods exports comprise a great many articles that are produced by the so-called structurally weak branches in the FRG as well and that therefore are subject to import quotas and customs duties. Consequently, maintenance of this export structure would introduce an element of instability into the trade relations. There has still been no increase in the share of those Hungarian commodity exports to the Federal Republic that on the one hand are in great demand in the FRG and that on the other hand could benefit from the competitive advantages of the Hungarian economy. However, this qualification notwithstanding, finished goods constitute a larger share of Hungary's exports to the FRG, as compared to the exports to the FRG from the other CEMA states.

This indicates that the export-oriented policy adopted by the People's Republic of Hungary is producing results and that the /cooperation/ between Hungarian and West German enterprises has served to modernize Hungary's export structure and to increase the country's export volume. However, both the cooperation on the company level and Hungary's purchases of Western licenses have led to a situation, where the goods produced on this basis are sold primarily in Hungary or in the other CEMA states rather than in Western markets. This is attributable to restrictive practices of the Western enterprises (no cooperation or l[illegible] in regard to products in the introductory or growth phase, prohibition of sales in Western markets) and to the CEMA markets' greater absorptive capacity for goods that in the Western industrialized countries have for some time been part of the standard assortment.

During the 1970's, the intensification of the trade relations with the OECD countries also led to the /establishment of Hungarian enterprises (or enterprises involving Hungarian participation) in the West/. These enterprises are primarily concerned with the marketing of Hungarian products in Western countries. In the last few years, a number of production enterprises have been established as well; however, their activities have not progressed past the initial stages. Like the cooperation agreements, the Hungarian business ventures are concentrated on Austria and on the Federal Republic of Germany.

According to the legal regulations that were passed in the fall of 1972 and significantly modified in 1977, /direct investment of foreign capital in Hungary/ is permissible. So far, however, only three joint enterprises have been established; this seems to indicate that this form of cooperation has not yet progressed past the experimental stage. However, it appears that in the 1980's the conditions will be more favorable in regard to the activity of joint ventures in the People's Republic of Hungary.

There are also a few examples of /cooperation on third markets/--especially of joint ventures in developing countries. On account of the good results achieved so far in the bilateral cooperation between Hungarian and OECD firms, conditions are favorable in regard to the expansion of trilateral cooperation. Among the positive factors to be mentioned in this respect are Hungary's research, planning and development capacities, certain accounting-related factors, and political reasons.

Generally speaking, it is safe to say that the form of economic relations that go beyond foreign trade proper have initiated a closer and more protracted cooperation that could help stabilize the economic cooperation even in politically or economically difficult periods.

In the /second half of the 1970's/, the People's Republic of Hungary found itself in an unfavorable situation in regard to foreign trade. The deterioration of the "terms of trade" and the decline in exports aggravated the foreign trade imbalance. Consequently, the problems pertaining to foreign trade are likely to remain for some time a key factor in Hungary's economic policy. Reduction of the foreign trade imbalance is the primary objective; this goal is to be attained through the /strategy of forced exports/ that was formulated in 1977 and that has since been gradually implemented. For Hungary, this means on the one hand abandonment of a growth-oriented economic policy and on the other hand changes in the production structure with increased emphasis on competitive advantages.

In order to enforce these changes in the production structure, Hungary intends to discontinue the protective measures shielding its enterprises from world market influences. To this end, the country has developed an economic-political control system, the key element of which is the /gradual adaptation to world market prices/ in those economic sectors that are involved in the international division of labor. This arrangement affects approximately 35 percent of the total production of the People's Republic of Hungary. Enterprises that export to convertible currency areas are granted tax relief or adaptation subsidies. The /right of direct exports/ is increasingly granted to production enterprises. Within the framework of so-called inter-sectoral development firms, the foreign trade enterprises are to adopt export-promoting measures.

Increased Hungarian exports to the OECD countries can be expected in the following sectors, in which competitive advantages can be brought into play: agriculture and related food industry branches, aluminum production, electric machine building, electrical engineering, instrument building, the pharmaceutical industry, refined chemicals, and some branches of the machine building industry. However, in order to insure the success of an export policy oriented toward exploitation of competitive advantages, it will be necessary further to develop the economic control system and further to extend more intensive forms of cooperation with Western enterprises.

Aside from the above-mentioned production sectors, there are /other possibilities regarding the development of economic relations between Hungary and the West/:

--Hungary's geographic location offers possibilities of overcoming infrastructure-related problems in connection with the expansion of trade between West Europe and the Near East and between Western countries and the East. The participation of a number of OECD countries in highway construction and railroad modernization in Hungary could contribute to a smooth handling of the increased merchandise volume.

--In the science and research sectors, Hungary has at its disposal a considerable pool of personnel that can be used at lower wages, as compared to the OECD area.

--Likewise, the Hungarian tourist industry offers wage-related (but also natural) advantages that could be exploited through joint expansion of the tourism-related facilities (not least tourism for medical purposes).

--As regards trilateral cooperation in "threshold countries", Hungary can draw on its development- and system-related experience (instruction, specialized training, health services, etc.).

To what extent it will be possible to utilize such potential assets for economic cooperation depends on a number of factors. In this connection, one should point out the following:

--The export-oriented developmental strategy of the People's Republic of Hungary has been brought into play at a moment, when the world economy has become less stable--a situation likely to continue for some time. The /world-economic uncertainties/ impede the transition from the traditional import-substituting developmental policy to a real--mental as well as practical--emphasis on exports. To be sure, the greatest danger to the Hungarian economy lies in a rigidification of the present production structure and the resultant weakening of the export potential, not in a higher or lower degree of self-sufficiency in regard to raw and basic materials. Nevertheless, one cannot rule out the possibility of frequent plan changes that could counteract a long-term economic strategy. For example, even though the expansion of exports to countries with convertible currency has since 1975 been given priority, the most important investments made since then have not been oriented toward that objective.

--In order not to increase the trade balance deficit, /imports from convertible currency regions/ are not to be expanded. The 1980 plan even stipulates that the Hungarian machinery imports from these countries be reduced by 15 percent--despite the fact that the modernization and reorganization of production with a view to exploitation of competitive advantages would necessitate increased imports from the OECD countries.

Under these circumstances, stabilization of the economic relations between the People's Republic of Hungary and these countries depends to a great extent on developments in the OECD countries. The slow-down in the OECD countries' economic growth, the uncertainties in regard to the structural changes in West Europe's industry, and the protection of structurally weak branches impede the desired reduction of the foreign trade imbalance through an export-oriented foreign trade policy.

The following measures would serve to support Hungary's foreign trade policy:

--The preferential agreements of the EC restrict Hungary's exports to the EC. A skeleton agreement between the EC and CEMA probably could partly eliminate this drawback.

--In regard to the cooperation on the company level, the Western partners should adopt a less restrictive position in regard to markets and the transfer of technology.

--The credit-granting policy should honor Hungary's export-oriented economic policy, i.e. it should make allowance for the fact that this policy creates the preconditions for repayment of the loans.

Implementation of these measures could boost mutual trust and stimulate the economic relations. Closer economic relations could make these relations less vulnerable to sudden policy changes; otherwise, political changes would freeze even those processes that are largely governed by their inherent economic laws.

The Foreign Trade Relations of the Socialist Republic of Romania, in Particular With the Federal Republic of Germany, With a View to East-West Cooperation

For the Socialist Republic of Romania, the economic relations with the Federal Republic of Germany are of special importance. This is evident from the very fact that the FRG is Romania's second most important foreign trade partner. But how great is the FRG's interest in economic relations with Romania? If the yardstick is Romania's share of the FRG's total foreign trade turnover, it must be considered small. But if one views the relations with Romania within the framework of all-European cooperation, this interest assumes another dimension. Romania has always been a vanguard of sorts in regard to the development of relations between the Federal Republic and the other CEMA countries. This goes above all for the establishment of diplomatic relations in 1967, but also for the establishment of a mixed government commission for economic cooperation and for the inclusion of West Berlin's research potential in an agreement on scientific and technological cooperation. Romania wants to balance its foreign trade relations with the most important regional groups, the CEMA countries, the Western industrialized countries and the developing

countries. This objective also reflects the desire for insuring a maximum degree of political independence. Viewed from this angle, the development of the policy of detente is of extraordinary importance to Romania, since the Romanians feel that equilibrium between the superpowers reduces hegemony-related pressure on small and medium-size countries.

As regards its /domestic economy/, Romania continues to adhere to /disproportionate/ growth and central economic control, and this has impeded implementation of some economic reform measures. Nevertheless, in pursuing this economic policy, the country has been able to maintain a high rate of economic growth that by far exceeds the growth rate of the other CEMA countries. However, the plan targets have not been met, which is due above all to the changes in the international energy markets. In order to protect itself from these influences, the country has drawn up an energy program that is to insure self-sufficiency in the energy sector by 1990.

A great deal of attention is directed to the /foreign trade relations/. In spite of the occasional import restrictions intended to improve the negative foreign trade balance, the foreign trade turnover has been increasing continuously. In terms of regional emphasis, the socialist states account for approximately 50 percent of the country's foreign trade, while the developed free-market economies and the developing countries account for approximately 25 percent each. Although Romania wants to avoid economic dependency on the other CEMA countries, these countries are granted--on account of a number of advantages ranging from favorable geographic location to the possibility of saving convertible foreign currency—a 40-percent share of Romania's foreign trade turnover. It is noteworthy that in the trade with the CEMA countries the volume of products resulting from the cooperation between Romanian and Western firms has been increasing considerably.

The /orientation toward the developed free-market economies/ is reflected in a number of moves: the accession to the GATT Agreement and to the International Monetary Fund and the drawing closer to the European Community. In 1972, Romania--the first East European country prepared to recognize the EC--applied for preferential rates of duty, which were granted because Romania's developmental level was comparable to that of other developing countries. Romania also accepted the EC offer concerning conclusion of separate trade agreements with CEMA countries. In the spring of 1980, there was concluded a comprehensive agreement concerning trade and cooperation, including the establishment of a mixed committee.

One gains the impression that the restrictive negotiations between the EC and Romania have always been delayed by the EC, even though the EC has been appreciative of Romania's attitude--an attitude diverging from the position taken by the other CEMA countries. Concrete steps have always been put off, until international events (e.g. Afghanistan) made appear imperative concessions vis-a-vis Romania.

Since 1965, the Federal Republic of Germany has been Romania's most important Western trading partner. The FRG's willingness to extend the relations with Romania is evident from the fact that in regard to the level of credit surety, Romania is in second place--behind the Soviet Union--among the CEMA states. These supportive measures are necessary, since the imports of modern technology from the Federal Republic cannot be compensated by the Romanian exports of raw materials, semifinished goods or products of the food and textile industries. Since most of the Romanian exports to the EC area go to the Federal Republic (1978: 42 percent), it is safe to assume that in consequence of the agreement between Romania and the EC the Romanian efforts toward a reduction of the trade deficits vis-a-vis the Federal Republic will meet with success.

Romania feels that the economic relations can best be extended through /bilateral or trilateral cooperation/ in the production sector. At the end of 1979, the regulations--established in 1979--concerning the formation of mixed companies in Romania were improved by an "Agreement Concerning the Promotion and Mutual Protection of Capital Investments" between the Federal Republic and Romania. This "Investment Promotion Agreement" is the first agreement concluded by the Federal Republic with a state-trade country. It was learned that the /joint ventures/ have been granted a special status within the Romanian economy so as to support their activities. Nevertheless, there have been difficulties:

--The high rates required for setting up business restrict the circle of interested parties to large-scale enterprises;

--certain inflexibilities inherent in centralized economic control occasionally interfere with production, e.g. as a result of material shortages;

--the difficulties involved in the handling of two currencies.

On its part, Romania runs /mixed enterprises/ in /Western industrialized countries/, for the most part in the commercial sector, but also in the production sector (e.g. coal production enterprises in Canada and in the United States).

As regards /trilateral cooperation/, there are further possibilities that go beyond the present framework, since in the last few years Romania has been steadily extending its economic relations with the developing countries. Upon Romania's admission to the "Group of 77 Nations", the contacts with the developing countries have been intensifying. This process of rapprochement was promoted by Romania's foreign policy conception of dissociation from the blocs; at the same time, it was oriented toward the nonaligned countries.

Considering the general /prospects of cooperation between the Federal Republic of Germany and Romania/, one should first take note of the favorable political starting position. At the end of May 1980, the two countries

agreed to engage in regular consultations on international problems. In various fields, there exist possibilities concerning the development of economic cooperation. Thus there is the Romanian proposal concerning German participation in the Danube Canal Project. Proceeding from the assumption of a linkage of waterways from the North Sea to the Black Sea, one could readily conceive of German involvement in such a project. In this connection, one should point out that Romania is the only CEMA country that is prepared to recognize the Rhine-Main-Danube Canal as a German national waterway and to enter into a bilateral agreement concerning use of the canal. In view of the Romanian intention to develop a nuclear industry of its own, cooperation would be of interest in this field as well. There are other fields, e.g. electronics, machine building, and technologies for the recycling of raw materials.

Trilateral cooperation would be good policy in those developing countries that show greater reserve vis-a-vis the "Western world" than toward the smaller socialist countries. Romania has been remarkably successful in cultivating its relations with developing countries and has been accepted by them as an economic and political partner. In critical situations, cooperation involving Romanian enterprises could possibly be helpful in regard to maintenance or reestablishment of relations with developing countries. A good example in this respect is the Romanian position in Iran.

Considering the continuation of economic relations with Romania, one should also take into account the following circumstances. It is obvious that Romania--for reasons of economic and political independence--wants to extend its contacts outside the CEMA area. On the other hand, Romania's economic organization shows considerable shortcomings--even in comparison with other state-trade countries--and these shortcomings impede economic cooperation. Another factor mentioned is the Romanian leadership's "concern with prestige." In this respect, however, one should take into consideration that this concern with prestige is bound up with the Romanian leadership's desire for independence. In view of Romania's advocacy of political detente in Europe, the relatively low cost of cooperation with Romania should be brought in relation to other financial expenditures, e.g. to those that are required for the European armaments balance. Frequently, it is only after the emergence of an international crisis that assistance is lent to countries that have been in difficulties for some time. Good examples in this respect are the EC agreement with Yugoslavia or the financial aid to Turkey--even though it had been known for a long time that instabilities of these countries on the fringes of the great power blocs are intensified by economic difficulties. Such considerations probably apply to Romania as well--a country whose political position in the East European confederation of states is well-known. This argumentation derives support from the fact that other Western states, too, promote economic cooperation with Romania along these lines.

Possibilities Regarding Scientific Cooperation Between the Federal Republic of Germany and the Soviet Union

In the Final Act of the Conference on Security and Cooperation in Europe, the participant governments declared their intention to eliminate the obstacles to further improvement of the scientific-technological cooperation and to expand and improve within the framework of their jurisdiction scientific cooperation and exchange. To this end, they pointed to activities--ranging from loose contacts such as the exchange of information and publications to the formation of study groups concerned with common-interest topics in basic and applied research and with cooperation in research and development on the company level--that extend to nearly all forms of international scientific cooperation. The provisions of the CSCE Final Act show that at that time the governments had cherished relatively great hopes concerning the possibilities of scientific cooperation between the different systems. In the field of science and technology, the development of cooperation has been much less significant--in regard to both quantity and quality--than that in the economic sector.

The /greater reserve in scientific relations/ is understandable; for in the scientific cooperation between the systems, complications result from the fact that the divergent sociopolitical orientations permeate the scientific systems in East and West. Complications arise all the sooner, the more the subjects of cooperation extend from the scientific-technological realm into that of the social sciences. However, in evaluating these circumstances, one must take into consideration that results of the social sciences and humanities are generally less capable of international transmission, whereas the technical sciences are of a more universal character.

Consequently, the projects in the inter-systemic /scientific cooperation in the technological-scientific realm/ are less controversial than those in the humanities and social sciences. Moreover, in the scientific and technological disciplines, one encounters research problems that necessitate a greater input of material resources and that therefore suggest international cost and benefit sharing. Finally, scientific-technological cooperation would continue and complement the existing economic cooperation, with the exchange of technical knowledge on its part giving fresh impetus to the economic relations. Without the East's indisputable interest in the transfer of technology, the economic relations would not have reached their present dimensions. The conception of science as a "productive force" suggests similar motivations underlying the scientific contacts with the Western industrialized countries.

The /scientific-technological relations between the Federal Republic of Germany and the Soviet Union/ stay for the most part within the framework of the respective general East-West relations. So far, the relations in the scientific-technological realm have been marked by three distinguishing characteristics. Firstly, the relations are based on inter-company contacts: Only /one/ inter-state agreement, namely with Romania, has been

concluded in the field of scientific research and technological development. Secondly, the transfer of technology largely takes place from the West to the East. Thirdly, this transfer focuses on Eastern imports of capital goods. However, there is increasing emphasis--primarily in East Europe--on the utilization of other forms of technology transfer: purchase of licenses, inter-company cooperation in regard to technology-intensive products and inclusion of research and development in this cooperation. In the field of research and development, the Soviet Union engages in a special form of cooperation with Western enterprises: It promotes skeleton agreements between Western enterprises and the State Committee for Science and Technology (GKNT), the Soviet Union's principal decision-making and coordinating institution in the field of science and technology. In accordance with the given circumstances, these skeleton agreements must be concretized by specific projects. For the most part, they have resulted in exchanges of views among experts, and occasionally, in licensing agreements. Certain progress has been made in regard to research and development projects involving FRG enterprises. Thus cooperation on technical development--both with East Europe and with the Soviet Union--has not yet progressed past the initial stages.

An approximately equal developmental level of research and development among the partners facilitates the international scientific-technological cooperation. From the point of view of expenditures on research and development, the Soviet Union offers the most favorable conditions for progress in regard to research. Since the beginning of the 1960's, the Soviet Union has steadily been expanding its /scientific potential/. Both in regard to the absolute financial expenditures and in regard to the research and development share of the GNP, the Federal Republic of Germany clearly lags behind the Soviet Union. The number of scientists, engineers and technicians engaged in research and development is approximately 6 times as high as in the FRG.

However, the considerable expenditures on research and development are insufficiently utilized for foreign trade:

--The Soviet Union can boast of no more than approximately 10 percent of the FRG's issues of letters patent in foreign countries.

--Regarding its trade in patent licenses and research-intensive finished goods--both with the FRG and with other Western industrialized countries--the Soviet Union shows clearly negative balances.

Regarding this state of affairs, several explanations can be adduced:

--There is a lack of coordination between the research and development sector and the production enterprises.

--The enterprises are insufficiently motivated in regard to the introduction of new products and production methods.

--To some extent, the research and development sector is insufficiently equipped with scientific apparatus and equipment. Among other things, this is a result of faulty coordination between the research institutions and the producers of scientific apparatus.

--The generally low level of foreign trade activity makes itself felt in the foreign contacts maintained by the research and development sector.

On the basis of these explanations, it is safe to conclude that Soviet research has not been very successful in regard to the application of research and development results to prototypes and test installations or to new products and production methods. But these explanations also suggest that the Soviet Union's scientific and technological capacities are insufficiently developed for direct international exchange and that they are unevenly utilized, because in consequence of the fact that the research process is centrally controlled the research and development results are greatly dependent on administrative priorities.

Proceeding from the above assumption, one can expect the /Soviet Union to have reserves in the realm of applied research/--e.g. expertise concerning technological problems and their solution, patentable ideas, testing procedures, models of apparatus and instruments. Research areas suitable for international cooperation would be based on focal points of Soviet research policy. Thus, applied research has probably yielded a great many results in iron and general metallurgy, in welding technology, foundry technology, construction technology, mining technology and in the energy supply sector, and to a lesser extent, in electronics, automation, chemistry and in the consumer goods sector.

The selection of /research institutes/ presupposes more detailed information. For the most part, applied research is carried out in the research institutes of the branch ministries. In regard to the capacities of these institutes, it is difficult to generalize, since as a result of specialization there are considerable qualitative differences between the individual research institutes. There are probably some 100 institutes that are comparable to the leading institutes for industrial research in the Western countries.

While there is no doubt that there are /qualitative/ differences among the many /research institutes/ of the branch ministries (and among the applied research centers of the universities), the basic research institutes of the USSR Academy of Sciences (ANSSSR) must be regarded as excellent. Cooperation in basic research may develop in areas, where the research interests of the Federal Republic of Germany and of the Soviet Union are identical, e.g. energy and raw materials research, transportation and traffic technology, developmental and radiological protection, medical research, health- and nutrition-related technologies, urban and regional planning. However, certain projects, e.g. projects in energy-related basic research, cannot be implemented until the agreement on German-Soviet cooperation in the sciences

is ratified. Most of the above-mentioned fields are related to the economic-technological development potential. However, cooperative research appears to be promising in the social sciences as well, insofar as it pertains to social development in connection with technological development, e.g. to problems concerning present-day work or changes in the social structure.

For various reasons, /basic research/ offers /more favorable conditions for cooperation/ than does applied research:

--Rapid development of commercially useful technologies is not of overriding importance.

--In various basic research disciplines, progress depends on imaginative theories rather than on the supply of scientific apparatus and instruments.

--Soviet basic research has produced pioneering results by means of the concentration of financial and manpower resources that is a distinguishing characteristic of the planned economy. In the fields characterized by rapid development of scientific apparatus and instrument building, the results have been less impressive.

International cooperation in research and development is furthered not only by approximate equality in the partner countries' performance levels, but also by similarity in regard to the /organizational structure of research and development/. In the Federal Republic of Germany and in the Soviet Union, however, the research and development sectors are organized differently. In the Soviet Union, research is for the most part centrally planned and its implementation takes place within a complex organizational structure. This is true above all of applied research. Consequently, various decision-making, planning, and licensing agencies are involved in the international cooperation in applied research (generally the appropriate main administration of a branch ministry, the GKNT, the organization for material-technological supplies (GOSSNAB) and the appropriate foreign trade organization) and this necessitates considerable efforts in regard to communication and coordination. In basic research, these expenditures are not as great, but here the search for areas suitable for cooperation is impeded by communication difficulties.

As regards inter-systemic cooperation in research and development, the distinguishing characteristic is bureaucratic, not spontaneous or decentralized collaboration. It is only by the former approach that inter-systemic cooperation can be set going. However, in the course of development it would be necessary to complement the bureaucratic component by a reduction of formalized relations and by direct contacts among researchers or research institutions. In view of the East's interest in improved utilization of the benefits offered by cooperation in research and development, it is safe to assume that steps in this direction will be taken.

However, immediate drastic changes are not to be expected, nor should they be sought.

All-European Cooperation in the Energy Sector

I. Preliminary Remarks

Within the framework of the economic cooperation between East and West after 1970 and in the linking of the economic relations with the policy of detente, the energy sector has been playing an important and promising role--at least in the Soviet view. This became apparent as early as the 24th Party Congress (1971), but also in the Final Act of the Conference on Security and Cooperation in Europe (1975), in the proposal concerning the holding of an all-European energy conference, in the efforts on the ECE level and finally in the German-Soviet Economic Agreement of 6 May 1978 and the resultant Long-Term Program of 1 July 1980. The economic background and the political implications should be delineated so as to bring into focus the importance and prospects of the cooperation in the energy sector, especially with a view to the continuation of the CSCE process.

II. Background of East-West Cooperation in the Energy Sector

1. The Energy Situation in the Soviet Union and in East Europe

CEMA as an economic bloc produces over 100 percent of its own energy requirements, i.e. the region's energy exports exceed its imports. In 1978, production exceeded consumption by 15 percent. But practically it is only the Soviet Union and, to a lesser extent, Poland that benefit from this production surplus. All the other CEMA countries are deficit regions that satisfy their energy requirements primarily through imports from the Soviet Union.

Since the Soviet Union accounts for 79 percent of CEMA's energy production and for 71 percent of its energy consumption,[1] we will first describe the energy situation in the Soviet Union. In the 1970's, the Soviet Union developed into the world's biggest oil producer, and among the leading industrialized countries, it is the only country boasting an energy surplus. Nevertheless, there are indications of potential problems in that production is no longer sufficient to meet the diverse demand.

Table 1 shows that since 1974 energy production has been characterized by steadily declining growth rates. During these years, however, the production increases still exceeded the increase in consumption; consequently, the net export share of production increased from 18 to 22 percent. Comparing the rise in energy consumption and overall economic growth, one realizes that an uncoupling of the two growth rates to the extent practiced in the Western industrialized countries was not feasible. Between 1973 and 1978, the rise in energy consumption was somewhat lower than the increase in national income as indicated by Soviet statistics (relation 0.9).

However, in order to be able to produce comparable data, one has to convert the national income into the GNP variable used in the West. On the basis of the pertinent CIA figures, the relation between the rise in energy consumption and economic growth is 1.2, while the comparative figure for the FRG was 0.3 between 1973 and 1978 (rising considerably after 1979, however). As regards the 1980's, neither the development in the 1970's nor the pertinent prognoses offered by experts—including a Soviet observer (Mel'nikov)--justify the assumption that this relation in the Soviet Union will drop below 1.[1a] This means that Soviet economic growth is limited by the rise in energy consumption. The rise in consumption on its part is determined by the production increases and the changes in exports and imports so that in the event of a continuing decline in the production growth rates continuous consumption increases can be maintained only through a curtailment of exports.

Table 1. Increase in Soviet Energy Production and Consumption, 1973-1979 (%)

	1) Produktion				6) Verbrauch
	2) Öl	3) Gas	4) Kohle	5) Energie	Energie
1973	7,1	6,7	1,9	4,9	5,6
1974	7,0	10,3	2,5	5,6	4,2
1975	7,0	11,0	2,5	5,2	5,7
1976	5,9	11,0	1,5	5,0	4,8
1977	5,0	7,8	1,5	4,7	3,3
1978	4,7	7,6	0,2	4,1	3,1
1979	2,5	9,4	-0,7	3,3	1,8*

* vorläufig 7)

Quelle: *Narodnoe Chozjajstvo* SSSR, Moskau, verschiedene Jahrgänge, *Pravda* 26. 1. 80, *World Energy Supplies* 1973–78, New York 1979.

Key:

1. Production
2. Oil
3. Gas
4. Coal
5. Energy
6. Consumption
7. Provisional
8. Source: NARODNOYE KHOZYAYSTVO SSSR, Moscow, various years; PRAVDA, 26 Jan 80; "World Energy Supplies," New York, 1979.

A further drop in production is likely, since it will be practically impossible to influence the cause of the decline in the growth rates, namely the rise in investment costs accompanied by an insignificant expansion of capital goods.

With the exception of natural gas, which in 1979 accounted for 25 percent of total energy production, the production targets have not nearly been met. As regards coal (26 percent of total energy production), the 1979 production volume was clearly below that of the two preceding years, while the growth rate for oil (45 percent) amounted to a mere 2.5 percent. Only

in the production of natural gas are the growth rates as high as planned; it should be pointed out, however, that the 1980 plan provides for lower rates.

The other primary sources of energy, above all water-power and nuclear energy, presently account for less than 5 percent of total energy production and they are not likely—neither in the short or in the long term--to improve the energy balance. According to estimates of the ECE, in 1990 nuclear energy will account for 2 percent, and water-power for 3.3 percent of the Soviet Union's total energy production.[2]

The energy production picture will give rise to concern, if the CIA oil production prognosis that was first published in 1977[3] and that has since been repeated with minor changes will come true before 1985. In contrast to the prognoses of other institutes, the CIA data proved to be very accurate for the first 3 years, which allowed comparison of the prognosis and the actual results; consequently, a large number of well-known experts expect the CIA prognosis to be accurate in regard to the coming years as well.[4] Likewise, a well-known Soviet energy expert, A. Krylov, holds that unless there are technological innovations, production will culminate in the near future and then decline.[5] According to the CIA prognosis, after 1980 production will by 1985 drop to the production level of 1975. Exports to the East European countries will rise only slightly. In 1981, the net exports to the West will be discontinued, and in the following years, Soviet demand in the OPEC markets will exceed by up to 100 million tons the exports to the Western countries. According to a subsequent CIA projection,[6] the Soviet Union will to some extent be able financially to compensate the oil imports through increasing natural gas exports; however, the natural gas exports will then restrict the possibilities of shifting domestic energy consumption from oil and coal to gas.

Due to the fact that coal accounts for a large share of energy consumption, the self-sufficiency rate of the East European countries is as high as 79 percent; however, of the total energy imports, oil accounts for 69 percent, and oil imports from the Soviet Union, for 53 percent. Energy imports from outside the CEMA account for only 16 percent of total imports and for only 5 percent of the energy supplies as a whole.[7] The trend toward a disproportionate rise in the share of imports from the countries outside CEMA was almost completely undone by the international price hikes.

In the East European countries, the import requirements as an expression of the difference between consumption and production are most clearly reflected in oil. While consumption in these countries amounts to 100 million tons, domestic production totals 18 million tons. Disregarding Romania, whose oil imports from the Soviet Union have so far been negligible, consumption amounts to 77 million tons, while production totaled barely 3 million tons. In view of the financial situation of the East European countries, the demand must be covered almost in its entirety by the Soviet Union, and this demand is increasing disproportionately, since

these countries--inclusive of Romania--cannot expand their production any further and since in consequence of the industrialization process they are increasingly dependent on oil, a flexible energy source.

As regards natural gas, the situation is similar. Here the Soviet Union meets nearly the entire import requirements of the East European countries. As regards coal, however, the Soviet exports are not as significant. In this sector, it is above all Poland that satisfies the relatively limited requirements of the East European countries.

2. The Soviet Efforts Toward East-West Cooperation

Since 1971, the Soviet Union has been making diverse high-level efforts aimed at solving the energy problems through cooperation with the West or broaching the energy problem as a problem concerning all European countries. At that time, the Soviet Union was in a position to perceive with greater farsightedness the problems pertaining to the supply of energy, since the energy supply could largely be determined by its own economic parameters and--more importantly--since the supply was not affected by international political conflicts.

The parallel development of detente notwithstanding, the expectations concerning cooperation with the West exceeded the actual possibilities of implementation. Thus the Soviet Union hoped to be able--with Western financial aid--by 1990 to meet 16 percent of its energy requirements through capital-intensive nuclear power.[8] According to present prognoses for 1990, 3 percent will be the maximum attainable. To some extent, the--in the Soviet view--unsatisfactory development of cooperation is rooted in the problems involved in inter-systemic economic relations, in the trade imbalance, in the inefficient capital utilization in the Soviet Union, etc. The Western countries' hesitation in the political realm is another factor.

The Final Act of the Conference on Security and Cooperation in Europe attached great importance to cooperation in the energy sector, considering it a contribution to long-term, stable relations;[9] in December 1975, a few months after the Helsinki Conference, there followed Brezhnev's proposal concerning the convening of a European energy conference based on the CSCE. As time went by, the hesitant response of the West gave rise to growing disappointment in the Soviet Union.

In view of the conditions prevailing at the Belgrade CSCE successor conference (1977/78), it was impossible to transform into a resolution the willingness--signaled above all by the FRG--to take certain steps in this direction.[10] It was not until the annual ECE conference in April 1979 that there was established a body of "Senior Advisers to ECE Governments on Energy" that is to assist in the process of working out a resolution concerning the holding of an all-European energy conference.

3. The Cooperation in the Energy Sector in the 1970's

The stagnation of cooperation in the energy sector is by no means attributable to the fact that so far the Soviet proposals concerning an energy conference have not been implemented. Rather, it is precisely in this sector that significant agreements have been concluded, above all the agreements concerning the delivery of pipes that were financed through loans, repayment of which was to take place in the form of long-term natural gas shipments. It is through oil shipments--more so than through the shipments of natural gas--that the Soviet Union obtains the foreign currency needed for covering its import costs. In the last few years, the Soviet Union obtained through oil and natural gas exports 50 to 61 percent (1978) of its foreign currency revenue from Western industrialized states. Likewise, imports of equipment for the development of energy resources have assumed increasing importance for the Soviet Union.

One should also mention the fact that Poland has been obtaining approximately one-third of its foreign currency revenue from coal exports and that it has expressed interest in intensive cooperation with Western enterprises in the field of coal refinement.

Nevertheless, it is obvious that the demand for Western technology and Western capital has not nearly been met--technology and capital needed for projects such as development of the large oil fields in the Barents Sea or of the Yakutsk gas deposits. However, it is not only since the Afghanistan crisis that the United States has been pursuing a restrictive policy in regard to the issue of making accessible to the Soviet Union technologies for resource development. The West European enterprises on their part considered certain offers insufficiently concrete, or the negotiations remained inconclusive, as was the case in regard to the project involving establishment of a nuclear power plant near Koenigsberg (Kaliningrad).

III. Dependence and Interdependence Through Cooperation in the Energy Sector

1. Dependence of the West

At present, Western Europe satisfies 6.6 percent of its energy requirements through imports from the CEMA countries. Although this percentage is not negligible, it is certainly not high enough to generate dangerous pressure in regard to security policy. This possibility exists only in Finland and Austria; while their energy dependence on the Soviet Union and Poland is disproportionately greater, these two countries import correspondingly smaller contingents from the OPEC countries. For the EC, this energy dependence on CEMA amounts to 4.9 percent, and for the FRG, to 4.2 percent.

Considering domestic consumption, the FRG's dependence on the Soviet Union is most pronounced in regard to natural gas (15 percent); as regards oil (3 percent) and coal (2 percent), on the other hand, the dependence is

insignificant. However, the dependence in regard to natural gas is not so critical, since the FRG can meet 80 percent of its requirements through domestic production and through imports from Norway and the Netherlands, i.e. secure sources. Moreover, the gas supply companies and the industrial customers have concluded agreements, according to which the customers are obliged--in the event of a shortage--to switch over to other energy sources (oil, coal).

Even in the event of massive financial aid to the Soviet Union, it is unlikely that the oil share of the Soviet exports to the West European consumers can be raised again, but in regard to gas (and also coal (Poland), the domestic supply of which exceeds that of natural gas), the shares could possibly be further increased, if closer cooperation in the energy sector were instituted. In regard to natural gas, however, the Soviet Union is presently confronted with compensation problems due to the discontinuation of the planned imports from Iran.

In considering dependence, one should also compare the alternatives. As regards oil and natural gas, the imports from the Soviet Union could at best be replaced by imports from the OPEC countries, for the West European resources are fully utilized anyway.

2. Dependence of the East

It is more difficult to quantify the CEMA countries' dependence on East-West cooperation, since it is hard to determine to what extent improvements in energy production and energy transport are attributable to the Western equipment shipments. Nearly the entire imports of pipes for pipelines come from Western industrialized countries and the imports of Western equipment for the development of energy resources have increased considerably. If one considers the orders of this type of equipment to be indicative of future purchases,[11] a further rise in demand is to be expected, unless energy production falls short of the plans and domestic growth requirements to an even greater extent than is obvious even now. In view of the decline in oil production in the European part of the Soviet Union and in view of the stagnation in the West Siberian oil fields, in the coal production sector and in the overall energy production of the East European countries (with the exception of Polish coal), it is imperative that new energy sources be opened up in regions that are more remote from the consumption and distribution centers--regions that thus necessitate infrastructure-related transport measures and that due to the extreme geological and climatic conditions require heavy input in regard to technology. For these tasks, Western equipment is needed more urgently than ever.[12]

With the exception of Romania, the East European countries will be totally dependent on the oil and gas imports from the Soviet Union. In view of their indebtedness, their financial situation is much more critical than that of the Soviet Union; consequently, it is difficult for them to pay for additional energy supplies with foreign currency. Under no circumstances

would they be able to compensate a decline in the Soviet shipments through imports from the OPEC countries.

3. Interdependence as an Element of Detente

Aside from the economic realm, interdependence could stabilize the relations between the partners. However, this would require certain structural factors. Thus the dependence of certain OPEC countries on Japanese capital goods can hardly be considered a stabilizing compensating factor vis-a-vis the Japanese dependence on energy imports from the OPEC states. In particular, a short-term dependence on vital commodities cannot be compensated by any long-term dependence.[13]

In regard to East-West relations, the view that stable economic interdependence can be considered a significant contribution to detente was reflected above all in the Final Act of the Conference on Security and Cooperation in Europe. In regard to the stabilization of the relations, this document proposes a number of measures (avoidance of abrupt fluctuations in merchandise traffic, diversification, exchange of information, etc.) and in regard to protective measures ("permanent ties"), it suggests various forms of cooperation on diverse levels, including cooperation in the energy sector.

In contrast to the European governments in the East and the West, the United States has never made this approach concerning an independent contribution of the economic relations to detente an integral part of their own policy: Even after 1970, the economic relations with the Soviet Union were to be extended only in return for conduct promoting detente. This goes for the Jackson/Vanik and Stevenson amendments (1974) as well as for the basic principles of the policy of detente as formulated by Kissinger[14] or Carter.[15]

The West European countries, and the FRG in particular, had proceeded from the assumption that a basic framework was to be established for the policy of detente, in the maintenance of which both sides would take an interest and which was to counteract any conflict extensions. The economic relations appear to be a suitable means to this effect. In his London speech of 1977, Federal Chancellor Schmidt expressed this in the following words: "(One of the) major tasks of Western security policy in economic terms is to establish balanced and stable economic relations with the communist state trading countries of the East."[16] In this regard, the German-Soviet Economic Agreement of May 1978,[17] which is intended to extend over 25 years and which documents the close link between economic relations and the policy of detente, has reference not only to the Final Act of the Helsinki Conference, but also to a 20-year-old bilateral treaty policy.

The West European countries' efforts to establish long-term, stable interdependence in the economic sector, in which they can develop parity-based relations with the Soviet Union and the East European states, certainly

could be a security policy-related complement of the attempts--supported primarily by the United States--to establish a balance of power based on military factors.

4. The Problems in Connection With the Embargo Policy

Economic relations cannot be developed independently of the political environment. In the first half of the 1970's, the East-West economic relations in particular underwent an intensification that was closely related and parallel to the process of detente. Thus it seems only natural that the disillusionment that became apparent in the policy of detente after the invasion of Afghanistan extends to the economic relations as well. However, an embargo in regard to the cooperation in the energy sector, in particular in regard to the shipments of equipment, would signify total abandonment of the objectives formulated in the Final Act, for in the Final Act it is precisely the energy sector that is singled out as a field suitable for long-term, stable cooperation, since measures concerning the exploration, exploitation and transportation of energy resources necessitate long-term planning.

The objective of long-term cooperation formulated in the Final Act was not bound up with the hope that there would no longer be any East-West crises. Rather, the participants were fully aware of the fact that a stabilization of the relations in Europe would not by any means rule out the possibility of a continuation of the East-West conflict in the Third World. If the Soviet Union forcibly initiated changes in the Third World and if these changes necessitated countermeasures by the West, the measures contemplated should be chosen with great care so as to rule out any destabilizing effects in Europe.

5. The Global Responsibility

In the light of prognoses submitted by the most diverse institutions such as the International Energy Agency, the Club of Rome and economic institutes, it seems safe to assume that in the 1980's the struggle for the largest possible shares of energy and raw materials will be intensifying. At the same time, the Soviet Union is likely to enter the international markets as a buyer or--if it lacks the financial means necessary--to seek other ways of sharing in the available energy resources, namely by fanning existing conflicts so as to create options for obtaining raw materials. In order to avoid creating--in addition to the potential conflicts in the Third World--an East-West conflict over the distribution of raw materials, the Western industrialized states must see to it that the Soviet Union can exploit the reserves on its own territory--thus increasing, if possible, the supply in the world market--and, as the ultimate objective, that the Soviet Union share in the global responsibility concerning raw material supplies. Naturally, this does not mean that the Soviet Union should be granted additional control over the exploitation and distribution of raw materials--which is one of the interpretations given the proposal by

Portugalov concerning a joint safeguarding of the transport routes in the Persian Gulf;[18] however, it could be interesting on the basis of precisely this proposal to discuss the Soviet conceptions concerning steady raw material supplies in the coming decades. It is difficult to imagine that this increasingly urgent discussion could lead to stable results without the participation of the Soviet Union--a country that on the one hand has at its disposal the most abundant raw material deposits and the largest natural gas and coal reserves and that on the other hand could take advantage of crisis situations, above all crisis situations in the Near East. On account of its great potential in regard to capital and technology and its disproportionately stronger economic commitment in the Third World, the West's position vis-a-vis the Soviet Union would by no means be unfavorable in such a discussion.

IV. The Future Cooperation

1. Projects for the 1980's

Provided that it is possible to come to a political decision in favor of intensified cooperation, one might consider--in accordance with considerations circulated within the ECE--the following projects:

(1) Tapping of the oil reserves in the Barents Sea. The largest untapped oil reserves of the Soviet Union are located in this Arctic region, where Western technology--based on the experience gained in Alaska and in the off-shore work in the North Sea--is far ahead of the Soviet technological capacities. Another problem is the Soviet Union's lack of investment capital for the creation of transport capacities.

(2) Coal refinement in Siberia. Coal-refinement procedures (gasification, liquifaction) developed in the FRG and in the United States could be put to especially good use in the Soviet Union. The conditions are favorable, because in Siberia there still are largely untapped coal deposits (above all the Kansk-Akhinsk Basin), which for the most part can be exploited by surface mining, i.e. at low cost, but which for lack of transport capacities cannot be moved, or only at a cost far exceeding that of production. An on-the-spot refinement of the coal would allow transportation by pipeline at a fraction of the coal transportation costs; moreover, it would create a more flexible energy source and thus increase the supply of oil and gas--energy sources that are in relatively shorter supply.

(3) Coal refinement in Poland. An agreement cor ning production of just under 1 billion cubic meters of fuel gas per year--beginning in 1984 near Kattowitz--was concluded in February 1980 with the Krupp-Koppers GmbH.[20] Upon solution of the financing problem, further agreements in this field are probably desirable.

(4) Natural gas, the only energy source--aside from nuclear power--in regard to which the Soviet Union can hope--on the basis of its own

investments--to achieve production increases, necessitates additional transport capacities. Another pipeline linking the Soviet Union--via Polish and GDR territory--with the West European network in the FRG would be welcomed by the transit countries as well, since they hope to obtain a certain quantity of natural gas in the form of "transit fees." As regards the projects involving the delivery of pipes in return for natural gas, the East-West relations benefit from many years of experience.

(5) The East has repeatedly proposed what it considers a promising project--to link up the East European with the West European electric power network. Certain progress has been made in the discussions concerning the establishment of power-line links at both the Hungarian-Austrian and the Czechoslovak-Austrian borders. A similar link could be established between the FRG and the GDR, what with the FRG's concern with insuring a steady power supply for Berlin. Generally speaking, such links could serve to equalize conditions during peak load periods; on the other hand, unilateral boosts of the Western network by Eastern power plants are conceivable as well.

Such projects can be implemented only on the basis of long-term financing assurance and this means above all state guarantees by the Western countries such as are provided by the German-Soviet Economic Agreement of May 1978 and the supplementary stipulations of the Agreement of 1 July 1980. This implies extensive advance financing by the parties supplying most of the investment funds. Although this may be considered an unbalanced cooperation, it is a quite normal procedure in other regions, both within the Western industrialized countries and in their relations with the Third World countries. Whether the Western industrialized countries still can find more secure regions for their investments is open to doubt. At the same time, however, the Western countries could justly insist on political guarantees by the East concerning efficient utilization of the capital and on the Western investors' right of codetermination in regard to management decisions. In order to overcome the structural and political difficulties involved here, the Soviet Union will have to hold a high-level conference covering a broad range of topics.

2. Procedural Aspects

The committee of "Senior Advisers to ECE Governments on Energy", which was established at the annual ECE conference in April 1979 and which is to discuss the problems in connection with a high-level all-European conference on energy questions, has so far convened twice (October/November 1979 and March 1980). During the first round, the participating governments were asked to fill out a questionnaire concerning the future development of their countries' energy sectors.

The CEMA countries did not follow this agreed-upon procedure to the extent required. In justification, the Soviet Union pointed out that for the

years 1990 and 2000 accurate data concerning the production and consumption of the individual energy sources were unavailable. Realistically, the Western countries could not expect the Soviet Union completely to fill out this questionnaire. However, on account of the general cooling of the atmosphere in 1980, this information ramification was used in the subsequent ECE discussions as grounds for halting the negotiating process; consequently, the Madrid Conference will lack a proposal concerning the staging and the subjects of a high-level energy conference. If both sides are willing to intensify their cooperation, such a conference could still be authorized, provided there is an opportunity in Madrid for detailed, pertinent discussions.

The Development of Transportation in CEMA--Considerations Concerning All-European Cooperation in the Transportation Sector

The economic growth in the Soviet Union and in the states of East and Southeast Europe, which has been continuing for decades and which has been slowing only in the last few years, has led to a sharp rise in the demand for transport services in all sectors. With the expansion of foreign trade, the traffic flow has been intensifying, both in regard to traffic within CEMA and in regard to the traffic between the CEMA countries and the countries of the Third World. Insofar as it is becoming apparent that the available capacity reserves are fully tapped, the present deficiencies are making themselves felt even more strongly. In varying degree, this is the case in all CEMA countries and it is reflected in a large number of publications and official documents. In this regard, one should mention the resolution "Concerning Measures for Improving the Construction, Repair and Maintenance of the Country's Highways" (reprinted in EKONOMICHESKAYA GAZETA, No 18, 1980, p 2), which was adopted at the end of April 1980 by the CPSU Central Committee and the USSR Council of Ministers; the resolution clearly expresses the problems at hand and draws attention to the critical situation in regard to highway construction and motor transport--sectors that do not meet the requirements of the national economy.

In order to prevent the transport system's shortcomings from affecting economic growth, it will be necessary to allocate to the individual carriers a larger share of the investments. But even if this were done, the CEMA states would hardly (if at all) be able to carry out the necessary modernization and expansion of their transportation systems.

In view of these conditions, the question is whether the transportation sector might offer new possibilities concerning economic cooperation along the lines of East-West cooperation suggested by the CSCE Final Act. In view of the transport situation in the CEMA countries, one may safely assume that the Eastern side is interested in such cooperation, at least in certain areas--as long as such cooperation does not provide information on armaments-related sectors.

The present study arrives at the following statements and conclusions:

In regard to /performance/, all of the carriers are insufficient. The shortcomings manifest themselves in various areas:

--In insufficient capacity;
--in the obsolescence of the transport facilities and the resultant deficiencies in the technical equipment;
--in the insufficient mechanization of the loading and unloading operations and in the resultant shortcomings concerning labor productivity and the handling of the transport containers;
--in the lack of spare parts that of necessity leads to stoppages and thus to a shortage of cargo space;
--in the shortage of specialized cargo space;
--in faulty work organization;
--in the hitherto insufficient utilization of the possibilities offered by electronic data processing and the resultant rationalization possibilities.

In the past decades, the CEMA states made considerable investments in their transportation systems. In so doing, they concentrated on key projects and it appears that these investments were preceded by consultations within the CEMA framework. Nevertheless, there still are considerable shortcomings in this area.

With the exception of the Soviet Union, the CEMA countries have not expanded their national /railroad/ networks--even though these networks are generally not distinguished by a high degree of coverage; some of the CEMA countries even curtailed the railroad network.

However, the transport volume and transport efficiency have been increasing considerably, a fact attributable--among other things--to electrification and introduction of diesel engines on the principal routes. But due to the inferior quality of the track bedding, the trains cannot travel at full speed. Thus in this area there still are untapped reserves.

A focal point in the expansion of the transportation sector are the /pipelines/, without which transportation between the USSR and the CEMA states would have been severely impeded. In 1978, the "Friendship" pipeline alone conveyed over 500 million tons of oil.

As regards /maritime transportation/, the CEMA states have been expanding their merchant fleets so as to save or obtain foreign currency. This expansion was accompanied by an extension of the port capacities; nevertheless, as regards the technical equipment of the ports, the shortcomings are still quite extensive.

In most of the CEMA states, /road transportation/ plays only a minor role, largely because of neglect or because of the poor road conditions. However,

trucks, repair centers and other infrastructure facilities are likewise in short supply.

/Air traffic/ is of importance above all in the USSR, where it is the primary mode of cargo transportation, especially in the developing regions. In the past few years, the air fleets of the CEMA countries have been expanded; they are made up almost exclusively of Soviet planes. Within the framework of the CEMA countries' long-term transportation program, a number of airports are being constructed or modernized. Electronic booking systems are to be introduced.

In comparison with the other carriers, /inland navigation/ plays only a minor role in the CEMA countries. The USSR is an exception in this regard; in this country, however, the use of inland ships is restricted by the climate, by the direction of the principal rivers and by the insufficient number and equipment of the inland ports and moorages.

On account of the increasing economic interdependence of the CEMA states and the resultant commodity exchange, the CEMA organs have for a number of years been directing special attention to the /joint development of the transportation systems/. The "Long-Term Target Program" (LZP) that was expressly developed for the transportation sector is to provide the foundation for the joint transportation policy. Essentially, it is five factors that are to determine the development of transportation within CEMA in the coming years:

—Intensification of the commodity exchange within the framework of economic integration;
—the requirements resulting from the increasing trade with third countries;
—economic growth and (in the USSR) regional development;
—establishment of large-scale industrial projects—partly intended to supply CEMA as a whole—entailing high-density effects resulting in strain on the transportation system;
—the increasing production specialization within CEMA, which entails new qualitative and quantitative demands on the transportation systems of the member states.

Since the railroads account for approximately 50 percent of intra-CEMA traffic, they are the principal target of the integration measures. In this respect, a number of measures have been taken—in regard to transport regulations, rates, and above all in regard to the modernization of the railroads and the establishment of a "Uniform Container Transport System"—that are intended to improve the overall situation. The laying of Soviet-gauge track linking the USSR with Romania, the CSSR and Poland naturally is of military significance as well. Likewise, in the realm of maritime navigation, the second most important means of transportation within CEMA, various agreements have been concluded and implemented that serve to expand the cooperation. However, in this field, too, it has not been possible to solve all of the acute problems.

A special problem in regard to intra-CEMA transportation [illegible] the rise in the average transportation distances, which entails increas[illegible] ansport costs for the participant countries. So far, none of the mea[illegible] intended to counteract this development have produced the results de[illegible]

Generally speaking, one can say that the /integration in the transportation sector/ is proceeding along the following lines:

--Via joint planning and plan coordination;
--via joint international CEMA organizations;
--via joint ventures in the transportation sector;
--via specialization agreements;
--via pooling agreements;
--via joint agreements on rates.

The /Long-Term Target Program concerning cooperation in the transportation sector/ comprises a catalog of tasks and measures, implementation of which is regarded as especially urgent:

--In accordance with its general importance, rail transport occupies first place among the fields enumerated. Its efficiency is to be improved above all by increasing the traffic flow on all routes and through coordination of all technical elements.

--In regard to maritime and inland navigation, it is planned to improve the international cooperation of the shipping firms, to expand the repair capacities and to intensify transportation on the Danube.

--In regard to motor transport and highway construction, it is planned to develop organizational forms of cooperation, with special emphasis being placed on insuring a sufficient supply of spare parts. As regards air transport, the objectives are similar. The program does not discuss at any great length transportation by pipeline.

The concrete LZP measures concerning the individual carriers and individual transport connections include the expansion or construction of a number of international railroad lines and international highways, all of which are specified in the program. Of special interest are the measures that are planned in the field of inland navigation and that indicate that the CEMA states on the Danube are looking forward to the completion of the inland waterway from the Danube to the ports in the Rhine estuary and that these states are planning joint operations on this big waterway.

/Cooperation with the West European industrialized states/ could help solve the acute problems in the transportation sector of the CEMA countries. Such cooperation appears to be feasible in three areas:

--In the field of transportation technology through delivery of the modern equipment required;

--in the field of scientific-technological cooperation through transmission of the latest research results and of the practical experience gained in the establishment of transport routes;

--through direct and indirect financial aid.

Large-scale cooperation between the states of the European Community and the CEMA states in regard to the development of an all-European traffic network by means of joint planning and joint financing appears to be more promising than the above-mentioned partial cooperation, since it would help both sides to extend the merchandise traffic and to reduce the transportation costs. In this respect, one should consider expanding the principal West-East and North-South railroad lines and motor transport routes. The LPZ expressly provides for a link-up of the Eastern transport routes with those of the neighboring countries.

However, there are some other problems in regard to all-European cooperation in the transportation sector. Directly or indirectly, investments in the transportation sector are of military significance as well. The assistance lent in the expansion of the Eastern transportation systems also served to improve the strategic position of the Warsaw Pact states in the event of conflict. Consequently, even the cooperation in the transportation sector presupposes a certain degree of mutual trust within the framework of the general East-West relations.

Moreover, in engaging in cooperation in this sector, one must take into consideration the /Eastern pricing practices/ in regard to maritime and air transportation and in regard to navigation on the Danube. The latter should be evaluated above all with a view to the completion of the Rhine-Main-Danube Canal. Thus, prior to any discussion of cooperation projects, it would be good policy (especially in regard to the entry into the Central-European waterway network) to develop Western counterstrategies. In the event of cooperation in the transportation sector, it would be advisable to ensure through contractual arrangements that the Eastern side observe the rules of conduct prevailing in the West European markets.

FOOTNOTES

1. The figures apply to 1978. Source: "World Energy Supplies 1973-1978," New York, 1979.

1a. See Economic Commission for Europe, "New Issues Affecting the Energy Economy of the ECE Region on the Medium and Long Term" (Preliminary Version), Add., 1, Geneva 1978, p 64;
L. Dines, "The Soviet Union: An Energy Crunch Ahead?" PROBLEMS OF COMMUNISM, No 5, Sep/Oct 77, p 44 footnote 6.

2. UN-Economic Commission for Europe, ENERGY/R, 4, 3 Sep 79, pp 4-9.

3. CIA, "Prospects for Soviet Oil Production," ER 77-10270, Apr 77.

4. See opinion poll in: SCIENCE, Vol 206, 4 Dec 79, pp 1379-1382.

5. See A. Krylov, "Rates of Development of Oil Deposits," EKO, Moscow, Jan 80, pp 65-74.

6. CIA, "Simulation of Soviet Growth Options to 1985," ER 79-10131, Mar 79.

7. See "World Energy Supplies 1973-1978," New York, 1979.

8. N. V. Mel'nikov, "Toplivno-energeticheskiye resursi SSSR" [USSR Fuel-Energy Resources], Moscow, 1971.

9. "KSZE Schlussakte, Bundestags-Drucksache" [CSCE Final Act, Bundestag [Lower House] Document], 7/3867, p 13.

10. See G. van Well, "Belgrade 1977--the CSCE Successor Conference and the Process of Detente in Europe," EUROPA-ARCHIV, No 18, 1977, p 593.

11. CIA, "Prospects for Soviet Oil Production, a Supplemental Analysis," ER 77-10425, Jul 77, p 28.

12. Due to the oil price hike, the Soviet Union can significantly improve its trade balance. At best, however, the Soviet Union thus could offset the discontinued energy exports to the West, but it could not effect any large-scale purchases of energy. At a price of $600 per ounce and with sales totaling 400 tons (this volume was attained in 1977 and 1978, whereas the 1979 volume was much lower), the Soviet Union would take in $7.7 billion--an amount approximately equivalent to the proceeds from the 1978 oil and gas exports to the West.

13. See F. Mueller, "Observations Regarding the Problem of Dependence in East-West Economic Relations," Stiftung Wissenschaft und Politik [Science and Politics Foundation], AP [Report] 2106, Ebenhausen, July 1976.

14. "We have always insisted that progress in technical fields, such as trade, had to follow--and reflect--progress toward more stable international relations," Kissinger 1973, quoted from: D. Finley, "Detente and Soviet-American Trade: An Approach to a Political Balance Sheet," STUDIES IN COMPARATIVE COMMUNISM, Vol 8, No 1/2, 1975, p 73.

15. See the withholding of oil drilling equipment in connection with the proceedings against dissidents in the Soviet Union in the summer of 1978. See the conceptions by S. Huntington that were developed in talks with Security Advisor Z. Brzezinski: "Trade Technology and Leverage: Economic Diplomacy," FOREIGN POLICY, No 32, Fall 1978, pp 63-80.

16. H. Schmidt, "The Alastair Buchan Memorial Lecture," SURVIVAL, No 1, 1978, p 8.

17. "Deutscher Bundestag Drucksache" [FRG Lower House--Document], 8/2143, 29 Jul 78.

18. See HANDELSBLATT, 7 Feb 80, p 1.

8760
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CEMA CONFEREES DISCUSS AUTOMATIZATION OF GOVERNMENT PLANS

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 10, Oct 80 pp 124-125

[Article by V. Nikitin and Ya. Urinson: "Conference of Experts on Questions of the Construction and Application of Automated Systems of Planning Calculations of Governmental Planning Bodies of CEMA Member Nations"]

[Text] The Conference of Experts on the Questions of Construction and Application of Automated Systems for Planning Calculations of the Governmental Planning Bodies of the CEMA Member Nations took place in April 1980 in Tashkent within the purview of the CEMA Committee on Cooperation in the Field of Planning Activities.

Taking part in it were delegations headed by N. Naydenovyy (People's Republic of Bulgaria, deputy chairman for the State Planning Committee); A. Vagi (Hungarian People's Republic, department head of the Institute for Economic Planning); G. Fayka (GDR, department head of the State Planning Commission); Kh. Barrera (Republic of Cuba, director of the Computer Technology Administration of the Central Planning Council); U. Bolde-Erdene (Mongolian People's Republic, department head of the State Planning Commission); Ya. Kramarchuk (Polish People's Republic, general director of the Government Computer Center for the Planning Commission of the Soviet of Ministers); Kh. Menesku (Socialist Republic of Rumania, director of the Electronic Computer Center of the State Planning Committee); N. P. Lebedinskiy (USSR, department chairman of the State Planning Commission, USSR); L. Krzhemechek (CSSR, director of the Computer Technology Institute of the State Planning Commission) and the chairman of the CEMA Secretariat, Yu. V. Borodin.

N. P. Lebedinskiy opened the conference. He stressed the great significance which is given in our country to the questions of the practical use of electronic computer technology and economic-mathematical methods in the improvement of planning, and also noted that the accumulated experience of the cooperation of the planning bodies of the CEMA member nations in the field of development of automated planning systems attests to the mutual benefit of the present bilateral relations. N. P. Lebedinskiy expressed conviction that the further development of cooperation in this field on a multilateral basis will facilitate the successful resolution of the planning modernization tasks facing our countries.

K. A. Akhmedov, deputy chairman of the Soviet of Ministers and chairman of the State Planning Commission of the Uzbek SSR greeted the conference participants.

In plenary meetings, the conference participants exchanged information on the state, the problems and the prospects for the building of automated planning calculation systems for the state planning bodies of the CEMA member nations. With consideration of the expressed opinions, the editorial group formed by the conference (the chairman is the first deputy assistant to the head of the Main Computer Center of the State Planning Commission USSR, V. B. Bezrukov), prepared and approved the following: generalized material on "Methods for Construction and Experience in the Use of Automated Planning Calculation Systems of the Governmental Planning Bodies of the CEMA Member Nations"; proposals for a program for the exchange of experience in the cited field for the period from 1982 to 1984 and a draft resolution of these questions for the upcoming 11th Conference of the Assistants to the Chairmen of the Central Planning Bodies and other responsible figures, who are in charge of questions on the improvement of planning and management systems of the economies of the CEMA member nations.

The generalized material notes that in the planning bodies of the CEMA member nations, great attention is given to the development and application of economic-mathematical methods and electronic computer technology for purposes of planning modernization. The works in the CEMA member nations in this field are identical in their initial theses and final goals. Thus, the necessity for the complex solution of the problem of automating planning with consideration of its methodological, informational, mathematical, technological and other aspects and the expedience of sequential introduction of the methods and means being developed for information processing into the practice of planning, both for resolution of traditional, as well as basically new economic planning problems, are generally recognized. In this, the basic goals of planning process automation lie in an increase in the balance and the operability of planning calculations, more complete coordination of the indicators of various sectors of the state plan, the provision of multiple variance of the basis and optimization of the planning decisions, improvement in the follow-up for plan fulfillment and the development of a planning information base.

Within these general theses, two approaches to their implementation may be isolated. The first is oriented towards the systemic application of economic-mathematical methods and electronic computer technology in planning and contemplates the development of a general concept for the construction of automated systems of planning calculations, whose stage by stage realization provides a sequential improvement in the planning practice. In this case, the design and introduction of automated systems into the work of the planning bodies are being conducted according to a common long-range plan, parallel to all of its supporting subsystems and functional assignments in conditions of a clearly determined organizational structure. The second approach gives preference to local automation of planning calculations and independent development of separate software. The central planning bodies of the CEMA member nations, who support this approach, are basically developing short-term programs for the automation of planning calculations in order to solve the next urgent problems.

It is indicated in the generalized material being considered that the economic-mathematical models being developed and used in the central planning bodies of the CEMA member nations are designed, chiefly, for medium and long-range planning calculations. Modeling methods in the annual planning mode are used in the planning bodies of the GDR, the Polish People's Republic and the USSR.

Interindustry balance of payments, industry and complex optimizational, economic, as well as simple regressive models, have received the greatest dissemination.

Cost and real-cost interindustry balance of payments models are composed by the planning bodies of a majority of the CEMA member nations and are used basically for justification of control figures for the last year of the long-range plan. Dynamic interindustry models are used by the specialists of the planning bodies of the People's Republic of Bulgaria, the Hungarian People's Republic, the Socialist Republic of Rumania and the USSR at the national economic level and in the People's Republic of Bulgaria, the Polish People's Republic, the Socialist Republic of Rumania and the USSR at the industry level as well, and in the Socialist Republic of Rumania, at the level of individual objects of capital construction. An optimizational model for the development and distribution of agriculture is prepared in the State Planning Commission of the Mongolian People's Republic.

The econometric models being created in a number of CEMA member nations are used in the planning bodies, either as an instrument of so-called passive prediction, or in an imitational mode.

The simplest regressive models, especially trend models, find use for the prediction of individual indicators in the planning bodies of the Hungarian People's Republic, the GDR, the Polish People's Republic, the Socialist Republic of Rumania and the CSSR.

In the general opinion of the experts, the economic-mathematical models are used most widely in the activity of the planning bodies of the Hungarian People's Republic, the Polish People's Republic and the USSR. There are also extensive works in these countries and in the CSSR for the formation of systems of economic-mathematical models.

The generalized material gives the characteristics of the universal system software available in the planning bodies of the CEMA member nations. It is noted, in particular, that the pool of electronic computers consists basically, of third generation electronic computers with a capacity in their operational storage devices of no less than 512 kilobytes and magnetic disk storage devices with varying capacity (from 7.25 to 100 megabytes). Moreover, minicomputers are widely used in a number of countries. In the majority of the computer centers of the planning bodies of the CEMA member nations, modern softwear is used, where the use of multiprogram operational systems and programming systems based on Programming Language 1, FORTRAN, COBOL and others is common for all computer centers.

Works in the field of building automated data banks for the planning organs of the CEMA member nations are directed towards the formation of integrated data bases for complexes of tasks, designed according to unified, methodological principles, which have a common logic structure and which function in the framework of a common system for data bank management.

The proposals under the program for cooperation from 1982 to 1984, developed in the course of discussions and with consideration of the directions in the further works for planning automation in the CEMA country members, include the following basic themes: organizational principles and methodology for the development of automated planning calculation systems; the use of economic-mathematical models to improve planning; problems of information support, the creation of data banks and the development of technical and economic information classification systems and the experience in the practical use of automated planning calculation systems in planning operations.

The conference participants expressed satisfaction in its results, which will facilitate the practical solution of tasks which face socialistic countries in the field of planning modernization based on the use of modern electronic computer technology and economic-mathematical methods.

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RAILWAY NETWORK TO BE FURTHER ELECTRIFIED

Bonn INFORMATIONEN in German No 18, Oct 80 pp 14-15

['Background' report by FRG Ministry for Inner-German Relations: "GDR Reichsbahn Network To Be Further Electrified"]

> [Text] According to GDR planning projections for the coming five-year plan (1981-1985) an additional 700 km of GDR Railroad [DR] tracks are to be electrified; so far, only 1,514 km (11 percent) of the total network of 14,199 km have electrified tracks. The GDR hopes that the new measures will result in better energy use of the brown coal which is still available here in abundance and from which approximately 85 percent of GDR electricity is produced, as well as, above all, in reduced imports of expensive fuels needed to operate diesel locomotives, the principal means of transportation.

In a talk to transportation officials in Gotha at the beginning of this year, Minister for Transportation Otto Arndt pointed out that increased conversion of the DR to electrified operation will be the central task for the GDR railway system in the eighties. Arndt said among other things:

"During the coming years, electrification will be the DR's most important rationalization measure to meet growing transportation challenges and, at the same time, to reduce primary energy costs by about 20 percent and labor requirements by about 10 percent by 1985. Because of the high energy effectiveness of electrified railroad transportation and because of the fact that domestic construction capacities and locomotives built in the GDR can be used, the electrification must be considerably accelerated."

With these reequipment measures the DR is trying to take into account the statistically proven facts that--measured in terms of specific energy consumption--the locomotive and transport achievement produced by electric locomotives is superior to all other transportation means.

However, it is only in the last 2 years that the increased electrification of the DR has been intensively promoted. Up to that time--for more than 20 years--preference had been given to the changeover from steam locomotives to diesel locomotives.

This important decision in traffic policy had primarily been based on the fact that compared to electric locomotives the construction of diesel locomotives required considerably less expenditure, and that the use of diesel locomotives was not limited to electrified tracks.

However, the changeover process took a long time because the railroad network had to be expanded first and industry investments were given priority over the modernization of railroad transport. Whereas in 1960 94.4 percent of all locomotives in the GDR were still powered by steam (diesel locomotives: 0.7 percent; electric locomotives: 4.9 percent), the ratio had changed considerably after 10 years: the percentage of steam locomotives had decreased to approximately 42 percent, diesel locomotives had risen to more than 41 percent, and electric locomotives had a share of 16 percent.

The changeover process continued up to this year. According to GDR statistics of 30 April 1980, steam locomotives have decreased to about 9 percent, diesel locomotives have increased to about 72 percent, and electric locomotives to 19 percent.

The preference given during the past years to a changeover to diesel locomotives was the reason that electrification of railroad tracks was only of secondary importance during that time. Since the beginning of the sixties—in 1960 there were 708 km of electrified tracks in the GDR--the speed of electrification of railroad lines has decreased from one five-year plan to the next. Whereas before 1970 650 km of tracks were electrified, the GDR traffic management changed only 97 km of tracks to electricity between 1971 and 1975.

In 1977/78, the absolute low point of electrification efforts was reached. According to official statistics of the CEMA Secretariat in Moscow, a total of only 6 km of electrified tracks was built in the GDR in those 2 years.

According to information provided by the GDR transportation minister, last year the GDR electrified a total of 94 km of tracks through the concentration of investments on main railroad lines that needed improvement, and through several concentrated construction projects.

A comparison between electrified railroad lines in the European CEMA countries shows that the GDR is in last place among them. The percentage ratio of electrified railroad tracks in relation to total track length in the different countries is as follows (as of 1978): Bulgaria 36 percent, USSR 29 percent, Poland 27 percent, CSSR 22 percent, Romania 18 percent, Hungary 17 percent, GDR 11 percent.

The GDR also trails in the speed of railroad track electrification as compared to the construction and modernization efforts by the other CEMA countries. In first place among the CEMA countries in the conversion of railroad tracks to electrified operation are the USSR, Poland and Romania. The difference in the speed of electrification between the GDR and the other CEMA countries during the past 13 years can be seen in the fact that only about one-tenth of the railroad tracks electrified in Poland was electrified in the GDR during the same time.

The respective plans that were now published in the GDR, "to create in the traffic system and other branches of the national economy conditions for a greater speed of

the electrification of the German railroad between 1981 and 1983," do not reveal how these goals are to be reached financially, especially since the railroad tracks to be electrified are first scheduled to be reconstructed into dual tracks.

And even if the GDR should succeed in electrifying an additional 700 km of tracks by 1985, it would still be in last place among CEMA countries in this form of traffic modernization with a ratio of 15 percent of tracks that would then be electrified.

8889
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MODERNIZATION OF ENTERPRISES ORGANIZATIONAL SYSTEM DISCUSSED

Budapest PARTELET in Hungarian No 11, Nov 80 pp 12-17

[Article by Istvan Lendvai, deputy chief of department of the Central Committee: "Modernization of the Enterprise Organizational System"]

[Text] The Hungarian economy began to develop rapidly following the liberation. Under the new social conditions, it was a basic goal of industrial policy to develop a large domestic industry which would be competitive even with industrially more developed countries. Following the changes in ownership and the goals of industrial policy, the form and organization of management have also changed greatly. In the course of the last 3 decades, Hungarian heavy industry was developed which is the foundation of our economic development. The establishment of large socialist enterprises made it possible--in spite of all of our difficulties and concerns--to meet the country's rapidly increasing demands, on the one hand, and to make them the bases of the ever more significant international barter and cooperation.

The process of large enterprise development was aided and speeded up from many respects by the centralized organization which took place in the 1960s. The organization of industrial enterprises went through a great change during this time. The extent of centralization is indicated by the fact that the number of enterprises decreased at that time by about 40 percent. As it is well known, the measures were based, among other things, on the fact that organizations which have larger intellectual and material resources can make a better use of both technical and market possibilities.

The facts of the past decades clearly show that the organizations which became larger and more concentrated were better able to meet the demand for growth, especially quantitative growth. This does not mean, however, that the proliferation of large organizations created a favorable situation in every respect. The permanent shortage of certain--mainly consumer--products is also related to the negative economic effects of organizational makeup.

Precisely as a result of the earlier economic development, economic conditions have greatly changed by today. Our special problem today is how to cope with the great changes in the external conditions. Since we cannot change them, we must adapt ourselves--and the various, including organizational, elements and framework--to them.

The new conditions are also reflected by the fact that production became more expensive and the country became more sensitive toward the price changes on the foreign market and toward the market conditions. It is becoming more and more clear that it is increasingly difficult under the new market situation to sell goods made in the earlier production structure with outdated technology and ever increasing costs. It is apparent from this that the country's external and internal economic balance depends on an economy which is updated more rapidly and which is more efficient in production and marketing. To increase the competitiveness of our products and to make the marketing of modern products more efficient, a rapid technological development and a flexible market economy are required.

International competitiveness is, of course, also related to other things beside the problem of modern technology. To find a market or a buyer is not the only objective. We can participate in international barter trade only if our exported products can be sold at good prices or if the cost of domestic goods' production is competitive with prices recognized by the world market at the time of purchase.

One of the basic objectives of the economic management system's present improvement is precisely to increase the proportion of profitable and modern products, and to set the cost of our products to world market prices, i.e., to make the process of production and marketing--from research to marketing of the product--rapid and flexible enough so that it can follow the changing demands of the foreign markets.

Not all production and organizational structures can efficiently serve to improve the economic balance. We want to change this, on the one hand, by eliminating unprofitable activities, by decreasing their central subsidy, and by regrouping them into other, more efficient activities. On the other hand, we want to update the organizational system by making every element of the economy (the enterprises, factories, plants, shops) sensitive to changes in the market, i.e., to economic demands and conditions of the world market which we must face as objective circumstances.

In Line with the Demands of Development

These econo-political goals can be reached through the further development of the entire economic management system. This is what the system's continuous modernization is supposed to aid, and this is the effect of improving the work, and decreasing the staff of central and governmental organs; of changing the organizational structure of industrial management; of the present review of the network of research and organizational institutes and their more direct connection to the production process; and of further improving the enterprises' organizational system to make them more adaptable to the new circumstances.

The modernization of the enterprises' organizational structure has many resources and possibilities for the improvement of economic efficiency. We want to exploit this possibility, on the one hand, by improving and modernizing this structure and, on the other hand, by modernizing the organizational system within the enterprise and the mechanism of internal management.

The enterprise organizational system is too centralized in Hungary today, and large enterprises have the upper hand. At the same time, the well-equipped small and medium-size enterprises are missing. According to international experience, there

is a double tendency in industrial development. On the one side, large enterprises play an increasing role, mainly in areas where they are needed for technological advancement, mass production, and acquisition and maintenance of markets. On the other side, the proportion of small and medium-size factories also increase significantly in the same countries. They play a significant role in domestic supply and, at the same time, serve as a supplementary background industry for the large enterprises. The experience of recent years shows that countries which have a well-distributed organizational structure can adapt themselves better, more easily and efficiently to economic and market conditions.

Notwithstanding, the number of independent economic units in Hungary has shrunk to about half between 1960 and 1980. Most of the small plants and cooperatives run by councils were incorporated by large enterprises as industrial units. This played a role in that the economy's flexibility has not increased adequately, and if we consider that the large enterprises' internal accounting and interest relations hardly improved, i.e., that the large enterprises' factory units are isolated from the effects of the market, then it is clear that this organizational change does not strengthen the economy's adaptability.

But the anachronism of the enterprise organizational structure is manifest in other ways, too. The fact that research and technical development is frequently separated from the enterprise management in a way that alienates the research, developmental and organizational institutions from the production enterprises' system of interest, also has a negative effect on economic efficiency. Their organizational isolation and the lack of mutual financial interest makes the use of research in production processes difficult.

There is a similar concern regarding the relationship of production and marketing as well. The foreign trade enterprises are not only organizationally separated from the production enterprises but their lack of, or weak, organizational relationship is coupled with loose relationships of interest. This weakens the mutual effect of production and foreign trade and decreases the efficiency of marketing.

Evidently, these relations are not so clear and simple in the complex system of economic life. In reality, there are, of course, efficient producing and marketing organizations. There are, at the same time, entirely outmoded and outdated structures as well. In order to be able to assess the goal, essence and meaning of changes that become necessary at various locations, we must look at the problems—and the efforts to change—which characterize the economic processes as a whole.

It also follows from this that we must not change, of course, the entire enterprise organizational system, that we should not consider the operation of large enterprises as inherently faulty, and that we may not hope to solve all of our problems by increasing the number of small and medium-sized enterprises. We are dealing here with a process in which we must find the points where the size and organizational complexity of the enterprise is out of proportion with the demand for market flexibility (resulting from product characteristics), and where the production and marketing process requires another form of organization. At the same time, a network of small and medium-size factories must be created which can, as an integral supplement to the large industry, flexibly follow public demand, the production's cooperational demand, and the possibilities of exporting.

What Changes are Necessary?

Experience shows that we must exercise caution and due discretion in dealing with organizational questions. However, this does not mean that we should overlook the existing and necessary possibilities for change or that we should accept for a long time an enterprise organizational structure which has become obsolete. For this reason, the party and government leadership decided to take more decisive steps toward the improvement of the enterprise organizational system through following the changes in the economy and through keeping pace with the modernization of the economic management system.

An important element of the necessary changes is the examination by government authorities of the enterprises' existing organizational systems. The ministries designated those enterprise organizations where the examination was justified, and they worked out, together with the enterprises, proposals for the necessary changes. Government organs have already discussed and accepted several of these proposals. On the basis of proposals that have already been accepted, several trusts will be closed down. Some units which belong to trusts or large enterprises will become independent enterprises. In some areas, where a close management by a trust is not justified but where some kind of central control and coordination is needed, central offices have been created within the ministries which will coordinate these independent enterprises on the highest level. It is important to emphasize that only those factory units, factories and plants should continue to be independent or be organized into enterprises where the vertical relations between the large enterprise's factory units are loose and deficient, i.e., where the individual factories are, in themselves, closed manufacturing and producing units—or can be made such with little investment.

This process (i.e., the organization of factories and factory units into independent enterprises) cannot be considered either as a general task or as a campaign. The point is much rather that the enterprises' organizational system should change into a flexible and efficient organizational form in a continuous and most suitable way which follows economic changes and is more flexible and adaptable to market demands. Organizational modernization is thus not part of a temporary action, but a constant element of the modernizing economic management, an element which continuously matches the enterprise organizational structure with life's changing requirements—albeit only to the extent that it is necessary and in areas where it is justified.

It is also one of our basic efforts to change the internal economic management system, economic flexibility and interest relation of medium-size and large enterprises so that the factories and factory units, too, can sense the effects of the external market and be able and willing to do management and development work that is compatible with the requirements of real economic conditions. This process cannot be dictated to the enterprises from above. It is the concern and task of every enterprise to establish its own internal mechanism. The government's effort, essentially, is to make the enterprises more willing to introduce changes. This effort must be formulated now not as a wish or a desirable goal but as a definite requirement which at the same time aids the enterprises to develop an internal economic management mechanism that is the most modern and most sensitive under the given economic circumstances.

The development of the internal management system is hindered not only by a lack of knowledge about modern enterprise management, but in many cases also by a fear of sharing authority within the enterprise, and frequently by a lack of confidence in local leaders. To change this, both the social institutions and enterprise managers must adopt a new and modern way of thinking.

The fact that the enterprise's internal management system has hardly improved in Hungary through the years, is mostly connected precisely with problems in attitude and consciousness. Now, when the requirements of both the external economic situation and internal progress mean more stringent tasks for the enterprises, the modernization of the internal mechanism becomes a basic element and essential requisite of staying afloat or moving forward. It must be noted everywhere that human creativity, personal responsibility and action that accepts risks and sacrifice are the things which can lead to a higher level of development.

The reorganization, i.e., the modernization of the internal mechanism of the enterprises is only one aspect of the task. In addition to the large enterprises, there is a need for a significant network of small and medium-size factories. The building of this network is made easier if the independent factories and factory units which secede from the large enterprises are organized into enterprises. But this is not enough. We must find the way to speed up the establishment of small and medium-size enterprises. The expansion of licenses for establishing enterprises is under preparation at present. We want to aid the existing management organizations to create so-called branch enterprises. We also want to aid the cooperative movement to rapidly increase through a simplified process of establishing cooperatives, the number of small units of production and service which are missing from the present enterprise structure. We formulated this unequivocally as a political goal, but the conditions and circumstances of the implementation have only been partly worked out, i.e., will be worked out in the future. However, the process has been started. It may be mentioned as an example that, in connection with the improvement of the industrial services, the Council of Ministers accepted a resolution to develop new and modern forms of service organizations. This way it will become possible to increase the number of industrial cooperatives faster in the future, and to have workers who, in addition to their regular jobs, can work in the services of the so-called specialized groups which function in addition--or belong--to the cooperatives. It will become possible to increase the number of small producers and artisans more rapidly, and to speed up the process of licensing for those industrial workers who want to go into services in addition to their regular jobs.

Strengthening Political Responsibility

It may happen that, because of rigid theorizing, ignoring reality or, in some cases, sheer habits, some people oppose the proliferation of small industry and small plants. It would be a mistake to disregard this. For this reason, the eliminating the onesidedness of the organizational structure and bringing problems out into the open make it mandatory for us to take a clear and definite stand: socialist progress in Hungary is being built at present--and will be built in the future--on industrial mass production. What we are dealing with here is eliminating the onesidedness of organizational structure. We must not forget either that the network of small and middle-size factories, namely, the improvement of industrial and service cooperatives which are filling gaps in public supply and mass industrial production. They are still needed today.

It may also be added that the workers' opportunity for moonlighting and the higher number of artisans entails only insignificant changes in the structure of the national economy as a whole. There is no talk about pushing socialist heavy industry into the background or decreasing the leading role of workers in the heavy industry. On the contrary, the structural modernization of socialist industry as a whole, and the increase of its capacity and efficiency, will in reality strengthen the socialist accomplishments, will boost the efficiency of production, and will improve public supply. This is somewhat similar to the process which took place in the improvement of agricultural household plots and subsidiary enterprises and which--we can already make this statement today--played, no doubt, a large part in the rapid development of Hungarian agriculture, in the strengthening of large agricultural enterprises, and in the outstanding results of the large socialist agricultural enterprises.

Thus the organizational modernization of socialist enterprises is a must for economic progress. For this reason, it is necessary to overcome adherence to the earlier practices, prejudice against change, and fear of problems related to change to remove as many limitations of consciousness and attitude as possible.

Everyone reckons with the fact that such a change entails many human problems, existential concerns, and conflicts arising from the change of habits. But, precisely because the objective economic circumstances necessitate these changes, both the party organizations and social institutions must strive to implement the changes as smoothly as possible, eliciting as few economic difficulties and human conflicts as possible. This is a great task for both the party organizations and the state and economic leadership. It requires a higher [degree of] political responsibility in all areas.

The initial experiences show that the preparations for organizational changes, the understanding of the goals and essence of the changes, and the elimination of unfavorable effects require more care and foresight, and more human concern. It is unacceptable to make preparations for organizational changes without discussing them in time with--and without soliciting the opinions of--the collectives concerned and, especially, the people directly concerned. Even a lack of goodwill originating from clashing interests and temporary opposition may be handled better by openly and clearly stating the necessity and reasons for the change and by involving the people concerned in finding the best solution. It is also unacceptable that in some cases the local party and social organizations are only being informed of finished facts.

Every leader must accept the fact that questions which concern the destiny of people cannot be solved without people. He who acts in such a way, only multiplies his troubles. At the same time, there is another requirement connected with this matter: decisions which are mutually debated, and made after the debate, must be consistently implemented by everyone. A one-sided priority of personal interests and the undermining of the discipline in the implementation cannot be tolerated from anyone. The complex task of the party and social organizations is precisely to help in establishing flexible forms of organization and management that are in the interest of the national economy, to promote social acceptance of correct changes, and to watch for the orderliness and discipline of the decisions' implementation.

9414
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SUPPLEMENTARY ACTIVITIES OF LARGE FARMS DEEMED USEFUL

Budapest TARSADALMI SZEMLE in Hungarian No 11 Nov 80 pp 48-53

[Article by Magda Szekelyi, university professor of Engineering and Management Training Institute of Ministry of Agriculture and Food: "On the Supplementary Activities of Large Agricultural Plants"]

[Text] In the period before the socialist reorganization the production of Hungarian agriculture increased annually by 1-1.5 percent. In the last decade the rate of development has doubled this, 3 percent annually, and even exceeded it in the first half of the 1970's. As a result of this our socialist agriculture has given the Hungarian people twice as much basic food stuffs as earlier. At the same time there has been a considerable increase in agricultural and food exports, from which the foreign currency income has increased sixfold since the development of large socialist farms.

A decisive role in these results was played by the fact that the large socialist farms were gradually developed and reinforced, that in addition the forces of production increased to a considerable degree, and that the agricultural production began to be collected by means of basic, modern industrial facilities.

During the last period of this developmental process the importance of the supplementary activity of large farms has increased. The resolution of the 12th MSZMP Congress drew attention to this fact: "From the viewpoint of the national economy it is necessary to support the useful supplementary activities of the agricultural enterprises and cooperatives."*

Hungarian agriculture has rich traditions of supplementary activities. Formerly on large estates and peasant farms alike food preparation, construction material production and construction, timber processing, transportation, marketing, cottage and other small industry activities,

*"A Magyar Szocialista Munkaspart XII. kongresszusanak jegyzokonyve." [The Report of the 12th Congress of the Hungarian Socialist Workers' Party], Kossuth Konyvkiado, 1980, 477 pages.

such as shoeing horses, and repairing machinery and equipment were a considerable part of farm management. For a long time during the period of socialist agricultural transformation the division of labor and specialization had a biased explanation. Partially because of this (and partially as a result of the level of the forces of production at that time) production cooperatives were not allowed to have their own tractors during the 1950's, while by the middle of the 1960's legal measures most decidedly and strictly forbade industrial activity in connection with farming, for example, mixing fodder, repairing machinery and so forth.

Changes were already gradually beginning in all of this during the preparation for the mechanical reforms, while the reforms legalized and opened the road to the development of supplementary activities. By the second half of the 1960's the state farms and the production cooperatives had not only developed agricultural production in the strict sense, but also the industrial service connected with it (for example, mixing fodder), and the processing and the direct sale of food as well. This set the base for the large farms, operating and specializing on a developed technical level, to go into mass production as long as its economic materialization does not at the same time necessitate industrial activities (construction, repair, fodder mixing, other services and so forth) or internal cooperation needed to market finished products, as industrial mass production generally does.

The large-scale production of food and of food stuffs, a signifcant expansion of which followed in this same period, likewise made it necessary for large, modern, farms to provide for the processing of some products and for direct sales to consumers. Without this some of the food produced would spoil, because it would only be possible to use part of the products, very perishable and difficult to transport, which would habitually remain in large amounts on the farms after large-scale marketing to buying agencies and processing enterprises, or because of recurrent difficulties in marketing.

The development of supplementary activities, mainly food industry processing on the spot, has been necessitated on large farms by the fact that significant numbers of village workers have left agriculture and become consumers of agricultural products since the trend towards large farms has become general. Along with the development of the wholesale food industry, the development of the food processing activities of large farms has also become justified because of demands for the elimination of gaps in food supply, for an increase in assortment, and for the production of goods meeting local customs and tastes.

Large farms, primarily production cooperatives, have developed supplementary activities which are not at all connected with the agricultural production. As a result of using our existing capacity (labor force, buildings) to continue these activities (for example, industrial enterprise paid labor), to replace a lack of income or because of the deficient capacity

of small plants, such activities have come into being to satisfy the actual need for products provided in this way. This part of the supplementary activities of large farms serves national economic purposes, and concerns national economic business, while the large farms are based on economic interests.

Under these influences the supplementary activities of large farms developed at a rapid rate at the end of the 1960's and during the 1970's. The increase in enterprise independence with the implementation of the mechanical reform produced significant incentive for this.

From the national economic viewpoint, generally to be considered to be helpful, in individual cases abuses and attempts to profiteer, in connection with outside people, occur along with useful efforts. The party and government resolutions introduced early in the 1970's helped to eliminate these harmful phenomena. Under their influence the supplementary activities developed in a helpful direction, while genuine plant and national economy requirements were satisfied.

The sales income proportion from supplementary activities rose from 37 percent in 1975 to 44 percent in 1979 in the economy of the large farms (state farms and integrated farms, tree farms, agricultural production cooperatives, specialized cooperatives and associations). Almost 80 percent of the supplementary activities of large farms is indirectly connected with agricultural production, and therefore "lengthening it" or serving it yields a more economic organization. These activities include crop shipping and drying, fodder mixing, wood production and processing, viticulture, agricultural machinery repair and agricultural construction, services accompanying the integration of small production and so forth.

The accompanying table (page 4) exemplifies well the total and the proportions of the supplementary activities.

Food industry processing is important in the supplementary activities of the large farms. The farms began to develope this at the end of the 1960's. The state farms have a larger share in food processing, while the agricultural cooperatives have a smaller share. There are also large differences from one megye to another. The production of four megyes (Bacs-Kiskun, Pest, Komarom and Hajdu-Bihar) provide more than half of the income derived from food industry processing. The large farms fulfill a much larger role than the national average in supplying some areas with food, and especially in expanding its variety.

Lumber processing is associated with the forestry of the large farms. At present about 1,000 lumber industry units are busy supplying lumber industry basic materials and semifinished products in the first place, and also packing and other wood products.

Main Indicators of Activities of Large Farms in 1979 (in percentage)

Item	Agricultural Cooperatives	State Farms	Agricultural and Forestry Farms Together
Basic activities	56.5	63.4	57.4
Supplementary activities relating to basic activities	32.2	33.8	33.3
Including:			
- Food industry	4.7	11.6	6.1
- Industry	4.8	5.2	6.3
- Construction industry and transport	3.3	4.1	3.5
- Commercial	19.4	12.9	17.4
Supplementary activities unrelated to basic activities	11.3	2.8	9.3
Including:			
- Light industry	1.2	-	0.9
- Metallurgy and machine industry	4.0	2.1	3.8
- Chemical industry	0.9	-	0.6
- Construction industry and Transport	4.7	-	3.5
- Other	0.5	0.7	0.5
Total of basic and supplementary activities	100.0	100.0	100.0

Source: data from MEM STAGEK

The need for cooperation in construction activities and other industrial service activities keeps increasing with the growth of production and the development of the technical base. The construction industry activities developed rapidly in the 1960's and the first half of the 1970's. In addition practical experience has shown that it is not expedient to squander the construction and other industrial service capacities of the large industries for small-scale village construction and other services, scattered for the most part. It is obvious that the directly concerned large farms themselves organized part of the industrial

services independently, or in the form of joint interenterprise cooperation with economy kept constantly before their eyes.

The large farms unite most of their transport capacity with transport suited for their own, household and auxiliary farms. Transport suited for outside customers constitutes only a few percent of the supplementary activities of the farms, which arouses criticism because a solution to local transport tasks is rather problematic, and at the same time the large farms have considerable free transport capacities available at various times.

In the last few years commercial activity has increased more significantly and its quota proportion in the income from the supplementary activities is greatest. Some 60 percent of the returns in the commercial activities of the production cooperatives come from selling household produce, thus linked to he tasks of integrating and organizing small-scale production. The cooperatives operate approximately 1,400 shops and 1,300 guest units. These units do not have heavy traffic, but their role is important in local supply. In the development of marketing in their own shops the large farms can experience a decline, a block. For example, the number of large farm sites selling vegetables and fruit declined in 1980 from that of the previous year. However, because of the large reduction in the profit margin, a further increase in the share of sales directly through their own shops would be justified.

Some of the large farms, mainly in the megyes of Pest, Komarom and Veszprem, also provided machine, heavy and light industry activities in the 1970's. Most of the state farm production is composed of the manufacture of building elements and agricultural technology equipment, provided by a total of five or six farms. To a greater extent the machine, chemical and light industry activities are also directed towards the supply of tools and equipment necessary in agriculture. They undertake to supply industrial products -- hardware, mass products, clothing, plastics, textiles and garments, lumber and so on -- or to accomplish various operations for which there is a need in the national economy, and accept orders on contract. In many cases they perform work by fitting it in or by paid work.

The authorities compress the supplementary activities unrelated to vertical food production arrangements by putting strict limits on them through legal measures and by the stringent prescription of possibilities, conditions and requirements. The proportion of the supplementary activities not related to basic production, and thus product supply and service outside of food production and paid work suitable for the industrial enterprises and cooperatives, in the entire income is 11.3 percent in production cooperatives, 2.8 percent in state farms and 9.3 percent in all of agriculture.

From what has been said so far, it is quite clear that in recent years in Hungary the production profile of large farms has organically absorbed all of those economic activities which are indispensable for assured performance of large-scale management within the vertical food production arrangements and for lack of worry about expanded reconstruction. Consequently vertically directed cooperation within the large socialist entities is being expanded and diversified. Specialized production organizations developing in raw material production are more and more frequently occupied with processing, packing, stocking and selling directly to consumers. Thus at the same time specialization and vertically directed expansion are characteristic of the change in the production organization of the large farms, giving their management a more specialized, but at the same time more complex, nature.

From the social and enterprise standpoint these changes are mutually beneficial. The vertical development of the farm management, along with the evolution of the specialized production organizations:

-- First of all results in more goods, and contributes to a betterment in the variety of goods supplied, to a supply of better food, sometimes to an expansion of the goods export base, and to reducing import needs;

-- To a significant degree aids in organizing the local industrial, transport, cultural and sanitary services, and helps satisfy needs;

-- By undertaking paid jobs and working them in it usefully complements the production of the extremely concentrated large industrial enterprises, and partially replaces lacking small and medium plant capacities;

-- It facilitates better utilization of the basic working period of workers, and the solution of local labor force economy and employments tasks; and

-- It expands the sources of income, and thus of stockpiling, for the large farms. As a result production increased significantly in many farms and even became more profitable, while at the same time state support associated with harsh judgments decreased or disappeared.

On the large socialist farms specialized large-scale production of goods gradually replaced the traditional, universal type of production characteristic of the peasant branch. In comparison with the universal peasant production, the profile becomes narrower, but at the same time expands in the vertical direction, because the specialized farms strive to develop industrial and service activities which are socially justified and useful from the standpoint of the national economy. Therefore we can justifiably call this process vertical development. As a result the farm economy is not limited to plant culture, animal breeding and gardening in the strict sense. Thus the

demands of consumers can be better adapted to the producers and can be better satisfied.

The supplementary activities of the large farms are developing in a good direction and to a satisfactory extent. These activites of the large farms have also contributed to satisfying national economic needs and to efficiency in management. In recent years the activities mainly related to agricultural production have expanded. Other industrial activities in contract areas have been carried out for the purpose of complementing large-scale production and in the interests of alleviating locally emerging employment difficulties, especially in regions of unfavorable characteristics.

However, during the conduct and organization of the supplementary activities, minor worries have occurred in our times, particularly in service and outside activities organized in Budapest for more distant cooperatives. This occasional case has caused a great deal of harm, particularly in view of the political effect, by circumventing the stipulation of wage regulations and labor force economy. However, there is justification for the supplementary activities carried out away from the site of the large farms (setting up pools, cleaning, service and so forth). It is also true that activities performed outside of the technical site require greater attention on the part of the enterprise leadership, internal enterprise supervision and pertinent authorities.

A great concern of the large farms is that for the most part the supplementary industrial activities are completed in production and service entities mechanized on an outdated low level. A significant part of the machinery and equipment consists of obsolete equipment of zero-value rejected by the industry or of leased equipment. It is characteristic that the productivity of the state food industry providing the majority of the total food industry production, disregarding a few exceptions, is greater than the productivity of the food processing plants of the large farms.

Thus small-scale production is the rule in the majority of the processing plants of the large farms. It is well able to complement the production of the concentrated state processing industry but cannot compete with it. Instead of competition collaboration is desirable and expedient, with its main goal being to meet the everyday needs of the populace, to eliminate gaps, and to usefully complement the activities of the industrial enterprises and cooperatives from the viewpoint of the national economy. A wide area of contact has developed by expanding the supplementary activities between the large farms and the industrial, commercial enterprises and the industrial cooperatives. However, the majority of these contacts are of an incidental and short-term nature. It is expedient to establish long-term cooperation based on joint interests between the large farms and the enterprises (industrial enterprises and industrial cooperatives).

Another important question about the industrial activities of the large farms is improvement in the social circumstances of the workers. At the present time large farms well equipped with social establishments are rare, and in many places the facilities of the industrial production lines are relatively behind the average level. For this reason there is occasional recourse to authoritative penalties. However, the health protection measures aimed at preventing accidents must be maintained everywhere, and a guarantee of these conditions cannot be a subject of deliberation. Improvement in social facilities is an ongoing task.

In recent years the monthly income of those performing industrial work and supplementary activities unrelated to the basic activities on large farms has been an average of 3,118 forints. The composition of the labor force employed in supplementary activities according to specialized training and the production indicators of the work force are less favorable than in industry. Because of seasonable distribution the staff employed in supplementary activities varies from 130,000 to 150,000. In recent years the actual personnel in supplementary activities increased by 9,000-10,000. Of these a total of 3,500 were employed in branches outside agriculture.

The demand and possibilities for further development of supplementary activities deviate widely from branch to branch and from region to region. For example, in the interests of bettering local facilities, there is a great need to expand the food industry processing, the local commercial and guest establishment facilities, and the services for improvement, culture and health. A differentiated approach to construction industry activities is necessary: in some areas it is only necessary to try to make better use of existing capacities, while elsewhere an expansion and development of reconstruction can be justified.

Reexamination and amendment of some stipulations of the economic regulation system are essential for further development of these supplementary activities of large farms. For example, simplification of the regulations referring to price formation and amendment of the production task and the technical development stipulations are justifiable. The licensing process is also very complex and frustrating. There are permits which require almost twenty approvals, and therefore the processing time is 7 or 8 months. It is expedient to do away with such unreasonable brakes as soon as possible.

In accord with the 12th Congress resolution, we have the important tasks of further facilitating better utilization of local possibilities and, from the national economic standpoint, of expediting useful supplementary activities on large farms serving to better satisfy growing and changing demands.

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AGRICULTURAL PRODUCTION CAPACITIES TO 1979

Belgrade GLASNIK POLJOPRIVREDNE PROIZVODNJE, PRERADE I PLASMANA in Serbo-Croation No 10, Oct 80 pp 10-16

[Article by Danilo Tomic, M. A.]

[Text] Yugoslavia possesses favorable natural and climatic conditions for the development of agricultural production. Considering the specific natural and climatic conditions, which vary from region to region, in Yugoslavia various types of agricultural production can be organized successfully. Mechanized agriculture has been undertaken successfully in the plains regions of Vojvodina, Slavonia, Macva and Semberija, and in the alluvial plains of the Sava, Morava and Danube.[1] In these regions the most common agriculture is crop production, particularly grain and vegetable crops. The hilly and rolling regions of the country are more suitable for the development of orchards, vineyards and grazing. In addition to very favorable natural and climatic conditions, particularly in land terms, Yugoslav agriculture also has at its disposal other production capacities, whose rational utilization contributes greatly to better and more rapid development of agriculture (including numbers of livestock, equipment for agricultural mechanization, irrigation systems, the rural population involved in agriculture, general and permanent employment, and other factors).

The purpose of the present study is to show the productive capacities of Yugoslav agriculture, with a separate survey of the agricultural status and capacities of Vojvodina, in order to determine a manner for their utilization and trends that have emerged in the postwar development of agriculture. Data have been used from the STATISTICAL YEARBOOK OF YUGOSLAVIA, the STATISTICAL YEARBOOK OF VOJVODINA, and other statistical bulletins, as well as other publications.

Land

Yugoslavia has about 25,580,000 total hectares of land, of which 25,540,000 is dry land. Of this 14,388,000 hectares or 56 percent is used for agriculture, while the remaining 11,152,000 hectares or 34 percent is devoted to other purposes (data from 1975)[2].

The most important factor for the successful development of agricultural production is land, and therefore this factor will be analyzed in detail.

Table 1. Yugoslavia's Agricultural Land by Categories of Use in 1,000 Hectares

Godine 1	2 ukupno	3 Obradive površine					4 Pašnjaci	5 Bara, barice i ribnjaci
		6 svega	7 oranice	8 voćnjaci	9 vinogradi	10 livade		
1946.	13800	9660	7380	298	255	1730	3840	108
1950.	13900	9700	7230	348	257	1860	4130	89
1955.	14800	10100	7530	382	280	1910	4650	67
1960.	15000	10300	7670	410	273	1900	3670	66
1966.	14800	10200	7570	437	259	1940	4510	74
1970.	14695	10153	7497	454	254	1948	4473	69
1976.	14401	9963	7291	468	246	1958	4358	80
1978.	14436	9939	7204	476	247	2012	4342	83

Key:

1. year
2. total
3. cultivated surfaces
4. grazing land
5. ponds, marshes and fishponds
6. total
7. crop lands
8. orchards
9. vineyards
10. meadows

Sources: Statistical Yearbooks of Yugoslavia, 1946-1979

Analysis if the data in Table 1 reveals that agricultural lands grew gradually in the period 1946-1960, and declined thereafter.[3]

The increase in agricultural land until 1960 resulted from the expansion of agricultural (largely cultivated) land surface through cultivation of previously non-agricultural lands because of rising demand for agricultural products. After 1960, a decrease in agricultural lands came as a consequence of the more rapid expansion of urban (industrial) settlements, the infrastructure, and other factors.

In the total agricultural land structure, cultivated land is the most prominent category. In 1946, of the total 13.6 million ha of agricultural land, 9.66 million ha, 71 percent, were in the cultivated category, with the remainder of 3.94 million or 29 percent being devoted to other uses. In 1978, of the total 14.436 million ha of agricultural land, 9.939 million were under cultivation, or 65.1 percent, while 4.497 million ha or 34.9 percent were pastures, ponds, marshes and fishponds.

Analysis of the structure of cultivated lands shows that the most important category is plowed crop land and gardens, with much smaller shares devoted to meadows, orchards, and vineyards. In 1946, of the total 9.66 million ha of cultivated land, 7.38 million ha were devoted to crops and gardens, or 76.4 percent. Meadows accounted for 1.73 million ha or 17.9 percent, orchards 298,000 ha or 3.1 percent, and vineyards, 255,000 or 2.6 percent. In 1978, of 9.939 million ha, crop lands and gardens covered 7.204 million ha or (72.5 percent), pastures 2.012 million hectares (or 20.2 percent), orchards 476,000 hectares (or 4.7 percent), and vineyards 247,000 ha or 2.5 percent.

These data show the very slight, insignificant variations in the categories that make up the structure of cultivated lands during the period.

It is also interesting to examine the manner of utilization of crop lands (the planting structure of Yugoslav agriculture); this is shown in table 2.

Table 2: Crop Lands in Yugoslavia According to Use in 1,000 hectares

Godina 1	Oranice i bašte 3	2 Zasejane površine 4 ukupno	5 žita	6 industr. bilje	7 povrtno bilje	8 krmno bilje	9 Rasadnici	10 Ugari i neobr. površine
1947.	7030	6280	5220	331	368	364	2,2	745
1950.	7230	6630	5190	444	465	545	3,2	597
1955.	7530	6860	5470	371	482	535	4,7	570
1960.	7670	7210	5650	324	514	719	2,6	465
1965.	7610	7050	5230	414	588	814	2,2	561
1970.	7497	6797	4935	410	636	816	1,4	693
1975.	7321	5711	4748	429	652	882	2,7	603
1976.	7291	6702	4737	432	651	882	2,7	580
1978.	7204	6524	4429	540	651	904	3,8	670

Key:
1. year
2. planted land
3. crop lands and gardens
4. total
5. grains
6. industrial crops
7. garden crops
8. feed crops
9. nurseries
10. fallow and uncultivated lands

Sources: Statistical Yearbooks of Yugoslavia, 1954-1979

The data in Table 2 show that, of the 7.03 million ha of cultivated land, 6.28 million ha or 89.3 percent were planted, while 747,200 ha (or 10.7 percent) were nurseries or fallow land or were not utilized (data for 1947). In the same year, of 6.28 million ha of planted land, 5.22 million ha or 83.2 percent were sown with grains, 331,000 ha or 5.2 percent with industrial crops, 368,000 ha or 5.8 percent with garden crops, and 364,000 ha or 5.7 percent with feed crops. In 1978, of the total 7.204 million ha cultivated, 6.524 million ha or 90.5 percent were planted and 670,000 ha or 9.5 percent were uncultivated, fallow, or nurseries. Of the 6.524 million ha planted in 1978, 4.429 million ha or 67.8 percent were sown with grain, 540,000 ha or 8.3 percent with industrial crops, 651,000 or 9.9 percent with vegetables, and 904,000 ha or 12.5 percent were sown with feed crops.

The great preponderance of grain crops, on the one hand, and the minimal plantings of industrial crops, vegetables and feed crops on the other, can be discerned in the planting structure of Yugoslav agriculture. In other terms, the relatively extensive development of agricultural production in the post war years can be seen. In the last several years, however, and particularly since 1973, the opposite trend can be noticed. Changes are occurring in the planting structure, with the surface planted to grains declining (by about 1.2 million ha in 1978 compared to 1960), while the land planted with industrial crops, vegetables and feed crops is constantly on the rise. This results from the accelerated agricultural and economic development of the country as a whole. Needs for various high quality processed

agricultural products are growing, and changes in the planting structure to meet these needs are becoming increasingly a necessity. Besides this factor, yields from hybrid plants, particularly grains, have been increased significantly per unit of land, thus assuring adequate quantities of these products even from reduced amounts of land.

Since Vojvodina has significant production capacities in this area, we will present its agricultural and cultivated land data and examine the differences in the manner of use of these hectares in Vojvodina as compared to Yugoslavia as a whole (Table 3).[4]

Table 3. Agricultural Land in Vojvodina by Category of Use in 1,000 ha

Godina 1	2 Ukupno	3 Obradive površine					9 Pašnjaci	10 Bare	11 Ribnjaci
		4 svega	5 oranice	6 voćnjaci	7 vinogradi	8 livade			
1964.	1829	1653	1578	10	25	40	155	17	4
1965.	1824	1650	1574	10	26	40	163	17	4
1970.	1814	1649	1574	11	23	40	146	15	4
1973.	1811	1645	1574	11	22	38	142	17	7
1975.	1810	1640	1569	12	21	38	144	17	9
1978.	1798	1628	1564	12	19	33	143	16	10

Key:
1. year
2. total
3. cultivated land
4. total
5. arable land
6. orchards
7. vineyards
8. meadows
9. grazing lands
10. ponds
11. fish ponds

Sources: Statistical Yearbooks of Vojvodina, 1964-1979

In 1964, of the total of 1.829 million ha devoted to agriculture, 1.653 million ha or 90.3 percent were cultivated, while the remaining 176,000 or 9.7 percent consisted of grazing lands, ponds, and fishponds. In 1978, of a total of 1.798 million ha of agricultural land, 1.628 million ha or 90.5 percent was cultivated, while the remaining 170,000 ha or 9.5 percent were pastures, ponds and fishponds.

The data in Table 3 show that in 1964, of the total 1.653 million ha under cultivation, crop lands and gardens accounted for 1.578 million ha or 95.4 percent, orchards for 10,000 ha or 0.6 percent, vineyards for 25,000 ha [illegible].5 percent, and meadows for 40,000 ha or 2.5 percent. The situation had no[illegible]nged markedly by 1978: of the total of 1.628 million ha under cultivation, crop [illegible]nds and gardens accounted for 1.564 million ha or 96.0 percent, orchards for 12,000 ha or 0.7 percent, vineyards for 19,000 ha or 1.2 percent, and meadows for 33,000 ha or 2.0 percent.

If we compare the data of Table 3 with those of Table 1, we note that crop lands and gardens are much more predominant in Vojvodina (about 95 percent of all land)

as the method of use of cultivated lands than is the case for Yugoslavia as a whole (where about 70 percent of the arable land is in crops and garden produce). On the other hand, orchards, vineyards and meadows are much rarer in Vojvodina than in Yugoslavia as a whole (when Tables 1 and 3 are compared).

The manner in which cultivated lands are used in Vojvodina is shown in Table 4.

Table 4. Cultivated Lands According to Use in Vojvodina, in 1,000 hectares

Godina 1	2 Oranice i bašte	3 Zasejana površina					4 Ugari i neobrađene površine
		5 ukupno	6 žita	7 industr. bilje	8 povrće	9 krmno bilje	
1964.	1580	1571	1170	174	66	161	9
1965.	1570	1551	1130	188	69	164	19
1970.	1574	1485	1085	217	75	108	87
1973.	1574	1549	1115	244	84	108	24
1975.	1569	1552	1144	228	80	100	16
1978.	1564	1522	1042	314	82	86	41

Key:
1. year
2. crop land and gardens
3. planted land
4. fallow and unused land
5. total
6. grains
7. industrial crops
8. vegetables
9. feed crops

Sources: Statistical Yearbooks of Vojvodina, 1964-1979

In 1964, of the total 1.58 million ha of cultivated land, 1.571 million ha or 99.4 percent were planted, while 9,000 ha or 0.6 percent were fallow or unused. Of the 1.571 million ha planted that year, 1.17 million or 74.5 percent were sown with grains, 174,000 ha or 11.1 percent with industrial crops, 66,000 ha or 4.2 percent with vegetables, and 161,000 ha or 10.2 percent with feed crops. In 1978 the situation was changed somewhat. Of the total 1.522 million ha cultivated, 1.042 million ha or 68.5 percent were sown with grains, 314,000 or 20.6 percent with industrial crops, 82,000 ha or 5.4 percent with vegetables, and 86,000 ha or 5.6 percent with freed crops.

These data show a slight decline in the amount of land planted with grains in Vojvodina, while the land planted with industrial crops has been growing significantly. That can be explained by the more rapid development of the food processing industry, chiefly through the construction of new sugar refineries and oil producing plants and the reconstruction of existing facilities. Lands planted with vegetables have shown a moderate growth, while the land sown with feed crops has declined constantly as a result of the diversification and decline in the number of livestock in Vojvodina.

Since agricultural production in Yugoslavia is organized into both social and private holdings, Table 5 shows the relationship between these categories of cultivated land in Yugoslavia.

Table 5. Cultivated Land by Type of Holding in Yugoslavia, in 1,000 ha

Godina 1	2 Ukupno	3 Društvena gadzinstva	4 Individualna gazdinstva
1954.	9980	921	9060
1957.	10200	827	9380
1960.	10300	1030	9230
1965.	10300	1413	8840
1970.	10153	1489	8664
1972.	10092	1504	8588
1974.	10007	1509	8498
1976.	9962	1533	8429
1977.	9936	1580	8355
1978.	9936	1580	8356

Key:
1. year
2. total
3. social ownership
4. private ownership

Sources: Statistical Yearbooks of Yugoslavia, 1954-1979

In 1954, of the total of 9.98 million ha of cultivated land, 921,000 ha or 9.2 percent was in social ownership, while 9.06 million ha or 91.8 percent was in private hands in Yugoslavia. In 1978, of the total of 9.936 million ha of cultivated land, 1.58 million ha or 15.9 percent was socially owned, and 8.356 million ha or 84.1 percent was owned by private individuals. That means that lands in social ownership were constantly increasing in the period 1954-1979, while lands in private hands were decreasing. These two opposite manifestations were the consequence of the development of social agriculture and the gradual socialization of individually owned agriculture. These factors are mutually related and interdependent. The development of one manifestation in the future can take place chiefly at the expense of the course of the other. Due to the slowness with which socially owned lands have increased (primarily by purchases of land from individual households, abandonment, noncultivation and irrational utilization of significant amounts of individually owned households have occurred (particularly where such households belonged to aged owners, as well as lands in hilly and rolling regions are concerned).

In that connection, Professor P. Milenkovic writes:

"Socially owned lands do not have much interest at the moment in purchasing land in general, since through the production of their usual crops they achieve relative high earnings per employee, and are not obliged to seek to expand their land holdings. Besides that, the purchase of new lands would require new finances, and these cannot be obtained on favorable terms. Therefore, many social cooperatives make it almost a condition for acceptance of new land that the agricultural worker assure cheap bank financing, with low interest and long terms of repayment (such as 20 years at 3 percent interest). The society must be aware of this situation, for if not the entire opportunity can be missed. Such social situations will probably have their weight as well, but in the last analysis, no one has the right to expect that a particular economic organization will resolve a social problem in its area of involvement in the name of the entire society without broader social solidarity, or without acting in its own economic self-interest."[5]

Therefore, in the future organized expansion of cultivated land in social ownership, primarily by the purchase of land from elderly owners and by the introduction of cultivation to new areas, must be the constant concern and the obligation of socially owned land holdings and of the broader social community.

Table 6 presents methods employed for expanding the cultivated lands of socially owned holdings.

Table 6. Methods for Expanding the Total Cultivated Land in Socially Owned Holdings in Yugoslavia

Godina 1	2 Kupovina	3 Privođenje obradi novih površina	4 Ukupno (2 + 3)	5 Zakup
1.	2	3	4	5
1960	35696	46589	82285	187414
1963.	136155	14917	151072	114687
1966.	17599	6766	23156	48313
1967.	19677	5105	24782	42958
1970.	19063	3194	22257	38306
1971.	11919	12798	24712	33111
1975.	10887	3184	14071	37490
1977.	11901	6784	18685	37785

Key:
1. year
2. purchase
3. introduction of new lands into cultivation
4. total of 2 + 3
5. leasing

Sources: Statistical Bulletins Nos 393, 465, 655, 716 and 1115

The data in table 6 permit the observation that leasing and purchasing land and introducing new lands into cultivation have been the most frequent ways for expanding the total cultivated land in socially owned holdings.

The Number of Livestock

Animal grazing is a very important branch of agricultural production where noticeable results have been achieved. Due to the lack of long-term systemic measures and the slowness in adopting such measures, livestock production has constantly fluctuated and lags behind crop production.

Table 7. The Number of Livestock Held in Social and Private Holdings in Yugoslavia in 1,000 heads

Godina 1	2 Goveda			3 Svinje			4 Ovce			5 Konji			6 Živina		
	7 ukupno	8 društvena	9 individ.	10 ukupno	11 društvena	12 individ	13 ukupno	14 društvena	15 individ.	16 ukupno	17 društvena	18 individ.	19 ukupno	20 društvena	21 individ.
1955.	5019	129	4890	4780	569	4211	11979	610	11369	1242	62	1180	25450	175	25275
1960.	5248	505	4743	6210	630	5580	11449	472	10977	1272	21	1251	27721	844	26877
1965.	5160	479	4681	6985	710	6275	9433	459	8974	1109	12	1097	31429	3178	28251
1966.	5520	431	5089	5118	762	4356	9868	424	9444	1131	11	1120	31685	3780	27905
1970.	5963	347	4616	5544	1040	4504	8974	242	8732	1076	5	1071	40854	9911	30943
1971.	5074	354	4720	6562	1073	5439	8703	230	8473	1048	4	1044	44954	9731	35223
1975.	5806	346	5460	6536	1169	5367	8175	225	7950	922	3	919	54991	15048	39943
1976.	4900	405	4495	6536	1233	5303	7831	221	7610	864	3	861	54764	16402	38362
1978.	5475	434	5041	8452	1445	7007	7514	297	7267	759	3	756	61513	20606	40907

Key:
1. year
2. cattle
3. hogs
4. sheep
5. horses
6. poultry
7. total
8. socially owned
9. privately owned
10. total
11. socially owned
12. privately owned
13. total
14. socially owned
15. privately owned
16. total
17. socially owned
18. privately owned
19. total
20. socially owned
21. privately owned

Sources: Statistical Yearbooks of Yugoslavia, 1956-1979

Table 8. The Number of Livestock Compared to Land Holdings

Godina 1	2 Broj goveda na 100 ha obradive površine		
	3 ukupno	4 na društvenim gazdinstvima	5 na individualnim gazdinstvima
1955.	502	156	525
1960.	509	490	513
1965.	500	338	529
1966.	541	298	580
1970.	488	233	532
1971.	501	238	546
1975.	580	221	644
1976.	491	264	530
1978.	551	274	603

Key:
1. year
2. number of cattle per 100 ha of cultivated land
3. total
4. on socially owned holdings
5. on privately owned holdings

Sources: Statistical Yearbooks of Yugoslavia, 1956-1979

The data of tables 7 and 8 lead to several conclusions:

1. The number of livestock in Yugoslavia has varied considerably in regard to types of livestock and of land holdings.

2. The number of cattle in the period examined has ranged from 488 to 580 head per 1,000 hectares of arable land.

3. The number of cattle on privately owned holdings also varies, but it is relatively higher and fluctuates between 513 and 644 head per 1,000 hectares of cultivated land.

4. The number of livestock on socially owned holdings varies a great deal fluctuating between 156 head per 1,000 ha of cultivated land in 1955, to 490 head in 1960, with the number per 1,000 hectares being 221 in 1975. A similar situation is found for other types of livestock. The variations are particularly great for swine, and also on socially owned land. The number of horses and sheep has been steadily declining on both socially and privately owned land, while the total number of poultry has increased on both types of holdings. The causes for these fluctuations in livestock production should be sought in the destimulative measures of economic policy, in unprofitable production, insufficient organization of markets, and insufficient bonds between producers of livestock and animal products on the one hand, and processors and consumers of animal products on the other. Particular difficulties are to be found in the unfavorable relationship between the prices for fodder and for animal products.

The situation concerning livestock in Vojvodina coincides with that in Yugoslavia as a whole (see tables 7, 8, and 9).

Table 9. The Number of Livestock in Vojvodina in 1,000 heads

1 Sektori	1966.	1974.	1975.	1976.	1977.	1978.
2 DRUŠTVENI SEKTOR						
3 Goveda ukupno	171	123	105	78	78	69
4 — krave	60	29	28	26	23	23
5 Svinje ukupno	415	453	486	430	426	516
6 — krmače	39	39	41	37	39	42
7 INDIVIDUALNI SEKTOR						
8 Goveda ukupno	305	341	342	307	300	293
9 — krave	125	132	145	143	128	117
10 Svinje ukupno	1.106	1.657	1.700	1.329	1.627	1.689
11 — krmače	114	189	206	167	189	182

Key:
1. sectors
2. the social sector
3. total cattle
4. cows
5. total swine
6. sows
7. the private sector
8. total cattle
9. cows
10. total swine
11. sows

Sources: Statistical Yearbooks of Vojvodina for the years indicated

It is interesting to note the greater capacity for adjusting to livestock market changes by privately owned holdings both in Yugoslavia and in Vojvodina.

The Mechanization of Agriculture in Yugoslavia

In terms of the number of tractors, combines and trucks, the mechanization of Yugoslav agriculture has been increasing constantly.

Table 10. The Mechanization of Yugoslav Agriculture in Major Categories

1 Godine	2 Traktori	3 Kombajni	4 Teretni automob.	5 Broj ha obradivih površina po 1 traktoru		
				6 ukupno	7 na druš. gazdinst.	8 na individ. gazdinstvima
	1	2	3	4	5	6
1958.	20500	639	1632	—	—	—
1964.	43264	9488	3149	273	35,25	1755
1965.	50096	10518	3480	—	—	—
1966.	51335	11293	3908	—	—	—
1968.	55192	12526	3987	—	—	—
1970.	68197	11793	3826	148	51	221
1974.	150000	10813	4624	—	—	—
1975.	195125	10915	4110	51,2	61	49,5
1976.	225524	11045	3924	44,1	60	42,1
1978.	296825	11092	3800	33,5	61	34,2

Key:
1. year
2. tractors
3. combines
4. trucks
5. number of cultivated hectares per tractor
6. total
7. on socially owned holdings
8. on privately owned holdings

Sources: Statistical Yearbooks of Yugoslavia, 1964-1978, for columns 1, 2, and 3; the data in columns 4, 5, and 6 were prepared by the author.

Analysis of the data in Table 10 shows the rapid growth in the number of tractors from 20,500 in 1958 to 296,825 in 1978. This growth in the number of tractors (which increased 13 times) resulted from the rapid process of so-called "tractorization" of privately owned land. The number of tractors on socially owned lands grew until 1966, but since then it has shown a tendency to decrease, although the number of horsepower per hectare of cultivated land has grown. If the ratio of cultivated hectares per tractor is considered, it is seen that in 1964 there were approximately 273 hectares per tractor in Yugoslavia, with 35.25 ha per tractor on socially owned lands and 1,755 ha per tractor on privately owned lands. By 1978 this situation had changed markedly, so that throughout Yugoslavia there was one tractor for every 35 hectares of arable land (about 60 hectares in the socialized sector and about 34 hectares in the private sector).

The number of combines tended to grow in the period from 1958 to 1968, and thereafter, to decline slightly.

The number of trucks, which have the important role of shipping agricultural products, increased until 1974, and then stabilized. The status of mechanization of agriculture in Vojvodina is shown in Table 11.

Table 11. The Mechanization of Agriculture in Vojvodina in Major Categories

1 Mašine i snaga	1972.	1973.	1974.	1975.	1976.	1977.	1978.
2 DRUŠTVENI SEKTOR							
9338—ruš 71 652							
3 Traktori komada	10712	10752	10700	11036	11211	11081	10975
4 Kombajni komada	5349	5395	5332	5601	5690	5679	5553
5 Kamioni komada	831	870	882	716	705	—	613
6 Ukupno KS (u 000)	1070	1025	1153	1210	1309	1390	—
7 INDIVIDUALNI SEKTOR							
8 Traktori komada	11990	20819	24000	30815	39670	47537	50275
9 Kombajni komada	393	977	1160	2238	3837	3715	2482**)

11 *) Izvor: podaci Pokrajinskog zavoda za statistiku

10 (**) U 1978. god. u broj kombajna nisu uračunati adapteri i berači kukuruza i suncokreta.

Key:

1. machine and horsepower
2. the social sector
3. tractor units
4. combine units
5. truck units
6. total horsepower in 1,000
7. the private sector
8. tractor units
9. combine units
10. 1978 figures do not include adapters, corn pickers or sunflower pickers
11. Source: Data from the Provincial Institute for Statistics

Table 11 shows that there was a more or less constant number of tractors and combines on socially owned land holdings. On privately owned lands, the number of tractors increased 4.2 times and the number of combines 6.3 times in the period from 1972 to 1978. In 1972, in Vojvodina there were 72.5 hectares of cultivated land per tractor, with 55 hectares per tractor on socially owned lands and 88 ha per tractor on private lands. In 1978, there were about 27 hectares per tractor, with about 57 ha per tractor on socially owned lands and about 20 ha per tractor on private lands.

Irrigation and Land Drainage in Agriculture

There are favorable circumstances for irrigation of cultivated lands in Yugoslavia. Thanks to the construction of the Danube-Tisza-Danube canal and the rivers Sava, Tisza, Morava and others, it would be possible to irrigate much more land than is presently under irrigation. That development would certainly have a positive effect on the development of agricultural production table 12).

Table 12. Irrigated Land in Hectares

Godina 3	1 Način navodnjavanja			2 Zemljište				
	4 ukupno	5 površinski	6 višk. kiša	7 ukupno	8 oranice i bašte	9 voćnjaci	10 vinogradi	11 livade i pašnjaci
1955.	97385	95878	1507	97385	78437	2896	157	15895
1960.	116617	99197	17420	116617	91873	3989	1188	19567
1965.	118325	87487	30838	118325	94306	10518	1700	11801
1970.	129576	94640	34936	129576	101756	9005	4860	13955
1975.	133055	89264	43791	133055	101948	11226	9498	10383
1978.**)	144502	99774	44728	144502	106572	12133	16707	9090

*) Izvor: SGJ 1956—1979.

12 **) Preliminarni podaci

Key:

1. method of irrigation
2. land type
3. year
4. total
5. surface irrigation
6. sprinkler systems
7. total
8. crop lands and gardens
9. orchards
10. vineyards
11. meadows and pastures
12. preliminary data

Sources: Statistical Yearbooks of Yugoslavia, 1956-1979

The total irrigated surface is on the increase. In 1955 only 97,385 hectares were irrigated, and of those 95,878 ha (98.5 percent) were done by surface irrigation and only 1,507 ha (1.5 percent) by sprinkler systems. In 1978, the total irrigated hectares reached 144,502, of which 99,774 ha or 69 percent were surface irrigated and 44,728 ha or 31 percent were under sprinkler systems. In 1955, the total 97,385 irrigated hectares included 78,437 ha or 80.5 percent crop lands and gardens, 2,896 ha or about 3 percent orchards, 157 or 0.2 percent vineyards, and 15,895 ha or 16.3 percent meadows and pastures.

In 1978, of the total 144,502 irrigated hectares, 106,572 ha or 73.7 percent were crop lands and gardens, 12,133 ha or 8.4 percent orchards, 16,707 ha or 11.5 percent vineyards, and 9,090 ha or 6.3 percent were meadows. Comparison of the data shows that the share of crop land, gardens, orchards and vineyards increased in the irrigation system, while the share of meadows and pastures in the total declined. Expressed in percentages, in relationship to the total irrigated lands, those consisting of crop lands, gardens, and meadows are less than previously, while irrigated vineyards and orchards are much better represented in 1978 than in 1955. It can be concluded that in Yugoslavia as a whole and in Vojvodina, the irrigation of crops is given little attention, with only 1-1.5 percent of cropland being irrigated (compared to 15 percent in Italy, 20 percent in Greece, and 30 percent in Bulgaria). Despite significant capacities, the irrigation system and the drainage system (see Tables 13 and 14) in Yugoslavia are insufficiently utilized, and use of the drainage system is not used effectively enough.

Table 13. Irrigation and Drainage Capacities in Yugoslavia

6 Godina	1 Za odvodnjavanje					2 Za navodnjavanje				
		3 crpne stanice			4 Crpni agregati			5 kišni agr.		
	7 kanali u km	8 broj	9 kapacitet m³/sec.	10 instal. snaga u KS	11 broj	12 kapacitet m³/sec.	13 instal. snaga u KS	14 kan. u km	15 broj	16 kapacitet lit/sec.
1955.	21551	154	217	20973		19	3761	2095	86	1093
1960.	36430	157	352	34271	77	38	7357	4000	334	13007
1963.	42169	209	488	51073	152	53	8546	3278	259	9217
1965.	34899**)	254**)	539**)	56648**)	522	106	22852	4768	1901	67428
1970.	45726	236	648	66845	671	72	37687	6799	2069	65984
1975.	46160	252	705	53296	766	88	45604	10072	1585	59276
1977.	46948	260	779	58419	989	134	52523	10350	1599	55132
1978.	45887	268	746	61658	1050	181	52882	6805	1616	68355

Key:
1. for drainage
2. for irrigation
3. pumping stations
4. pumping units
5. sprinkling units
6. year
7. canals in km
8. number
9. capacity in cubic meters/sec
10. installed horsepower
11. number
12. capacity in cubic meters/sec
13. installed horsepower
14. canals in km
15. number
16. capacity

* Sources: Statistical Yearbooks of Yugoslavia, 1956-1979
** Data until 1963 include only water management organizations, while those for 1964 and thereafter also include socially owned agricultural organizations.

For these reasons, every year there are floods and resultant erosion in river valleys and particularly in hilly regions, where erosion brings severe damage to Yugoslav agriculture.[6]

Keeping in mind the available irrigation and drainage capacities and the great losses that result from their ineffective and untimely use, it is clear that much more attention must be devoted to the utilization of the irrigation and drainage systems. In the future, the irrigation system must be used more to cultivate industrial crops, vegetables and feed crops.

The Agricultural Population; Total Employed and Permanently Employed Workers

In the postwar period there has been both an absolute and a relative decline in the rural population of Yugoslavia (from 75 percent in 1946 to 35 percent in 1975). This has resulted from the rapid industrialization process and accompanying reduction in the agrarian populace of the country. The possibility that a steadily declining agricultural population will produce increasing amounts of agricultural products and satisfy the needs of a constantly growing population underlines the growth of productivity in Yugoslavia agriculture.

Table 14. Flood Protection

3 Godine	1 Zemljište u hilj. ha		2 Zemljište u hilj. ha	
	4 branjeno od poplava		5 poplavljeno	
	6 ukupno	7 obradivo	8 ukupno	9 obradivo
1957.	1434	863*) 10	110	54
1961.	1649	978	155	82
1968.	1726	1052	531	333
1970.	2086	1297	396	262
1972.	1973	1385	582	364
1974.	1818	1361	187	112
1976.	2043	1535**) 11	156	100
1977.	1945	1445	118	66
1978.	1982	1426	110	66

Key:
1. land in 1,000 ha
2. land in 1,000 ha
3. year
4. protected from floods
5. flooded
6. total
7. arable
8. total
9. arable
10. besides land and structures protected from floods by dikes, the data also show land and structures protected by drainage systems.
11. Crop lands, orchards and vineyards

Comparison of total employed and permanently employed on socially owned lands in Yugoslavia reveals that the number employed grew until 1965, and thereafter declined. Regarded from the viewpoint of socially owned lands, this phenomenon is justified, but from a broader social viewpoint it is not. It is true that the development of industry and other economic activities requires that the surplus rural population be absorbed in these functions, but until these activities train the unemployed to fulfill these tasks, places should be found for the rural unemployed in agriculture through the intensification of production.[7]

It is unacceptable that in Yugoslavia, according to statistical data, some 670,000 hectares of arable land remain unworked. (and empirical data indicate an even higher total), there are some 740,000 unemployed, of whom about 430,000 are workers in the semi-skilled and unskilled categories. The introduction of cultivation on these uncultivated lands could contribute to the employment of a definite number of the presently unemployed.

The presence of a hereditary values system in Yugoslavia degrades physical work in general and agricultural labor in particular. For that reason the affirmation of labor (particularly physical and agricultural work) must be assured a respected place on the socioeconomic system, so that it, as a source of income, would eliminate all other possibilities from competition and become the main factor in social prestige.[8]

The number of agricultural specialists, veterinarians and economists employed in socially owned land holdings has been growing steadily, both in total numbers and per 1,000 hectares of cultivated land (see Tables 15 and 16).

Table 15. Employees on Socially Owned Lands In Yugoslavia

1 Godina	2 Gazdinstva	3 Ukupno zaposl. osoblje	4 Stalni radnici	5 Poljoprivredni stručnjaki			6 Ekonomisti	
				7 fak. i v. šk.	8 sr. šk. i niže šk.	9 Veterinari	10 fak. i v. šk.	11 srednja škola
1957.	7586	182324	136943	1765	5687	227	89	1984
1960.	5120	234727	187175	1929	7770	926	139	1825
1965.	3559	284438	213028	5325	7685	1805	882	5394
1970.	1925	200987	131867	7396	8837	2312	1173	7688
1975.	2362	206441	140592	8474	10250	2741	1258	8780
1976.	2428	199929	136447	8748	10349	2818	1230	8521
1978.	2789	201750	141652	9437	11398	3137	1531	9634

Key:
1. year
2. number of socially owned holdings
3. total employed
4. permanent workers
5. agricultural specialists
6. economists
7. university and specialist training school
8. high school and lower school training
9. veterinarians
10. university and specialist training school
11. high school

Sources: Statistical Yearbooks of Yugoslavia, 1958-1979

Table 16. Workers on Socialized Farms per 1,000 Hectares of Arable Land

1 Godina	2 Ukupno zaposleno osoblje	3 Stalni radnici	4 Poljoprivredni stručnjaci	
			VSS 6	SSS 5
1957.	220	165	2,13	6
1960.	227	181	1,8	7,5
1965.	201	150	3,7	5,4
1970.	134	88	4,9	5,9
1975.	134	91	5,5	6,6
1978.	127	89	6,0	7,2

Key:
1. year
2. total employees
3. permanent employees
4. agricultural specialists
5. with secondary schooling
6. with advanced training

FOOTNOTES

1. Since Vojvodina has especially great production potential, a special survey of its agricultural capacities will be given.

2. Total land is taken to mean land surface including land under domestic bodies of water.

3. Agricultural areas shown in Table 1 include farms as well as opstina grazing and meadow lands and other land under socialized ownership.

4. Agricultural lands in Table 3 include lands in agricultural households and lands in nonagricultural households.

5. For more details see Professor Milenkovic's study: "Problems of Social Insurance for Farm Workers," which is a part of the collective work Basic Directions of Development of the Agroindustrial Complex in Vojvodina, Novi Sad, 1978, p 312.

6. Cf. Professor V. Stipetic, "Resources and Measures of Agrarian Policy," in the study DOES HUNGER THREATEN, Zagreb, Globus Publishers, 1976, p 277.

7. Cf. Professor B. Rajkov, "Labor Productivity," in the collective work BASIC DIRECTIONS IN THE DEVELOPMENT OF THE VOJVODINA AGROINDUSTRIAL COMPLEX, Novi Sad, 1978, p 177.

8. See the study by K. Mihajlovic: "Discussions on Development of the Yugoslav Economy," Belgrade, 1977, p 25.

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12131
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EXPORT OF FOOD--PROBLEMS, POSSIBILITIES

Belgrade GLASNIK POLJOPRIVREDNE PROIZVODNJE, PRERADE I PLASMANA in Serbo-Croatian No 10, Oct 80 pp 34-37

[Article by Milenko Nikitovic]

[Text] Not long ago (and perhaps at an untimely moment) Yugoslavs began to state and proclaim that "food is our oil," and to determine to export food, so that in exporting they might reach a total income of one or 2 billion dollars.

However, in order to export, it is necessary to have, and in order to have, it is necessary to produce. Considering the present situation, Yugoslavia is not producing enough of certain most important products even for internal needs; rather, these products are being imported. That is incontestable. It is logical that export plans, whether they include a half, 1 or 2 billion dollars in value, should be based on the needs of the country and on its production plans.

Unfortunately, despite all the proclamations on food exports, the official projection for the Yugoslav five-year plan on the development of the agro-industrial complex from 1981 to 1985 does not foresee any significant food exports. On the contrary, the "Basic Directions of Development of the Yugoslav Agro-Industrial Complex for the period 1981-1985," presented at the Yugoslav conference on food in Belgrade in March, expressed more doubt about the possibilities of expanding Yugoslav agricultural exports, with the statement "that we should not nurture any unusual expectations recording our exports of agricultural and processed food products."

Among other things, the projection plans for annual exports in the coming period totalling:
60,000-70,000 tons of meat;
0.5 million tons of corn; and
20,000-25,000 tons of tobacco.

For the satisfaction of domestic demand, it is estimated that in the coming period the following quantities will be needed:
6 million tons of wheat;
11 million tons of corn;
about 1.5 million tons of meat;
900,000 tons of sugar;
500,000 tons of fat, etc.

As an argument for the impossibility of increasing Yugoslavia's agricultural exports, the example is cited of the decline in the volume of exports of the 7 most important products during the period 1968-1977.

It is understandable that such an evaluation of the possibility of Yugoslav agricultural exports is not only contrary to the urgent needs of the economy, as well as the status of the Yugoslav foreign trade balance and balance of payments, but also that it does not correspond to the situation on world food markets. To be specific, today Yugoslavia could [theoretically] sell in foreign markets more than 100,000 tons of meat, several hundred thousand tons of sugar, grain, and other commodities.

Why did Yugoslavia export less in the period 1968-1977? With the exception of the crisis from July 1974 until the end of 1975, provoked by the decision in Brussels to embargo exports of baby beef from countries that were not members of the EEC, for all the years prior to 1974 and after 1975 Yugoslavia exported as much baby beef, pork and poultry as it had available for export. There was no grain for export until 1977, when 200,000-300,000 tons were exported, only to have to import corn 6 months later. Throughout the period there was simply no sugar, oil, lard or poultry and very little pork, available for export. Yugoslavia exported its first tons of sugar in July 1979. On the contrary, imports of these commodities (some constantly and others frequently) were regularly necessary.

The exports of pork are a typical example; they have followed the pattern below in the last 7 year (in 1,000 tons):

1973	1974	1975	1976	1977	1978	1979
--	2	18	5	--	10	--

It should be stated that pork was actually imported in 1977 and 1979. It is, however, certain that Yugoslavia could market 30,000 to 50,000 tons of pork in foreign markets annually.

It should be pointed out that in 1965 Yugoslavia exported a total of 120,000 tons of all types of meat, which at today's prices would be worth 220 million dollars, or 60 percent of the total exports of animal products in 1979.

In 1979 Yugoslavia exported:

45,328 tons of yearling beef;
3,052 tons of lamb;
203 tons of poultry; and
24 tons of pork; totalling 48,507 tons

That same year imports were:

47,772 tons of beef;
3,718 tons of pork; and
82 tons of poultry; totalling 51,522 tons

Thus regarding meat, where Yugoslav exports have always been the greatest, the balance in terms of volume varies, or is even a negative one, where for the first time since World War II imports of meat surpass exports.

The record years for exports of animal products should be recalled, since they represent the limits that can be achieved and can be compared with the exports of Europe's largest meat exporters. According to years and types of stock and meat, these records are as follows:

live cattle	1972	171,000 head
baby beef meat	1978	82,000 tons
pork	1965	56,000 tons
canned meats	1965	38,000 tons
live sheep and lambs	1971	206,000 head
lamb and mutton	1966	5,000 tons
horses	1978	43,400 head

If the above quantities are calculated at today's prices and other articles are added to them, the total livestock products exported would be valued at 700 million dollars, or twice the 1979 total. If other agricultural exports were added, a total of 1 billion dollars in exports would be very nearly acheived. It cannot be explained, however, why less exports of meats are included in the plan for 1985 than were attained in the past decade.

It is significant to point out that the projected exports of animal products for 1981-1985 of the Foundation for the Advancement of the Production and Marketing of Livestock and Animal Products plan exports worth 750 million dollars in 1985. This figure includes the quantities of 86,000 tons of yearling beef, 20,000 tons of pork, 10,000 tons of poultry, etc., for a total of 127,000 tons of meat, along with increased exports of live animals, canned meat and other products.

In order to complete the data necessary to perceive the actual situation in the Yugoslavia balance of imports and exports of food, the following figures are presented to show food imports in 1979, in millions of dollars:

Grains and processed grains	270
meat and processed meat products	63
live animals	9
milk products	8
sugar and processed sugar products	9
fish and processed fish products	22
animal feeds	87
fruits and vegetables (largely tropical fruits)	155
coffee, cocoa and spices	280
other products	47
Total	950 million dollars

A summary of exports and imports of food is shown in table 1, in million dollars:

Table I

Exports		Imports		Balance	
1978	1979	1978	1979	1978	1979
686	676	604	950	+82	-274

In contemplating exports and imports of food, the unavoidable conclusion is that Yugoslav agricultural exports have been declining in the past decade. The reason is that production is insufficient even to satisfy domestic demand, so that Yugoslavia has been forced to import many goods that could be produced there. In today's world there are purchasers of meat, sugar, oil and grains, but Yugoslavia has thus far had rather limited quantities for export, so that without higher production, even in the future it will be impossible to count on increased agricultural exports.

Another question is why the programs and objectives established in the Agreement on the Bases of the Yugoslav Social Plan for the Development of the Agroindustrial Complex for 1976-1980 have not been accomplished. Those programs and objectives were both carefully wrought and grandiose, so that, in a word, their realization would have solved many problems and dilemmas related to the agrocomplex.

According to the Agreement, the development of agricultural and food production would have been directed to satisfy the growing domestic needs of Yugoslavia, gradually reduce and eliminate imports of agricultural products that can be produced domestically in sufficient quantities, and facilitate economically effective and socially justified exports at an average annual rate of 10 percent.

Without presenting quantities for each product, it can be said that among other things, planned corn exports would amount to 1.5 million tons and wheat export to 0.5 million tons. These goals and objectives were completely realistic and correctly reflected the country's needs. They were, however, achieved only in part, for growing demand was satisfied by imports and imports were not decreased nor eliminated, but rather increased, while exports did not increase but rather, they became smaller from year to year.

Certainly two poor harvests are not the only cause of this situation; rather, a number of factors are involved, beginning with increasing uncultivated land or from the opposite viewpoint, decreasing amounts of land in cultivation, and including the slowness of adding land to the social sector, credit policy, low yields from the lands of private producers, and other factors.

For a more objective evaluation of Yugoslav plans and programs, always keeping in mind the country's needs and the needs for exports, it is useful to compare the planned quantities of agricultural products in the Agreement for 1976-1980, anticipated results for 1980, and the plan projections for 1981-1985, presented in Table 2.

Table 2.

1 Proizvodi	2 Dogovor 1976/80.	3 Procena realiz. u 1980.	4 Projekc. Dogovora 1981/85	5 Procena 1980: Dogovor 1976/80.	6 Dogovor 1981/85. Dogovor 1976/80.
7 Goveđe meso (000 t)	407	375	450	92,1	110,5
8 Svinjsko meso "	510	450	525	88,2	102,9
9 Ovčije meso "	65	60	70	92,3	107,6
10 Živinsko meso "	239	240	300	100,4	125,5
11 Ostalo meso "	65	85	100		
12 SVEGA MESO "	1.296	1.210	1.445	94,0	112,3
13 Mleko (mil. lit.)	4.571	4.350	5.360	95,1	117,2
14 Jaja (mil. kom.)	4.509	4.200	5.200	93,1	115,3
15 Pšenica (u 000 t)	6.000	5.800	6.000	96,6	isto
16 Kukuruz ..	10.700	9.500	11.000	88,7	102,8
17 Šećerna repa ..	8.720	6.250	7.650	74,4	87,6
18 Suncokret ..	695	600	700	86,3	100,7
19 Uljana repica ..	75	45	55	60,0	73,3

Key:

1. products
2. the 1976-80 agreement
3. estimated 1980 plan fulfillment
4. planned target for 1981-85
5. 1980 fulfillment: 1976/80 plan
6. 1981/85 plan: 1976/80 plan
7. beef (1,000 tons)
8. pork (1,000 tons)
9. mutton (1,000 tons)
10. poultry (1,000 tons)
11. other meats (1,000 tons)
12. Total meats (1,000 tons)
13. milk (million liters)
14. eggs (million units)
15. wheat (1,000 tons)
16. corn (1,000 tons)
17. sugar beets (1,000 tons)
18. sunflowers (1,000 tons)
19. oil-bearing rape

The Projected Agreement for 1981-1985 in comparison to the Agreement for 1976-1980 reveals several factors, primarily in relation to the needs of the country and to export.

It must immediately be stated that the planned amounts of grains and meats absolutely preclude the possibility of any significant increases in agricultural exports; indeed the physical quantities of exports will continue to decline. Therefore, the conclusion must be that the production of meat and grain must be increased so that growing domestic demand can be satisfied and significant quantities accumulated for export, and so that agricultural exports can rapidly reach and surpass the constantly mentioned level of 1 billion dollars.

The commodities and quantities that should be produced are chiefly the following:

13 million tons of corn, of which 10-10.5 million would be for domestic needs, and 2.5-3 million tons for export;

approximately 7 million tons of wheat, of which 6 million would be for domestic needs and 1 million tons for export;

about 1,550,000 tons of meat, of which about 1.4 million tons would be for domestic needs, and 155,000 tons for export; and

about 300,000 tons of sugar for export.

The manner in which these record levels of production of particular commodities can be achieved is a topic about which many doctoral dissertations and masters' theses have been defended, yet the production of wheat has never surpassed 6 million tons and corn production has never approached 11 million tons.

To answer the question as to whether the indicated production quantities are realistic and attainable, is necessary not only because of the pressing needs to export but also because Yugoslavia is obliged to reach higher production and productivity by the 9 million hectares of cultivated land, and the total of 14 million hectares of agricultural land (including cultivated land and pastures), by the number of persons employed in agriculture, and by the results achieved so far in crop and livestock production.

These goals and objectives must, however, be accepted by everyone, and that suggests the mobilization of all forces in all sectors and positions, from production and science to specialists in economic associations, republic and federal secretariats, to the banks and all those who in any way are involved in or related to agricultural production. In other words, crop and livestock production must reach hitherto unattained levels of production, but levels that are not unrealistic or unattainable.

Without grain exports and increased meat and live animal exports, it is impossible to achieve the fervently awaited billion dollar goal. Agricultural exports account for only 10 percent of total Yugoslav exports, eg., in 1979 they amounted to $650 million of the total $6.5 billion exports. But agricultural exports from Hungary have exceeded $1.5 billion for a long time. Romania and Poland export $1 billion each, not to mention the Federal Republic of Germany, which realizes $4.5 billion from agricultural exports, or France with $8 billion, or the United States with $38 billion in agricultural exports.

It was stated previously that there are enough buyers in today's world for grains, meat, sugar and oils; that means that sufficient quantities of foods should be produced for domestic needs and for export. The quantities produced for export should be:

2.5 to 3 million tons of corn;

about 1 million tons of wheat;

155,000 tons of meat; and

about 300,000 tons of sugar.

It is, of course, easier to come to these conclusions on paper than to produce the goods. Certain preconditions must exist in order to produce the indicated quantities in actuality; the domestic resources of Yugoslav agriculture must be found and the hindrances overcome that have prevented our surpassing the 6 million ton wheat barrier and the 10 million ton barrier for corn.

Further Socialization of the Land

The structure of land ownership and the 82 percent share of the private sector in cultivated land has a decisive role in the volume of agricultural production. It is certain that every percentage point of increased land in social ownership brings greater yields and thereby, greater surpluses for the market.

Of the total 7.1 million hectares of cultivated crop land, the private sector holds 5.78 million hectares, or 81.5 percent, while the social sector has 1.32 million, or 18.5 percent. It is believed that if the social sector had about 700,000 additional hectares, it would be able to solve the problems related to supplying the domestic market and food imports.

Expansion of land in the social sector averaged about 45,000 hectares annually until 1970. After that there was little change, so that currently the expansion does not amount to even 10,000 hectares per year. The reason for this is found in the more stringent conditions for financing purchases of private land, while economic organizations do not have their own capital available for this purpose.

There are other problems as well. One prominent economist in eastern Serbia explained the types of difficulties encountered by his work organization in purchasing land. The organization purchased 1,000 hectares of private land, and then had to plow, seed and cultivate it. They went to a tractor factory seeking to buy tractors on credit. There they were asked to put up 30 million dinars if they hoped to obtain tractors. Then they went to a chemical fertilizer plant, where they were expected to put up 10 million dinars. They received similar requests from the sheet metal factory and other suppliers. The economist concluded by saying that their bank could not keep up with these investments, because it did not have the resources.

The plan projection for 1981-1985 anticipates that by 1985, some 150,000 more hectares will be socially owned. This increase does not even approximate the country's needs, for it is the social sector that provides market surpluses and that should eliminate imports of food and increase exports.

It is obvious that the instruments of current policy do not favor land purchases, despite the fact that further socialization of the land has a pivotal role in Yugoslavia's future volume of agricultural production and food balance. Increasing the maximum limit for land holdings in individual regions of the country can provide certain results, but the social sector has the role of revolutionizing agriculture, not only by involvement of science and the application of modern agrotechnology, but also by producing the quantities of foodstuffs that are lacking in Yugoslav food balances, both for domestic needs and for export. For these reasons, further socialization of the land should be promoted at the most rapid possible tempo, and all current regulations must support that process.

The Reduction of Agricultural Land

This question is also of exceptional significance for the continuing development of agricultural production. Specifically, the reduction of agricultural land has been under way, and from 1961 to 1977 it has averaged approximately 40,000 hectares per year. This trend will continue in the coming period largely in favor

of the construction of the infrastructure, of industrial installations, the growth of urban settlements, and the like.

This fact must be kept in mind, for crop lands, for example, have decreased by nearly 600,000 hectares in the last 20 years.

Uncultivated Lands

According to official data, more than 600,000 hectares of crop lands are not being cultivated, and about 2 million hectares of pasture that are socially owned are not included in organized production. This fact is certainly the most unfavorable and most drastic one regarding the agricultural problems mentioned above. It is striking that Yugoslavia imports grain, meat, butter and other commodities while it has 600,000 hectares of uncultivated land. That is uneconomic land management that requires, not as often is said "suitable solutions," but simply that that land be put into service as urgently as possible. In this area the social sector is most called to execute its social role, regardless of whether the land is in the private or the social sector.

Analysis of the data presented force the conclusion that in the past period not everything that could have been done was done, particularly regarding the purchase of private land and the cultivation of unused lands. Much depends on these factors for supplying domestic markets, eliminating food imports and increasing agricultural exports. It cannot be disputed that these are questions that require determination of policy by the highest agencies of the Yugoslav social community, and the passing of suitable measures for the entire territory of the country. Associated labor will then be obliged to bring such policies to life diligently and comprehensively.

Increasing the Number of Livestock

When the objective of increasing meat production to 1,550,000 tons in 1985 is proposed, of which 155,000 tons is to be exported, the first requirement is that the number of livestock, and particularly of cattle, be increased.

The question of increasing meat production is specifically related to livestock production. Analysts would immediately point out that only 55 percent of the total cattle become full-grown, and the slaughter of calves weighing less than 100 kg accounts for 44 percent of the total cattle slaughter; this is unique in Europe. Because of the slaughter of large numbers of calves, the average weight of butchered cattle in Yugoslavia does not exceed 140 kg, while the average for other European countries ranges from 200 to 240 kg.

There is a similar situation regarding pork production. In 1978, 14.4 million hogs were slaughtered, of which 36 percent were young pigs; this does not occur in any other country. As a result, the average weight of all slaughtered hogs is only 34 kg, while those slaughtered at slaughterhouses average 77 kg. Therefore, along with other measures, much more rational slaughter plans are necessary that would greatly reduce the number of calves and young pigs slaughtered.

Similar problems exist with sheep raising, alongside other problems. Primarily, the number of sheep is rapidly declining, for from 11 million in 1969 the total number of sheep in Yugoslavia is 7.5 million today, despite the fact that throughout the rest of the world, including Australia, Great Britain, the FRG and the USSR, the number of sheep is on the rise.

The Private Sector

The question is how can the private sector be activated and urged to greater production? The problem includes matters of volume, time period and tempo by which the private sector can contribute to a significant increase in food production.

With a potential of 9.7 million hectares of land, of which 5.8 million are crop lands (accounting for 81.5 percent of all crop lands in the country), the private sector can make a significant contribution to agricultural production without a doubt. That means that it is necessary to perfect measures and regulations relating to this sector with the goal of stimulating individual producers to achieve greater production of those commodities that are in short supply and that are foreseen in the social plans.

Yet planned objectives and proportions in social plans are not transformed into plan obligations for those responsible for the planning in either the social or the private sector. Every plan is good if it is fulfilled, attained and if it contributes to the increased material welfare of the society.

The Agreement on the Bases of the Social Plan for the Development of the Agroindustrial Complex for 1976-1980 also had very well stated and formulated objectives, the plan was ambitious and promised much. The Agreement, however, was only partly achieved. For example, it happened that one socially owned holding with 30,000 hectares of public land liquidated its livestock as an unprofitable activity, because crop cultivation assured definite accumulation of capital and income, while livestock raising could even result in losses.

The social sector, however, cannot ignore the needs of the society, and it is obliged to produce the quantities and assortment anticipated by the social plans, always for society's needs. Naturally, it is obvious that the society must provide all the conditions for the set production levels. In the opposite case, free and elemental laws will rule the market, and some commodities will be in short supply while there are surpluses of others. That means that not only the profitable goods must be produced, but all the goods the society needs for its nourishment and for export.

12131
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JPRS 77086

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EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2077

CONTENTS

CZECHOSLOVAKIA

Briefs
New Prague Port 1
Car Sales Drop 1

GERMAN DEMOCRATIC REPUBLIC

IPW Director Discusses Problems of Strategic Balance
(TRIBUENE, 17 Oct 80; IPW-BERICHTE, Oct 80)..... 2

'Insane Strategy,' Important Initiatives, Max Schmidt Interview
Need for Continued Dialogue, by Max Schmidt

West German Analysis of GDR Combine System Development (II)
(Kurt Erdmann, Manfred Melzer; DEUTSCHLAND ARCHIV, Oct 80)..... 28

Working Conditions Contribute to Efficiency, Job Satisfaction
(TRIBUENE, 29, 22 Aug 80)..... 56

Tasks of Industrial Psychology, Baerbel Matern Interview
Importance of Work Safety, Horst Behtanz Interview

POLAND

Hard Realities of Economic Situation Described
(Stanislaw Chelstowski; ZYCIE GOSPODARCZE, 26 Oct 80)..... 65

Study Assesses Profitability of Livestock Production
(Adam Rozmoch; NOWE ROLNICTWO, 1-15, 16-21 Jul 80)..... 73

Briefs
Sweden-Poland Ferry Discontinued 89

ROMANIA

Successes of Aeronautical Industry Discussed
(George Popescu; VEAC NOU, Nov 80)..... 90

BRIEFS

NEW PRAGUE PORT--The fluvial port in Prague-Holesovice can no longer serve the volume of the current shipping, and construction of a new port in Radotin, south of Prague, will begin in 1982. The new 21-berth facility will be one of the most modern ports in Central Europe, capable of handling 3 million tons of goods yearly. The port should become operational after 1990. [Bratislava PRACA in Slovak 10 Dec 80 p 2]

CAR SALES DROP--The price increase of gasoline in the CSSR has not only resulted in lower gasoline sales, but also lower sales of cars. Consequently a 9.2 percent drop in car sales has been registered in 10 months of 1980, the figures being about the same for both new and used cars. Car repair facilities have less customers and the Motokov enterprise has on hand thousands of unsold cars. [Prague MLADA FRONTA in Czech 9 Dec 80 p 2]

CSO: 2400

GERMAN DEMOCRATIC REPUBLIC

IPW DIRECTOR DISCUSSES PROBLEMS OF STRATEGIC BALANCE

'Insane Strategy,' Important Initiatives

East Berlin TRIBUENE in German 17 Oct 80 p 7

/Interview by Hans Kramer with Prof Dr Max Schmidt, director, Institute for International Politics and Economics, East Berlin: "Military-Strategic Balance Helps Secure Peace--Nuclear War Strategists in Pentagon and NATO Gamble With Security of Nations." Some of Professor Schmidt's answers draw heavily on an article he has written for his institute's monthly journal. A translation of this article follows this interview/

/Text/ Biographic Sketch

Prof Dr Max Schmidt was born on 6 January 1932 into a working-class family. He has taught at the Edwin Hoernle civil service academy in Weimar. After completion of his studies, he held a research post at the GDR academy for political science and jurisprudence. He then graduated from the SED central committee's institute for the social sciences. After working for the SED central committee for several years, he was named director of the institue for international politics and economics and head of the research council into questions of imperialism in 1973. On a number of previous occasions Prof Schmidt has commented on topical world affairs issues in the pages of TRIBUENE.

/Question/ The resolutions and propoals put forward by the member states of the Warsaw Pact such as the declaration of last May and the foreign policy goals of our own GDR have all underscored the objective and urgent necessity for progress in military detente time and again. What are the reasons for that ?

[Answer] As everyone can see, the world situation has become a good deal more aggravated in the eighties. The results of the process of political detente which were of value to all peoples, particularly to those in Europe, in the seventies are now in danger. Instead of taking steps to relax tensions, the leading circles of the United States and of NATO are now pursuing a policy of confrontation. They are stepping up the arms race and intensifying the conceptual and material preparations for war. The conduct of the arms limitation talks is being undermined and SALT II, a treaty so very important for peace is not going into effect as a result of its ratification being blocked in the United States.

At the same time, development, production and deployment of new nuclear and "conventional" weapons of mass destruction are being forcefully pursued by NATO on the basis of its 1978 long-range program and its December 1979 resolution.

The efforts by the most aggressive forces of imperialism to do away with the existing balance of power and to establish military superiority by engaging in greatly stepped-up arms programs is casting a kind of pall over the international arena.

In view of this, continuation of detente tied to disarmament is and will remain the cardinal question for the eighties, as Erich Honecker has recently stressed once again.

[Question] You have spoken of military balance of power. What exactly is meant by this ?

[Answer] The concept of military-strategic balance of power as a pre-condition for peace is something relatively new. It was first used deliberately by the socialist countries who look upon it as one of the bases and as the guarantee for peaceful coexistence between countries with different economic systems. It involves the recognition of the fact that approximate parity in military strength between the USSR and the United States and between NATO and the Warsaw Pact has been reached as a result of a lengthy process.

And it also involves recognition of the fact that given present power relationships in the international class struggle this military-strategic balance must serve as the basis for reaching agreement on limiting, restricting and at length reducing armaments while preserving intact the security of all participants.

[Question] Could one say that there now is approximate military-strategic balance between the two power blocs ?

[Answer] Yes. The member countries of the Warsaw Pact have repeatedly pointed out that there now is military balance in Europe and in the world as a whole. This assessment is based on an analysis of all the factors which need to be taken into account, including an overall comparison of nuclear and conventional weapons systems, their number and firepower, of troop strengths and of the strategic situation.

Geographic, logistic and economic factors must also be considered. To be sure, the military power relationship is extremely difficult to assess. But one must make a realistic start on the basis of the sum total of opposing military forces. Up until recently, members of the U.S. government and of other NATO countries have more than once attested to the fact that approximate parity exists as between the USSR and the United States and the Warsaw Pact countries and NATO. This was underlined in particular by the American President on the occasion of the signing of the SALT II treaty in Vienna in June 1979. Chancellor Helmut Schmidt and other West European political leaders have also called attention to the existence of approximate parity.

[Question] What significance is there to the existence of military balance ?

[Answer] The evolution, the existence, operation and maintenance of approximate military-strategic balance between the main forces of the two different social systems in the world and of the countries allied with them is an important pre-condition for the preservation and the strengthening of peace.

This has been a decisive factor in starting on the road to political detente based on the efforts of the socialist countries and the position taken by realistic forces in the western world; a process which has been of political and economic benefit to all concerned and has opened up new vistas.

It has been a major element in thus far being able to prevent the outbreak of a third world war which is to say a war involving missiles and nuclear weapons.

It has been the principal factor for Europe, which twice has been the starting point of a world war,now experiencing the longest period of peace in this century and for the continent itself emerging as an example of peaceful coexistence between countries with different social systems.

It has provided the very basis on which successful negotiations on arms limitation and disarmament can be conducted, as SALT I and SALT II clearly demonstrate.

[Question] You have spoken of the recognition of military balance on the part of Western politicians. But what is their real attitude towards it ?

[Answer] I have already indicated by my answer to your first question that the efforts by the United States and NATO to do away with balance and to establish military superiority are the main causes for the aggravation and complication of the world situation.

[Question] What are the indications for this ?

[Answer] It cannot be overlooked that there has been a growing trend recently of members of Western governments and Western military figures --above all in the United States-- calling for making war or at least the use of military power in the service of political goals and based on superiority more practicable or efficaceous. The so-called State of the Union message by the American President in January 1980 designated the strengthening of American military power and the attainment of military superiority as the priority goal of the United States in the eighties.

[Question] In this connection, how is the American President's so-called directive 59 to be viewed ?

[Answer] This directive contains a new definition of U.S. strategy for nuclear warfare. The targets of U.S. nuclear missiles are to be varied and to be concentrated primarily on a wide range of military objectives in the USSR. In essence, this re-definition is aimed at lowering the nuclear threshold in order to carry out a preventive nuclear strike to annihilate the USSR and to be in a position to wage "limited" nuclear war.

This insane strategy is not really new. In fact, it has always gone hand-in-hand with the aims of aggressive circles in the United States wishing to confront the Soviet Union from a position of strength and superiority. But the attainment of strategic parity by the Soviet Union and the inability of the United States to carry out a devastating first strike forced American governments to recognize this parity, as evidenced among other things by the SALT agreements.

Now, the goal of overcoming military-strategic balance is openly being pursued again. In doing so, the United States are speculating on the qualitative and quantitative development of new weapons systems which are to provide a new material basis for their efforts aimed at attaining military superiority, primarily as regards a nuclear first strike capability.

They are hoping for greater accuracy, greater explosive yield and a high level of mobility for the MX and Trident missile systems among others.

/Question/ How does the NATO missile resolution of December 1979 fit in ?

/Answer/ It is absolutely correct to view this resolution in connection with U.S. nuclear strategy. In addition to the 8,000 nuclear units already positioned in Western Europe and the 3,000 nuclear delivery systems and the 1,000 delivery systems on board of warships in the Atlantic and the Mediterranean, that is to say in addition to the so-called Forward Based Systems, plans are to deploy Pershing II's and Cruise missiles with a range of 1,800 to 2,500 kilometers. Their multiple warheads, more accurate and harder to defend against, could hit different targets simultaneously. Early warning time for these medium-range missiles is reduced to about 6 minutes as opposed to 30 minutes for strategic missiles. Thus, it is not a matter of "simply modernizing" obsolete weapons, as it is said, which have the same purpose as heretofore, but of introducing strategic weapons which would reach from West European soil far into Soviet territory up to the foothills of the Urals. The NATO decision thus has the aim of bringing about a fundamental change in the European strategic situation.

/Question/ What dangers are there, in your view, in this militant concept for nuclear war ?

/Answer/ First of all, this strategy does not aim for reducing nuclear war but for materially preparing for it. As this is being done, the insane idea is being put forward that limited nuclear war can both be waged and won. But it is totally unrealistic to believe in the possibility of a limited or regional nuclear war. Any nuclear attack would inevitably lead to a direct confrontation including retaliatory strikes forthwith.

/Question/ What implications does this have for Europe ?

/Answer/ As a consequence of the NATO missile resolution, the danger of atomic conflict, particularly in Europe, has increased. The deployment of new medium-range missile systems in Western Europe within the context of the new U.S. strategy turns these countries into atomic hostages of the United States to all intents and purposes. While the United States mean to use these additional missile systems to gain substantial military advantages as regards the USSR, the nations of Western Europe for their part are called upon to bear the "nuclear risk." The arms race is further intensified.

/Question/ And what does it mean for the socialist countries ?

[Answer] In view of the acute threat, the socialist countries will have to provide the necessary measure of military security for themselves. History has proven that the socialist states, headed by the USSR, have all the means necessary to meet the efforts of the NATO countries to upset the military balance.

[Question] You are now touching on our own position. Could you be more precise ?

[Answer] Let me summarize it briefly: the socialist states do not aim for military superiority or for altering the strategic-military balance in their favor which has evolved in the course of time. This applies equally to the strategic balance that exists between the USSR and the United States and between the Warsaw Pact countries and NATO in the European area.

"Our efforts," Leonid Brezhnev has said, "are directed at not having a first or a second strike happen or, for that matter, any nuclear war at all. Our approach to this question is the following: the defense capabilities of the Soviet Union must be such that no one will dare disturb our peaceful life. Our policy does not aim at superiority in armaments but at their reduction and at a reduction of military confrontation."

This position also was part of the Warsaw Pact declaration of last May and was the basis of concrete initiatives undertaken by the socialist states at the the 35th General Assembly of the United Nations, at MBFR in Vienna and in other forums.

[Question] Which of these initiatives are most important ?

[Answer] The primary objective of all our efforts and proposals is to take further steps to reduce the danger of nuclear war. At the current U.N. General Assembly session, the USSR has countered the American nuclear war concept by submitting a list of the most urgent measures aimed at reducing the danger of war. It calls first of all for the ratification of SALT II by the United States; it calls for a start of negotiations on medium-range missiles; for tangible results at the Vienna talks and in connection with the Madrid conference and for the convocation of a conference on military detente and disarmament in Europe. There are concrete proposals on all these matters on the table.

Let me point out the special importance of the USSR initiative aimed at overcoming the impasse in medium-range nuclear weapons negotiations created by the NATO resolution of December 1979.

There is a need for negotiations on medium-range nuclear weapons in Europe-- even prior to the ratification of SALT II which, as is well known, has thus far been thwarted by the United States.

There is a need to establish an organic link between these negotiations and the problems raised by the so-called "forward based" American nuclear weapons. If any arms limitation agreements are reached in these talks, they could be taken up after SALT II has been ratified.

Erich Honecker has said that these proposals are important because "they serve to overcome the impasse in the disarmament dialogue created by NATO missile resolution adopted in Brussels."

[Question] What role do you see labor unions playing in this endeavor ?

[Answer] Ever since the Stockholm appeal in 1950 to the success of which the WFTU made a great contribution, as is well known, the unofficial organizations have grown rapidly in significance-- the way-stations being their fight against the neutron bomb over the past few years; their support for the holding of a European security conference and their active role at the U.N. special session on disarmament. The international trade union movement has had a large share in this. After all, it is the working class which plays the largest part in the worldwide efforts for peace and detente. Just the same, the recent meeting of the WFTU general council and of the WPC have both shown that more strenuous efforts must be made to combat the arms race and the danger of war.

"It is not enough to be shocked! Nor is it enough to be worried! The peoples have the power to safeguard peace which is their birthright! The time to act is now!" This Sofia appeal of the WPC is addressed to us as unionists, too.

Need for Continued Dialogue

East Berlin IPW-BERICHTE in German Vol 9 No 10, Oct 80 pp 1-9

[Analyses-Problems' feature article by Prof Dr Max Schmidt, director, Institute for International Politics and Economics, East Berlin: "Military-Strategic Balance, Political and Military Detente: U.S. Nuclear War Strategy Aims at Military Superiority-- Safeguarding Peace Requires Balance of Forces--Arms Limitation and Disarmament Versus Concept of Nuclear First Strike"]

[Text] The start of the eighties has witnessed a marked aggravation of the world situation. The results of the process of political detente which benefited all peoples, particularly those in Europe, in the seventies are now endangered. Instead of taking steps toward detente, the ruling circles of the United States and of NATO are now pursuing a policy of confrontation. The system of international relations is being strained to the utmost by the discrepancy between the readiness to agree to arms limitation and disarmament manifested in numerous declarations and treaty documents and the heightened activity on the part of the leading NATO countries which points in the opposite direction, heating up the arms race further and intensifying conceptual and material preparations for war.

The chances of success of the arms limitation negotiations are being undermined; the SALT II treaty cannot take effect, as important as it is to peace, because its ratification is being blocked in the United States and all this while the development, production and deployment of new nuclear and conventional weapons of mass destruction by NATO is proceeding apace on the basis of its long-range program of 1978 and the December resolution of 1979.

Balance of Power, Equal Security, Peaceful Coexistence

The most aggressive forces of imperialism are mounting a vastly stepped-up arms program in an attempt to do away with the existing balance of power and to achieve military superiority while refusing to supplement political detente with military detente. This has cast a kind of pall over the international arena. Safeguarding peace has thus become the cardinal issue of our time, as Erich Honecker, secretary general of the SED central committee, has said. "We must continue to work for detente in the eighties, tying it to an orientation toward disarmament."[1]

This calls for building on the foundations laid for the benefit of mankind in the seventies but which certain imperialist circles do not seem able to accept. Developments during that time had created a world situation which opened up favorable opportunities in the fight for peace. Peaceful coexistence between states with differing social systems was beginning to take concrete political and economic shape. Multilateral and bilateral treaties and agreements proved their usefulness in improving international relations. An important factor has been and still is the evolution, the existence, operation and maintenance of an approximate military-strategic balance between the main forces of the two different social systems and of the countries allied with them. This balance is an important pre-condition for preserving and strengthening peace.

It has been a decisive factor in starting on the road to political detente, based on the efforts of the socialist countries and the main realistic-minded forces in the capitalist countries: a process which has been of political and economic benefit to all concerned and has opened up new vistas.

It has been a major element in thus far being able to prevent the outbreak of a third world war, which is to say a war involving missiles and nuclear weapons.

It has been the principal reason that Europe, which twice has been the starting point of a world war, is experiencing the longest period of peace in this century and that the continent itself is emerging as an example of peaceful coexistence between countries with differing social systems.

It has provided the very basis on which successful negotiations on arms limitation and disarmament can be conducted, as SALT I and SALT II have shown.

The concept of military-strategic balance of power as a pre-condition for peace is something relatively new. It was first used deliberately by the socialist countries who look upon it both as one of the foundations and as a guarantee for peaceful coexistence between countries with differing social systems. This involves recognition of the fact that given present power relationships in the international class struggle this military-strategic balance must serve as the basis for reaching agreement on limiting, restricting and ultimately reducing armaments while preserving intact the security of all participants.

The member countries of the Warsaw Pact have repeatedly pointed out that there now exists "a military balance in Europe and in the world as a whole."[2] This assessment is based on an analysis of all the factors which need to be taken into account, including an overall comparison of nuclear and conventional weapons systems, their number and firepower, of troop strengths, of the strategic situation, of the consequences of possible surprise attacks and the effectiveness of defense installations. Geographic factors such as length and strategic location of borders, logistic and economic factors among others must also be considered.

To be sure, the military power relationship is extremely difficult to assess. To analyze it, a great number of quantitative and qualitative factors as well as global and regional ones must be taken into consideration. But, to be realistic, one must above all start out on the basis of the sum total of the military forces opposing each other. Any attempt to remove individual weapons systems or individual countries or even regions from their proper

context and to compare them will inevitably distort the picture. Overall, strategic balance is a reflection of the fact that neither side possesses or has hopes of attaining a devastating "first strike" capability.

Right up to the present, members of the U.S. government and of other NATO countries have more than once attested to the fact that approximate parity exists as between the USSR and the United States and the Warsaw Pact countries and NATO. This was underscored in particular by the American President on the occasion of the signing of the SALT II treaty in Vienna in June 1979. Chancellor Schmidt of the FRG and other West European political leaders have also called attention to the existence of approximate parity.

The existing balance of power clearly calls for another dimension in international relations: the principle of equal security which makes it incumbent upon all sides not to aim for preponderance and military superiority and, most importantly, to have this principle serve as the basis for all negotiations and agreements on arms limitation, arms reduction and disarmament.

In this sense, the principle of equal security has been upheld both in multilateral agreements such as the final document of the U.N. special session on disarmament in 1978 and in bilateral agreements such as the joint USSR-U.S. communique in Vienna in 1979 and agreements between the USSR and the FRG, the USSR and France and others.

Efforts To Attain Military Superiority Endanger Balance of Power

In view of the present international situation the question is how this fundamental aspect of peaceful coexistence is being viewed. This calls for a more exact analysis of intentions, doctrines and actions along the following lines: Are these efforts directed toward recognition of this balance, toward the reduction of the level of military confrontation and toward arms limitation based on the aforementioned principle or is this imperative being disregarded.

It cannot be overlooked that there has been a growing tendency recently of members of government and military leaders of the capitalist countries --particularly the United States-- demanding openly that war or military power as an instrument of policy based on superiority be made practicable again or be employed more efficaceously. On the occasion of a visit to the Pentagon, U.S. President Carter declared that he would see to it that the United States remains the premier military power in the world.[3] He thus clearly oriented American arms and military policy toward attainment of military superiority.

Testifying before the Senate foreign relations committee on the goals of increased U.S. and NATO arms programs, U.S. secretary of defense Harold Brown said that the purpose was to "surpass" the Warsaw Pact; to "gain a clear advantage."[4] Appearing before the armed services committee later, he asked for an increase of his military budget by saying: "We must now decide whether we intend to remain the strongest nation on earth."[5] The quest for military superiority also came up in speeches given by former secretary of state Henry Kissinger and former NATOcommanding general Alexander Haig at a conference of military experts in Brussels in early September 1979 on the subject of "NATO and the Next 30 Years." "Their statements lead to the conclusion," an FRG press report said, "that they are looking for superiority instead of approximate parity."[6]

President Carter's state of the union message of January 1980 lists concrete programs which, if carried out, would lead to a breach of approximate military parity as between the USSR and the United States and the attainment of American military superiority. The strengthening of the military power of the United States and its allies is given top priority in the eighties. In the current fiscal year alone, U.S. military expenditures will increase by $20 billion and by the middle of the eighties the U.S. military budget is to be more than $200 billion.

Special emphasis is being placed on strengthening the nuclear missile arsenal. Development and production of qualitatively newer strategic offensive weapons systems, among them the MX missiles, fixed-wing missiles and Trident missiles, are proceeding. A start has been made on the development of an interventionist "rapid deployment force" together with a special fleet of floating naval bases and an air transport fleet capable of transporting large-size units to the farthest reaches of the earth.

In political science communities in the capitalist countries voices justifying this policy of military power and the deployment of it are becoming louder. R Kennedy of the U.S. Army College's Strategic Studies Institute calls the ability to resort to force a pre-condition for successful negotiation and defines the function of military power as being "its ability to threaten and, if necessary, to resort to military power so as to force a preferred point of view upon the world order."[7] So much is clear: The quest of the United States for military superiority is to serve the goal of "forcing the point of view preferred" by U.S. imperialism upon the world order.

The heightened arms buildup by the leading NATO power is based on designs for worldwide expansion and not on U.S. security interests. Thus the former American diplomat Arthur M. Cox wrote as long as 5 years ago: "Brookings Institute analysts believe the defense budget could be cut in half, if our only object were to defend the territory of the United States."[8] In the meantime, U.S. arms expenditures have escalated to such an extent that the discrepancy between security needs and expansionist designs has widened even more. The United States is the only country which disposes of a worldwide system of military bases in 114 countries.[9]

'New' U.S. Nuclear War Strategy

In this connection the most recent decision of the President of the United States relating to U.S. nuclear strategy must be viewed with considerable alarm. Jimmy Carter signed "directive 59" which calls for varying the targets of the strategic nuclear missiles. Essentially, this change is designed to carry out the first strike against military objectives in the Soviet Union, to lower the nuclear threshold so as to be able to wage a limited nuclear war.

This concept of a limited strategic nuclear war against the USSR is not new. It was developed as long ago as 1974 by the then U.S. defense secretary Schlesinger and its origins, in fact, go back even further than that. When all is said and done, it always conformed to the designs of the forces opposed to detente which mean to confront the Soviet Union from a position of strength and superiority.[10]

The attainment of strategic parity by the Soviet Union and the inability of the United States to carry out a decisive and devastating strike forced the various U.S. governments to recognise this parity situation. This was manifested in the documents relating to the limitation of strategic offensive weapons and missile systems of 1972, in the treaty on the prevention of nuclear war of 1973 as well as in later protocols.

But there always were powerful forces among the ruling circles of the United States which were unwilling to accept strategic parity. They were constantly looking for military superiority which they define as the capability of carrying out a devastating first strike with superior weapons systems. The quest to attain such a first strike capability has never been relinquished by any U.S. government. Their approach to arms control and disarmament agreements has been and always is tied to the option of leaving the way open for once again attaining military superiority. This was particularly apparent in the debate on SALT II in the United States.[11]

Contrary to the official pronouncements of the American government that it is prepared to maintain parity vis-a-vis the USSR and is cognisant of the danger of a violation of the principle, there are renewed attempts now to aim at overcoming the military-strategic balance both materially and conceptually. The United States is basing its efforts on the qualitative and quantitative development of new weapons systems designed to provide a new material foundation for its quest after military superiority, primarily in the sense of attaining a nuclear first strike capability. There are three aspects relating to the qualitative factors upon which they are basing their hopes.

The first factor is the accelerated improvement of the accuracy of the nuclear missile systems; secondly, they are trying to increase the strength of the warheads and thirdly, they are trying to perfect so-called invulnerability or at least to make it more difficult to defend against U.S. weapons systems.

In this way they are attempting to develop the capability for a "disarming" first strike. A start was made as long ago as late 1977 when 300 Minuteman III missiles were equipped with the MK-12a nuclear warhead which is twice as strong and as accurate as its predecessor. But with the signing of directive 59 the following new weapons systems are coming into play.

First, there is MX, the intercontinental mobile ballistic system of land-based nuclear missiles. 200 of these have been included in the U.S. arsenal. Based on statements of U.S. experts, these missiles have a destructive capability 20 times as great as that of Minuteman III due to their greater accuracy and strength; they are mobile and therefore considered invulnerable.

Secondly, there is the development and deployment of sea-based Trident II missiles with individually controllable and maneuverable warheads. Each U.S. atomic submarine, equipped with 24 of these missiles, is capable of annihilating at least 200 fortified military targets. A report prepared by the U.S. arms control and disarmament agency refers to these missiles as first strike weapons with a significant potential for destroying priority targets.

Thirdly, there is the development of new types of aircraft and missiles which are said to be insensitive or marginally sensitive to radar. According to U.S. defense secretary Brown, they are already in the testing stage and should, he says, alter the military balance considerably. Clearly, the new assessment of nuclear strategy undertaken by directive 59 is based in large part on these systems.

Fourthly , in the light of the President's directive, there is a need to assess the decision of 12 December 1979 relating to the development and deployment of U.S. medium-range nuclear missile systems (Pershing II and Cruise) in Western Europe. In view of strategic parity between the USSR and the United States, U.S. political leaders and military planners, in seeking renewed superiority, are concentrating not only on the development of new strategic weapons systems but also on regional aspects, which is to say a shift of "regional balnces of power" in their favor. In this, they assign highest priority to Europe. It is considered a particularly important arena of military confrontation with the Soviet Union and the member states of the Warsaw Pact.

The so-called Schlesinger report set the course in this direction in 1975. In positing alleged Soviet aggressive designs against Western Europe and the deterrent function of NATO, the report said that "the threat of mutual annihilation narrows the range in which enemy actions can be deterred by strategic forces and places greater emphasis on deterrence by medium-range missiles and conventional forces."[12]

As long ago as 1975 priority was thus given to increasing the NATO medium-range missile arsenal as part of a long-range strategic program whose point of departure was actual military-strategic balance and by no means Soviet military superiority. In the meantime, the present U.S. defense secretary Harold Brown has come out with much clearer and more comprehensive language. In his report to Congress on the proposed military budget for fiscal year 1980/81, he said: "In our view, NATO needs a strategic 'triad' of its own which is different from ours...It must dispose of nuclear-strategic forces, tactical nuclear weapons and non-nuclear forces."[13]

In practical terms, this comes down to dual military-strategic superiority. According to this scheme, the nuclear-strategic forces of the USSR would be opposed both by those of the United States and those of NATO. The first line would be occupied by the "Euro-strategic" weapons systems pursuant to the NATO resolution of December 1979 whereas the new weapons systems Pershing II and Cruise are clearly intended to provide a first strike capability. The 1975 Schlesinger report which "justified" the stronger emphasis on medium-range missiles had already provided in no uncertain terms for the nuclear first strike option. Although "clearly limited, the attack should be carried out with sufficient force and decisiveness in order effectively to alter the conceptions of the Warsaw Pact leaders and to create conditions favorable to negotiations."[14]

Now this was by no means a threatening gesture of a mere tactical nature for as M. Kahler of Princeton University points out there are indeed forces active in the United States today which hold the principle of "assured mutual annihilation" to be obsolete and which are therefore coming out in favor of making nuclear weapons "applicable."[15] And they are not restricted to the United States. Commenting on directive 59, FRG military analyst A Weinstein, known for his outspoken support for the aggressive NATO strategy, wrote on 6 September 1980: "It is no longer true that there can be no victors in a nuclear war. It would depend on what kind of nuclear war is waged. Whoever carries out a first strike with precision weapons and in so doing destroys the offensive weapons of the enemy has a chance of winning."[16]

NATO Missile Resolution Aims at Changing Military Balance

What significance does the NATO resolution of December 1979 have with respect to the military power relationship ? To add to the 8,000 nuclear units already positioned in Western Europe and the 1,000 delivery systems on board of warships in the Atlantic and the Mediterranean, it has been decided to produce qualitatively new American nuclear weapons and to deploy them in Western Europe, namely Pershing II missiles as well as fixed-wing missiles (the so-called Cruise missiles) with a range of 1,800 to 2,500 kilometers and an in-flight time of mere minutes. Their multiple warheads, being more accurate and harder to defend against, could hit different targets simultaneously. Early warning time would be reduced from 30 to 4 to 6 minutes.

Thus, it is not a matter of "simply modernising" obsolete weapons, as it is said, which have the same purpose as heretofore, but of introducing strategic weapons which would reach from West European soil far into Soviet territory up to the foothills of the Urals. The NATO decision thus has the aim of bringing about a fundamental change in the strategic situation in Europe and at the same time undermines the agreements reached in the SALT II treaty. Bundeswehr major general (ret) G Bastian along with many other Western politicians and analysts considers this to be a "new situation" for the Soviet Union "in that the USSR does not have equal opportunities, namely to pose a nuclear threat to the United States with medium-range weapons."[17] So it may be said that the United States has set its course on developing a first strike capability in the European theater as well.

The NATO position relating to the proposed stationing of new medium-range nuclear missiles in Europe is being justified above all with the alleged need for "modernisation." This position does not conform to reality-- either historically, politically or militarily. As to the historical aspect, it may be recalled that NATO's original tactical decision to station new American missiles

does not date from December 1979 but from the fall of 1977 when it was reached at the NATO nuclear planning group meeting in Bari. The official report of the U.S. Arms Control and Disarmament Agency for FY 1980 states that the budget decisions for the development of the Pershing II missile were reached as long ago as 1974.[18] The Soviet missiles, however, which have repeatedly been used as ex post facto "justification" were an unknown quantity until 1975 by the United States' own admission. And the funds for the development of the fixed-wing missiles were decided upon even earlier, in 1972. Furthermore, it is worth recalling the previously mentioned American long-range plans for the attainment of military superiority which assign a labor-sharing role to the medium-range missiles.

As for the political aspect, long before the new medium-range nuclear systems of the United States and of NATO were decided upon and prior to the modernization of its own arsenal, the USSR proposed inclusion of medium-range weapons in the SALT negotiations. But, as the imperialist camp admits, these weapons were excluded by the United States.[19] Similarly, the Soviet proposals of 1979 for negotiations on the medium-range arsenal were simply brushed aside.

As for the military aspect, it should be pointed out that there is approximate parity in the medium-range nuclear weapons field, too, if not only similarity of available means but similarity of actual effectiveness are considered.

To justify the "modernisation" lie, all sorts of calculations were being offered in the NATO countries, which were self-serving and exceeded the bounds of exaggeration. A particularly revealing example for this type of manipulation is a study commissioned by a group of CDU Bundestag deputies. According to the study, "Soviet superiority over NATO in short-range missiles stands at 4.5:1."[20] But Hamburg peace researcher Dieter S Lutz has taken a close look at the calculations on which this particular manipulation is based. He has found "that there is no way in which NATO military inferiority can be deduced in the TNF field. On the contrary, it cannot be ruled out that the Warsaw Pact may have to counter quantitative and qualitative improvements in the NATO arsenal by adopting modernisation measures of its own."[21]

Comparative figures worked out by Lutz and based on total NATO and Warsaw Pact strength add up to a ratio of 1,622:1,637 systems. Now this reflects approximate parity without a doubt. In this calculation, the total number of weapons systems is taken into account as well as their differing qualitative criteria. Justifiably, the calculations are also based on the need to include U.S. and NATO systems frequently excluded by the bourgeois camp such as American equipped with Poseidon missiles operating in the Atlantic and the

Mediterranean under SACEUR; carrier-based aircraft in the same area, and all NATO with a range of more than 1,500 kilometers. Also included are the nuclear weapons systems of France and Great Britain.

As long as the aforementioned U.S. Forward Based systems which are capable of reaching the Soviet Union and against which the land-based Soviet missile arsenal constitutes a reply are excluded, there is no comparing and no negotiating about medium-range weapons systems. This is confirmed --unintentionally, it may be assumed-- in a report by the chairman of the U.S. Joint Chiefs of Staff, which states: "The U.S. contribution to LRTNF consists of forward-based F-111 and A-6 aircraft as well as a significant number of Poseidon RV's, all assigned to SACEUR."[22]

There are also major differences with regard to their strategic mission between the Soviet SS-20's and the proposed Pershing II's and the Cruise missiles which should notbe left out of consideration. The SS-20's are a replacement with no increase in range for the SS-4's and SS-5's which had already been in use for more than 10 years.

The deputy director of the London International Institute for Strategic Studies, G Treverton, confirmed this fact which has been pointed out by the Soviet Union on a number of occasions, stating the SS-20 poses "no qualitatively new threat" as compared to the obsolete delivery systems.[23] And Stockholm-based SIPRI in its latest yearbook also states that "if the existing missiles are replaced piecemeal by SS-20's, this does not introduce a quantitatively new threat." As for designating the Pershing II and Cruise missiles as "modernization," SIPRI calls that an "understatement"pointing to "qualitatively new capabilities" NATO could gain at the expense of the Warsaw Pact organisation.

The number of medium-range missiles has not been increased in the European part of the USSR during the past 10 years, nor has the number of corresponding aircraft. Furthermore, the Soviet Union has stationed no such weapons on the territory of its allies. As a matter of fact, the number of medium-range missile launch pads and their nuclear warhead strength were decreased somewhat as was the number of medium-range bombers. The ministerial meeting of the NATO nuclear planning group in The Hague in November 1979 itself confirmed the fact that "the total number of Soviet missile launching sites targeted on NATO territory in Europe has been reduced somewhat in recent years."[24]

In a speech before the Brookings Institute in February 1980, defense secretary Harold Brown also acknowledged the fact that the USSR did not increase the number of its medium-range weapons and warheads in the seventies, but in fact decreased them.[25]

Thus, the NATO decision to develop, produce and station new medium-range nuclear systems in Western Europe is not the result of military superiority or a threat on the part of the Warsaw Pact states but based on the desire to attain military superiority and to abrogate the principle of equal security as the basis of mutual relations and negotiations.

A Deadly Scheme

The entire scheme of the United States and of NATO to gain superiority with the help of new weapons systems is highly dangerous and a threat to peace:

1. The danger of a general war involving missiles and nuclear weapons is not reduced but heightened; above all because there is an erroneous assumption of being able to wage and to win a limited nuclear war. It is a view that completely disregards reality that a localized nuclear war could be waged. Any nuclear attack would escalate into a direct confrontation in short order and involve retaliatory strikes. The 30th Pugwash conference of noted world scientists in late August 1980 rightly called for steps to counter this madness. M Kaplan of the United States, the secretary general of the international Pugwash movement said in conclusion: "Perhaps the worst thing that has happened is the increasing promotion and public acceptance of the idea that limited nuclear wars could be fought without the risk of nuclear escalation, that nuclear wars could be survived and won."[26]

2. The danger of nuclear conflict is heightened as a result of attempts by the United States and NATO to develop a first strike capability which is to say --in connection with directive 59-- above all in Europe. The deployment of new medium-range systems in Western Europe turns these countries into nuclear hostages of the United States to all intents and purposes. Whereas the United States are aiming for a considerable military advantage vis-a-vis the Soviet Union by adding these missile systems, the West European countries are called upon to bear the "nuclear risk." This has not only led to considerable uneasiness among the population but also to suspicion and anxiety among realistically thinking West European politicians.

Contrary to the U.S. position, official and unofficial views are being voiced in some of the smaller member states of NATO which oppose the new U.S. strategy aimed at lowering the nuclear threshold. This is true for example of the two largest political parties in the Netherlands[27] and equally of the retired FRG general Baudissin who now heads the Hamburg Institute for Peace Research and Security Policy and who warns of the dangerous consequences this U.S. nuclear war strategy would have.[28] There is a growing realization that the danger of military conflict in Europe and

for its population cannot be "escalated out of existence" by introducing new weapons systems but that military detente and arms reduction are needed.

3. The arms race is being stepped up. There are new rounds being started which forces the socialist states to take the necessary steps to safeguard their military security in view of the acute threat. History proves that the socialist states have the capability to match any new weapons technology introduced by NATO with corresponding new weapons of their own which are necessary for their defense. But it is a new round in the arms race with its very grave consequences that the socialist states would like to prevent.

It should be noted that a new round in the arms race does not in any sense signify a mere numerical enlargement of "somewhat modernized" weapons systems. Based on this erroneous thesis, some bourgeois journalists have come to the "reassuring" conclusion that military balance is bound to restore itself in the end. This would lead to a restoration of the status quo guaranteeing world peace once more. If one group of states were to add more arms to its side of the scales, the "international scales" would balance out again as soon as the other group of states adds an equal number of "weights" to its side.

The metaphor of the scales is antiquated and obviously deficient because of the mechanistic symbolism involved, even if it does have a certain descriptive value. At any rate, if it is used, one must not overlook a most important fact. Any scales can be weighed down up to a point. But if it is overloaded, the whole system collapses.

Any sober and objective assessment of the military-strategic situation in the world and above all in Europe must lay stress on the conclusion that armaments both in terms of quantity and quality are now dangerously close to the upper limit of the loading capacity of the military balance system. There is a fundamental threat to strategic stability in any new round of the arms race, particularly in the development, production and deployment of weapons of mass destruction and delivery systems with materially new capabilities. More and more realistically thinking politicians are coming to realize this. The long-time head of ACDA, Paul Warnke, for example, wrote: "The Russians are capable of warding off any threat to strategic equality just as we are able to forestall any attempt of theirs to attain superiority. The result of any stepped-up competition will be a situation comparable to the present but characterized by a higher level of potential destruction and more unsettled political conditions...Today, the best alternative which offers a guarantee against nuclear war is the

conclusion of agreements on strategic arms control conducive to reducing tensions and to paving the way to comprehensive and more effective disarmament in the future."[29]

4. An arms race which aims at the attainment of military superiority undermines the principle of equality of states in the system of international relations. The quest for hegemony is fostered; a policy of strength and the attempt to apply military pressure and to resort to blackmail to turn negotiations into dictates gains favor. There would doubtless be an increase in tensions and in suspicion between groups of states not only in international relations including those in the economic field. Clearly, this would also impede the work of all existing and projected bodies dealing with arms control and disarmament and impair the basis for negotiation.

5. Finally, there is a need to point to the many economic and social consequences of such a process for all states whether directly or indirectly concerned. Although these consequences are not discussed here, there is no doubt but that they would be extremely grave.

Arms Limitation and Disarmament Based on Equal Security

Despite all presently existing tensions and difficulties in world affairs, the socialist states believe that the process of detente and the results attained thus far must continue to have priority in international relations. They are in favor of constructive steps such as to counter further hardening of the international and the European situation.

The socialist states aspire neither to military superiority nor to a shift of the military balance which has historically evolved in their favor. This applies both to the strategic balance between the USSR and the United States and between the Warsaw Pact and NATO in the European area. It was already in 1977 that Leonid Breshnev called the allegations according to which the Soviet Union was aspiring to nuclear superiority in order to carry out a first strike "nonsensical and totally unfounded," adding that "our efforts are in fact aimed at preventing both a first strike and a second strike and, for that matter, nuclear war itself."[30]

In May 1980, the Warsaw Pact countries renewed their pledge of never developing a nuclear first strike capability and of never arrogating to themselves any control over "spheres of influence" or international transport routes.[31] Their whole policy aims at eliminating the military factor. But as long as significant progress in the direction of general and total disarmament cannot be reached, the military factor continues to be important. That

is why the preservation of the military balance is one of the fundamentals of peaceful coexistence between states with differing social systems. But it is not only a military factor but also a pre-condition for practical measures aimed at arms limitation and disarmament.

The central goal of the foreign and security policy of the Warsaw Pact countries continues to be a reduction in the level of military confrontation on the basis of reciprocal reduction of forces and armaments. Their policy continues to be based on the principle of equal security, respect for the legitimate security interests of other states and readiness to enter negotiations about all types of weapons. The only condition they attach to all their proposals for arms limitation and disarmament is unequivocal and effective respect for the principle of equal security for both sides.

This position is also being supported by leading bourgeois experts. G Kristiakowski, for example, a former scientific adviser of the President of the United States and a long-time member of the top staff at the Los Alamos atomic center, wrote: "To reach agreement (on arms limitation-ed) we must unequivocally grant the Soviet Union equal status and take her legitimate security needs into consideration."[32]

The Warsaw Pact countries consider the preservation of approximate parity of forces an important stabilising factor in world affairs. For this reason, their proposals have been and still are aimed at maintaining approximate military balance at a level to be gradually lowered with a view to reaching effective and mutually acceptable reductions in arms expenditures.

The Warsaw Pact countries are making numerous efforts to thwart any attempt aimed at disturbing the military-strategic balance and achieving one-sided military superiority. Now that the United States and other NATO members have set their sights on a new, stepped-up arms race, the Warsaw Pact countries have no other choice to adopt measures to increase their defense preparedness in the sense of preserving approximate military parity. These are measures that pose no threat to the security of any other country. But the socialist states cannot accept any disturbance of the military-strategic balance because this would endanger their security and threaten world peace.

The communique of the meeting of the political consultative committee of the Warsaw Pact countries in May of this year spells out the main points of this coordinated socialist foreign policy which is in the interest of their own security needs and those of the world as a whole:

First: Agreement on the principle that no state or group of states in Europe may after a certain date increase the numerical strength of its armed forces in the area designated by the Helsinki Final Act. This is also how the most recent initiative of the socialist participants at the Vienna negotiations is to be understood. The deadlock at these negotiations could thus be broken and first results could be achieved, if the proposal were accepted to withdraw 20,000 military personnel of the USSR and 13,000 of the United States during the first stage of troop reductions as well as to impose a collective "freeze" on troop levels during the "intervals" between the reduction stages.

Second: Strict adherence to all terms of the Helsinki Final Act, above all to the basic principles all participants have pledged to uphold-- such as the renuncication of force or the threat to use force; the inviolability of national frontiers; the peaceful settlement of disputes; the non-interference in internal affairs; the fulfillment in good faith of obligations under international law.

Third: Intensive bilateral and multilateral exchanges of opinion in order to structure the Madrid conference in such a way that practical steps aimed at comprehensive implementation of the Final Act can be agreed upon.

Fourth: Stepped-up preparations for a conference on military detente and disarmament in Europe with the aim of reaching practical decisions in Madrid on the agenda, date, location and mode of operation of the conference and of concentrating the work during the initial phase on confidence-building measures.

Fifth: Ratification of the SALT II treaty and speedy conclusion of negotiations going on at present and/or broken off such as the talks on banning nuclear tests, radiological and chemical weapons and on the non-use of nuclear weapons against non-nuclear nations.

Sixth: Immediate start of constructive negotiations on such issues as a world treaty on the non-application of force, a ban on the production of nuclear weapons and a ban on the development of new types and systems of weapons of mass destruction.

Seventh: Discussions on the limitation and reduction of military presence and military activities in the Atlantic, in the Indian Ocean, the Pacific, the Mediterranean and in the Persian Gulf.[53]

The primary object of all these efforts and proposals is to make further progress in reducing the danger of nuclear war. In addition to the ratification of SALT II, this calls for reopening the way to negotiations on medium-range missiles. As is well known, these

negotiations were blocked as a result of the refusal of the Soviet offer of 6 October 1979 and the NATO resolution on medium-range missiles of December 1979.

New Soviet Proposals

The newest initiative of the Soviet leadership calling for immediate consultations on the best approaches to solve the medium-range nuclear missile issue which was submitted both to the chancellor of the FRG on the occasion of his visit to Moscow in June 1980 and to the U.S. leadership is therefore of extraordinary, fundamental and topical importance. What are its main points ?

Its purpose is to start discussions and preliminary negotiations as soon as possible on medium-range nuclear weapons in Europe--even prior to ratification of the SALT II treaty which, as is known, has been blocked by the destructive position taken by the United States.

The point is to conduct these talks "within the organic context" of the issue of the so-called forward based American nuclear weapons, including, as mentioned previously, the F-111 and Phantom combat aircraft stationed in Great Britain as well as American nuclear submarines assigned to NATO, particularly those on patrol in the Mediterranean.

Arms limitation agreements reached in these talks, if any, could be taken up which is to say realized following ratification of SALT II.

Such talks could commence without any pre-conditions whatsoever.

Erich Honecker, secretary-general of the SED central committee, has called these proposals "a means of breaking the impasse in the disarmament dialogue caused by the NATO missile resolution in Brussels."[34] Evidence that the proposals are considered to be meaningful is reflected in positive statements on some aspects of them in various European NATO countries. Thus, FRG chancellor Helmut Schmidt said he thought the inclusion of FBS in such consultations to be "quite logical," adding that he could "appreciate the Soviet position with respect to SALT II."[35] SPD disarmament expert Pawelczyk made a point of stressing that the Soviet proposal offers a way of gaining time and "one possibility of preventing an arms race in Europe in the medium-range nuclear systems field."[36]

Addressing letters to Western heads of state and government in August, the secretary-general of the CPSU central committee, Leonid Brezhnev, made new efforts to get the talks started. In a joint press conference, the U.S. and FRG foreign ministers reacted --at least indirectly-- by announcing their readiness to enter preliminary talks soon.[37]

But in this case, too, the idea is to take concrete steps without delay. And, one cannot help noting that a kind of rejection movement against the USSR proposals is already beginning to form in some of the NATO countries. There are demands, for example, not to include FBS in the talks, but only medium-range missiles. But even NATO military experts do not deny --as we have already shown-- that the stationing of Soviet medium-range missiles in European Russia was meant as and still constitutes a reply to the so-called FBS which in effect fulfill the function of medium-range nuclear missiles. In the final analysis, the issue is the entire range of weapons which fulfill the same or a similar function-- unless one is making an attempt arbritarily to alter the present approximate military balance in one's own favor.

Pessimistic estimates are also being given according to which it would be extremely difficult to conduct such talks and negotiations because of the subject matter involved. It may even take years to agree on a mutually acceptable definition of the matter at issue, it is said.

But: the subject matter treated by SALT I and SALT II also was extremely varied, particularly with respect to the comparability of types of weapons, their location and range and their destructive capabilities, etc. Nonetheless, results were achieved conforming to well-perceived bilateral interests. The decisive aspect is mutual good will which in the end contributes greatly to mutual trust. The peoples impatiently expect and yearn for negotiations. The apparent and totally unfounded hesitancy in the guise of the alleged need to give careful "study" to the USSR proposal gives rise to suspicions that the object is to gain time in order to pursue goals and arms measures of one's own and to create accomplished facts of a most dangerous nature.

Today's world is one of heightened tensions. The situation is complicated. It demands the highest degree of political readiness to to work toward and to conduct a dialogue about issues in dispute and at the same time to avoid anything that might contribute to aggravating the situation. A shift toward military detente in the eighties is possible, if the negotiations are based on the existing approximate strategic balance and the principle of equal security for all sides.

FOOTNOTES

1. NEUES DEUTSCHLAND, East Berlin, 9 Sep 1980

2. NEUES DEUTSCHLAND, East Berlin, 24 Nov 1978

3. SUEDDEUTSCHE ZEITUNG, Munich, 8 Mar 1977

4. IGA-BULLETIN, Washington/Bonn, 20 Sep 1979

5. NEW YORK TIMES, New York, 14 Dec 1979

6. FRANKFURTER RUNDSCHAU, Frankfurt/Main, 8 Sep 1979

7. R. Kennedy, "Essays on Measuring the Strategic Balance" in "U.S.A. and the Strategic Balance," Munich, 1980, p 23

8. A.M. Cox, "The Dynamics of Detente," New York 1976, p 130

9. NEUE ZEIT, Moscow, No 4, 1979

10. Cf J. Stelzow, "Strategic Parity or Strategic Superiority ?" in DEUTSCHE AUSSENPOLITIK, Berlin, No 8. 1980, p 95ff

11. Ibid

12. J.R. Schlesinger, "The Theater Nuclear Force Posture in Europe: A Report to the United States Congress in Compliance with Public Law 93-365," Washington, U.S. Department of Defense, 1 Apr 1975, p 2

13. Quoted by S.D. Fair, "TNF and the Strategic Balance" in "U.S.A. and the Strategic Balance," loc cit, p 38

14. J.R. Schlesinger, loc cit, p 15

15. NEUES DEUTSCHLAND, East Berlin, 1 Jul 1980

16. FRANKFURTER ALLGEMEINE, Frankfurt/Main 6 Sep 1980, p 10

17. FRANKFURTER RUNDSCHAU, Frankfurt/Main 13 Aug 1980

18. Fiscal Year 1980 Arms Control Impact Statement, 96th Congress, 1st Sec, Mar 1979, Washington, DC, p 135

19. See e.g. P. Schlotter, S. Tiedke, "Is There an Alternative to Rearmament in Europe ?" Frankfurt/Main, 1980

20. H. Hoffmann, R. Steinruecke, "Armament and Disarmament in the Euro-Nuclear Area," Washington/Bonn 1979, p 35

21. D.S. Lutz, "The Military Strength Ratio in the Field of Euro-Nuclear Weapons Systems," IPSH-FORSCHUNGSBERICHTE, No 12, Hamburg, Oct 1979, pp 31-32

22. Group of Authors, "The Controlled Chaos: The Crisis of Disarmament," Frankfurt/Main, 1980

23. Cf G. Treverton, "Nuclear Weapons and the Gray Area" in FOREIGN AFFAIRS, New York, Summer 1979, p 1080

24. EUROPA-ARCHIV, Bonn, No 2, 1980, p D 29

25. FRANKFURTER RUNDSCHAU, Frankfurt/Main, 31 Jul 1980

26. FRANKFURTER RUNDSCHAU, Frankfurt/Main, 5 Sep 1980

27. FRANKFURTER RUNDSCHAU, Frankfurt/Main, 12 Aug 1980

28. FRANKFURTER RUNDSCHAU, Frankfurt/Main, 15 Aug 1980

29. P. Warnke, M. Krepton, "The Awesome Pact Behind the SALT-Debate" in "Across the Board," New York, No 3, 1979, p 18 ff

30. NEUE ZEIT, Moscow, No 26, 1980, p 11

31. Declaration by Member States of Warsaw Pact in NEUES DEUTSCHLAND, East Berlin, 16 May 1980

32. DEFENSE MONITOR, Washington, Mar 1978, p 7

33. NEUES DEUTSCHLAND, East Berlin, 16 May 1980

34. NEUES DEUTSCHLAND, East Berlin, 26 Aug 1980

35. DER SPIEGEL, Hamburg, 7 Jul 1980

36. FRANKFURTER RUNDSCHAU, Frankfurt/Main, 21 Jul 1980

37. INTERNATIONAL HERALD TRIBUNE, Paris, 28 Aug 1980

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WEST GERMAN ANALYSIS OF GDR COMBINE SYSTEM DEVELOPMENT (II)

Cologne DEUTSCHLAND ARCHIV in German Vol 13 No 10, Oct 80 signed to press 26 Sep 80 pp 1046-1062

[Part II of 'Analyses and Reports' feature article by Kurt Erdmann and Manfred Melzer: "The New Combine Decree in the GDR — Possibilities and Limits of the Productivity Stimuli of the Newly-Formed Combines." A translation of Part I of this article is published in JPRS 76865, 24 Nov 80, No 2065 of this series, pp 31-52. Translations of six below-cited articles from the following two East Berlin journals are published under quoted headings in JPRS issues of this series as indicated: Three items from EINHEIT: Footnote 1 — Fritz Haberland, Wolfgang Salecker, "Combine Managers' Tasks, Improved Production Methods Discussed," 76104, 24 Jul 80, No 2026, pp 34-76; footnote 45 — Horst Martens, "Petrochemical Combine Expansion, Rationalization Discussed," 76459, 19 Sep 80, No 2043, pp 43-45; and footnote 62 — Gerd Friedrich, Klaus Kroemke, "Combine System's Development, Future Tasks Analyzed," 75132, 14 Feb 80, No 1980, pp 15-26. Three items from WIRTSCHAFTSWISSENSCHAFT: Footnote 16 — Rudolf Gerisch, Willy Hofmann, "Effective Combine Management Seen Vital to Economic Success," 73083, 26 Mar 79, No 1872, pp 13-39; footnote 31 — Ingo Wolf, "Combine Responsibilities for Construction Deadlines Outlined," 74274, 6 Dec 79, No 1961, pp 33-48; and footnote 82 — Gerd Friedrich, "Combine, Enterprise Management and Planning Reviewed," 76335, 29 Aug 80, No 2038, pp 7-32. Also available is a translation of an earlier DEUTSCHLAND ARCHIV article by Kurt Erdmann, cited in footnote 85, published under the heading, "Problems Cited in Industrial Design Development," in JPRS 74271, 27 Sep 79, No 1937 of this series, pp 24-36]

[Text] Part I of this analysis (published in issue No 9, 1980, pp 929-942) initially discussed the new combine decree, both from the standpoint of earlier legal provisions regarding enterprise organization as well as follow-up regulations issued in the interim. This was supplemented by a description of the benefits which the economic leadership anticipates from the combines in remedying at least some of the existing functional weaknesses and reducing the problems that have arisen as a result of foreign economic strains. Next came an analysis of changes in the economic management system that came about once the VVB's [associations of state enterprises] were abolished and integrative enterprise mergers (combines) were established. Another important point was the limited expansion of the authority of combine managements to make decisions.

Part II of this study concentrates on industrial management problems affecting internal combine organization. Solution of these problems will ultimately determine whether the — so urgently needed — general improvements in productivity can or cannot be achieved with the combines.

IV. Priorities and Problems of Managerial Intensification Efforts in the Combine

1. Industrial Management Objectives

The industrial management sector is the main starting point for the active mobilization of productivity in the combine reorganization process. The GDR economic leadership's expectations resulting from a revision of the internal organizational structure as well as from crucial process-related changes are directed toward the potential ability of the new combines to make a qualitative leap, as it were, to a higher level of productivity by coordinating specific actions aimed at the intensive mobilization of all industrial activities. Among the justifications offered is that "previous development trends in the growth of production, in the development of productivity, can no longer be realized with the same means" as before; rather, "qualitative changes..." are "necessary."[1] Priorities in the call for a critical review and rationalization of the combines' own potential are increased efficiency and the managerial result as measured by success (plan fulfillment, profits, cost minimization) — quite apart from the axiomatic fulfillment and overfulfillment of national economic plan quotas.

One of the GDR's leading economists, Koziolek, therefore characterized the industrial importance of the combines in these words in 1979: "Most of the national economy's intensification processes intersect in combine and enterprise reproduction and are ultimately realized there."[2]

The possibilities for internal enterprise rationalization and the problems involved have consequently been discussed intensively at a number of economic and political conferences in recent years, but seldom has there been any clear result.

The special importance ascribed by the economic leadership to establishing a new "internal containment" of the entire industrial process in the combine[3] can be seen in the fact that this demand was included in Art 1 of the new combine decree,[4] although toned down somewhat ("largely contained reproduction process"). This cautious wording is doubtless occasioned by the negative practical experiences in realizing the "self-contained system of economic levers" as the core of the reform phase of the New Economic System in 1963. Probably, however, the ideas at that time on achieving "internal containment" were behind the present-day planning. The effort to arrive at a contained economic system was not successful then. Today the hope is for at least a largely "consistent combine system." This in turn may be equated with a general revaluation of industrial management problems.

One of the most important points on the combine reorganization agenda is the best possible adaptation of combine structural organization to the specific conditions that exist in each case. Guenter Mittag stressed this at the combine conference in 1978: "So one should do what is necessary in the area of organization, but I should like to warn expressly against treating formation of the new combines in just one way, as a problem of structure and organization."[5]

A number of measures, procedures and demands can be listed among the efforts to arrive at an improved combination of factors and a more efficient structuring of industrial spheres of activity in the combine. Only a few main markers — with no claim to completeness — are featured here, set against the backdrop of an extremely broad catalog of industrial management tasks found in the "joint directive" of the party and government on drafting the 1981 National Economic Plan,[6] and also borrowing from the four essential industrial production factors found in Western business administration theory:[7]

(1) Dispositive factor (management and organization as essential intensification factors, for example);

(2) Capital or working capital factor (including the "effectiveness of capital assets"[8]);

(3) Labor factor (including the use of industrial labor resources and especially the "saving of human labor"[9]);

(4) Materials factor (including the "efficient use of energy, raw materials and material"[10]).

Another key area in the internal sector is the question of the extent of relative autonomy on the part of the combine enterprises, thus also of the principle of economic accounting — as an essential "method of systematic management..., in order to carry out in the enterprises the most effective means of plan fulfillment while making the most efficient use of resources."[11] With a few exceptions, a discussion of further industrial management details in this context must be omitted.

2. Management and Internal Combine Organization

Special importance is ascribed to the formative force of the dispositive factor in the phase of combine reorganizations in particular. Four basic types of combines are differentiated in the GDR literature:[12]

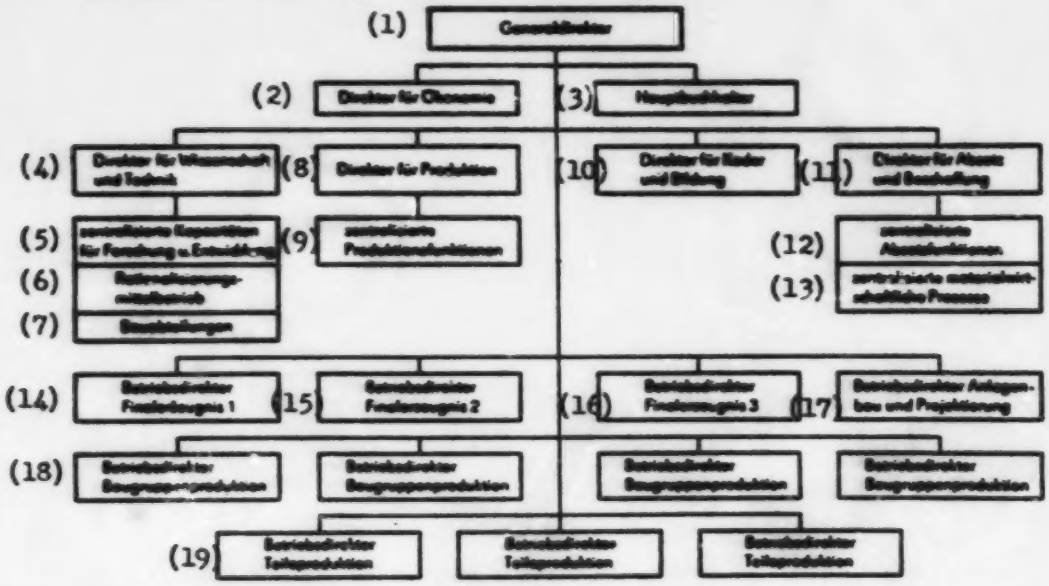
(1) Management by a central combine management of a combine having only one enterprise (Leuna Works, for example);

(2) Management by way of an independent management apparatus of a combine having several enterprises (VEB Carl Zeiss Jena Combine, for example);

(3) Management by way of a main enterprise of a combine having several enterprises; this management guides the entire combine simultaneously (for example, the Mansfeld Combine, the Bitterfeld Chemical Combine, the IFA Passenger Vehicle Combine);

(4) Management by way of control enterprises for various product groups for combines having several enterprises (for example, the Microelectronics Combine, the Deko Combine, the Radio and Television Combine).

Fig. 1. [illegible]



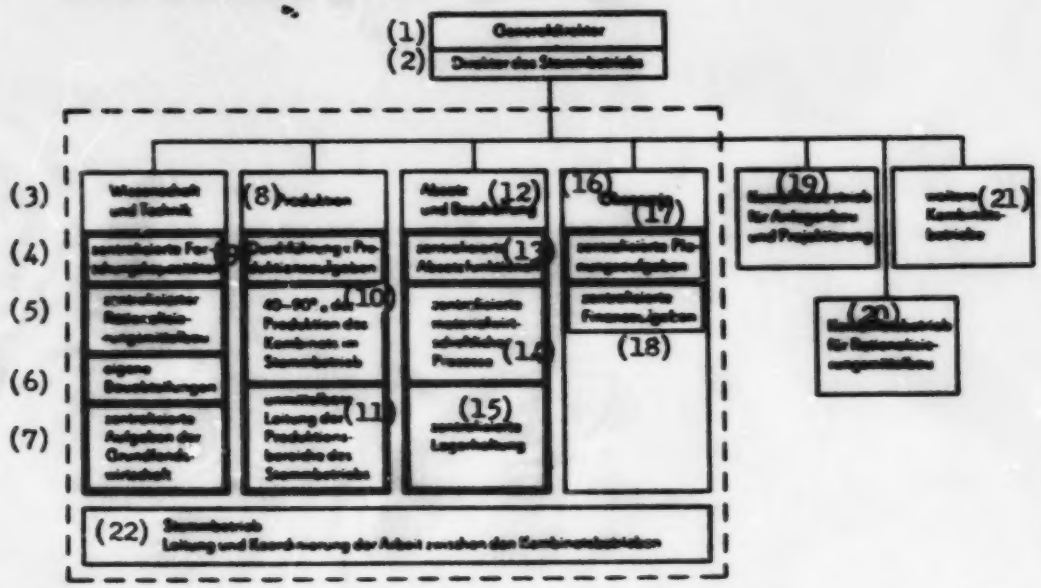
11 Werner Schmann, Eberhard Sandmann, Egon Thomsch, Leiten – Planen – Entscheiden. Handbuch zu den Aufgaben der Leiter bei der Betriebsplanung, Berlin (Ost) 1978, S. 31.
12 Autorenkollektiv (Ltg. Gerd Friedrich und Helmut Koziolek), Grundfragen der sozialistischen Wirtschaftsführung, Berlin (Ost) 1979, S. 353 ff. Siehe auch: R. Gerlach, S. Kohl, A. Seifert, W. Hoffmann, K. Bittner, D. Urban: -Kombinate – Leitung, Organisation, Leistungsanstieg-, in: Die Wirtschaft 12/1979, S. 7 ff.

Fig. 1. Basic Management Structure of a Combine with Its Own Combine Management

Key:

1. General Director
2. Director for Economy
3. Main Bookkeeper
4. Director for Science and Technology
5. Centralized R & D capacities
6. Rationalization means enterprise
7. Construction departments
8. Director for Production
9. Centralized production functions
10. Director for Personnel and Training
11. Director for Marketing and Procurement
12. Centralized marketing functions
13. Centralized materials management processes
14. Enterprise director, finished product 1
15. Enterprise director, finished product 2
16. Enterprise director, finished product 3
17. Enterprise director, Installation Construction and Project-Planning
18. Enterprise director, Components Production
19. Enterp e director, Parts Production
20. Source: Authors' Collective, "Basic Questions of Socialist Economic Management," (East) Berlin, 1979, p 353.

Fig. 2.



(23) Quelle: [illegible], Grundlagen der sozialistischen Wirtschaftsführung, Berlin (Ost) 1979, S. 340

Fig. 2. Basic Management Structure of a Combine with a Main Enterprise

Key:

1. General Director
2. Director of the Main Enterprise
3. Science and Technology
4. Centralized research capacities
5. Centralized construction of rationalization means
6. Own construction departments
7. Centalized capitalization tasks
8. Production
9. Implementation of production tasks
10. 40-90 percent of combine production in main enterprise
11. Direct management of the main enterprise's production sectors
12. Marketing and Procurement
13. Centralized marketing functions
14. Centralized materials management processes
15. Centralized warehousing
16. Economy
17. Centralized planning responsibilities
18. Centralized finance responsibilities
19. Combine Enterprise for Installation Construction and Project-Planning

[Key continued on following page]

20. Combine Enterprise for Rationalization Means Construction
21. Other combine enterprises
22. Main Enterprise
    Management and coordination of work among the combine enterprises
23. Source: Authors' Collective, "Basic Questions of Socialist Economic Management," (East) Berlin, 1979, p 349.

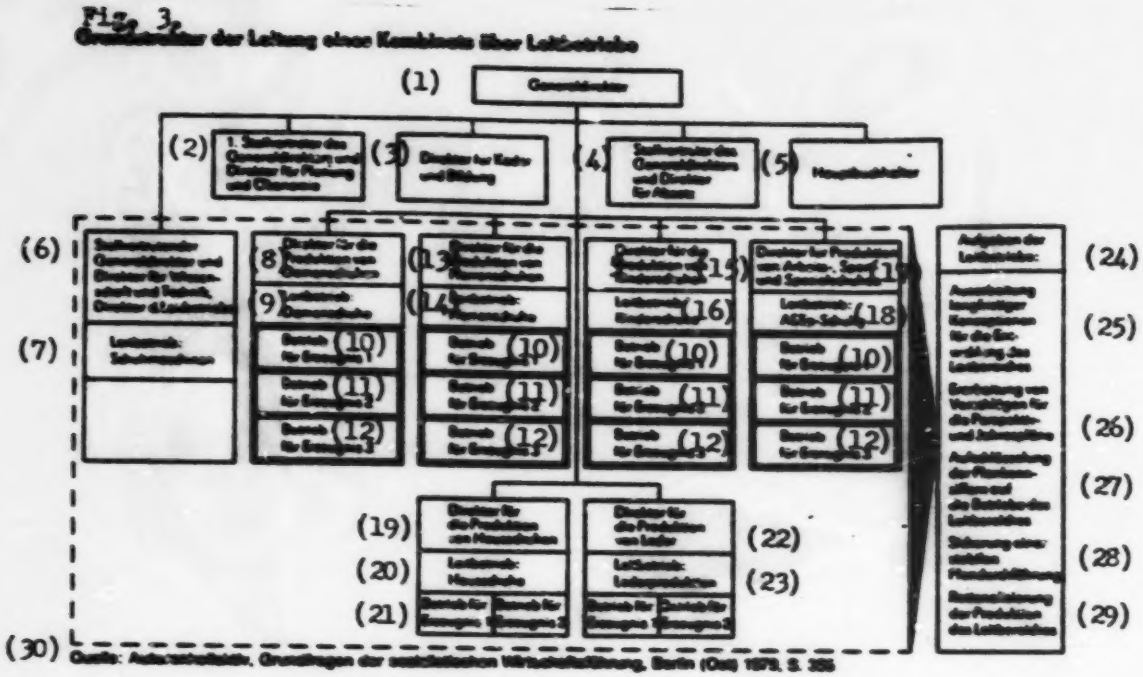


Fig. 3. Basic Management Structure of a Combine Using Control Enterprises

Key:

1. General Director
2. First Deputy to General Director and Director for Planning and Economy
3. Director for Personnel and Training
4. Deputy General Director and Director for Marketing
5. Main Bookkeeper
6. Deputy General Director and Director for Science and Technology, Director of Control Enterprise
7. Control enterprise: shoemaking machinery
8. Production Director for Women's Shoes
9. Control enterprise: women's shoes
10. Enterprise for product 1
11. Enterprise for product 2
12. Enterprise for product 3
13. Production Director for Men's Shoes
14. Control enterprise: men's shoes
15. Production Director for Children's Shoes
16. Control enterprise: children's shoes
17. Production Director for Work, Sports and Specialty Shoes [ASSp]
18. Control enterprise: ASSp shoes
19. Production Director for Slippers
20. Control enterprise: slippers
21. Enterprise for product 1
    Enterprise for product 2
22. Production Director for Leather

[Key continued on following page]

23. Control enterprise: leather production
24. Responsibilities of control enterprises:
25. Drafting of long-range plans for development of the control sector
26. Development of proposals for long-range and annual plans
27. Allocation of plan index figures to enterprises of the control sector
28. Assurance of stable plan implementation
29. Rationalization of control sector's production
30. Source: Authors' Collective, "Basic Questions of Socialist Economic Management, (East) Berlin, 1977, p 355.

In cases 1 and 2 it is critical to note that the tighter internal structure created with centralized combine management also involves greater dangers and risks: lines of planning and decisionmaking that are too long; reaction times that are too lengthy in the case of coordination processes; thus the possibility of decisions that are too far removed from practical application. To be sure, the top level of the combine could be organized efficiently so that it would function more as a controlling and supervisory organ — along the lines of a holding company — and would have only minimal opportunities to influence enterprise operations. But this would be totally at variance with the intention of using the combine leaders to achieve state goals.

In the case of combine formation with management by a main enterprise (case 3) — for us this is approximately comparable to a takeover of competitors by the market leader — set against the advantage of a centralization of a centralization of production processes and thus a lower-cost mass production (in the case of turning over small-lot production to small-scale enterprises and other specialization and centralization effects) are three not insignificant disadvantages: It is difficult to select the most suitable main enterprise and the general director from among the enterprises to be merged; the main enterprise selected does not have to be the best economically and could thus become a false standard for the others as a result of its leading position; finally, in order to increase its efficiency the main enterprise could divert from others to itself parts of the program that are beneficial, or it could assign unfavorable parts to other enterprises.

Particularly in the case of combine formation with control sectors (case 4) — which has been instituted above all in consumer-oriented sectors — the trend toward large-scale enterprise forms for product groups could produce distinct disadvantages for consumers despite centralized planning: Long-established, finely tuned structures could be destroyed, products dropped, variety further reduced and the varied marketing channels of former single enterprises sacrificed. Moreover, multiple chains of command and accompanying conflicts of interest by enterprises in the combine system are possible with this combine form in particular.

Internal organization can form only the outer framework in the establishment of more productive economic units. Needed above all is a better quality of management work itself in order to do justice to the many and varied responsibilities — conserving raw materials and setting a course for new procedures, for example.[13] The necessity[14] here is to view problems less from a situation-related and more from a process-related standpoint, to perceive to a greater extent elements that can be changed and influenced and not to overestimate outside influences. In addition, a GDR study reveals, following a survey of managerial personnel, that there are still many different things that must be done to improve management, especially because of the "lack of organization" that is still frequently in evidence and because there are still "too many short-notice directives" that have to be issued.[15] At lower levels of management there is an inhibitive effect in that decisionmaking powers are quite limited and only inadequate participation in the preparation of decisions is allowed.

It is basically within the purview of the combine's "management organization" to develop a tight and less bureaucratic management system with shorter lines of decisionmaking — one of the main arguments for the reorganization. Moreover, high priority is being accorded the so-called "expertise principle,"[16] thus a qualified

team of leaders for the combine. Greater emphasis than in previous regulations is found in Art 3, par 5, of the new combine decree with the demand that management is "to be organized comprehensibly" and in "the most efficient manner."[17] For instance, the "expertise principle" is grounded in Art 24, par 3, with the term (management) "close to production."[18]

A general objective here, and one that must be assessed positively, is that management would be drawing closer to production, production will possibly be structured better and fewer instances of intersectoral coordination will be necessary on the level of the economy as a whole. While three of the aforementioned organization models of a combine are included in the combine decree (Art 26), this new decree makes no provision for the former regulation covering combines in the form of the large-scale enterprise with legally dependent enterprise branches (case 1); the VEB decree dating from 1973 had made specific provision for such enterprises (Art 24, par 1).[19] It remains to be seen whether and to what extent combines of this systemic type dating from 1968 will undergo a possible conversion in the future. Even considering the few problems cited here, it becomes apparent that the completed reorganizations have caused numerous internal combine management as well as planning problems that are new and in part quite complicated, problems that cannot be solved in a day. It should therefore be kept in mind that the internal management buildup in the combines is still in full swing and that much experimenting is still being done in this very area.

Good "manageability of the overall organism"[20] depends just as much upon questions of allocating management responsibilities and delegating duties (for instance, with staffs, the position of state commissioners, functions of SED party organizations and other "social management organs"[21]) as it does upon the solution of pressing problems involving the industrial information system[22] and the use of EDP. But also important is the intelligent application of both mathematical and cybernetic models[23] and methods by combine management. The "collective advisory organs" mentioned in the combine decree (Art 5, par 4) are intentionally not described further by order of the "Legal Department, Council of Ministers' Secretariat." Since economic practice had produced "many different forms" of consultation, it was left to the "statutory stipulations" for the combines to determine the "composition and tasks" of such bodies.[24]

3. More Efficient Use of Capital in the Combine

Neither the changes in the organizational management buildup nor the legal codification of tasks, rights and obligations on the part of the combine management and the combine enterprises are being done for their own sake. Rather, their purpose is to make it possible to better realize the catalog of goals that have been set. They are designed to create an institutional framework, so to speak, for the desired radical internal restructuring of the potentials that are united within the combine. This is the crucial issue. In other words, they want to increase potential capabilities by combining these potentials more effectively — a prodigious task within a combine.

For example, a flexible installations park is a prerequisite for the manufacture of new products that meet demand. However, in the single enterprise in the GDR, installations are almost totally inflexible for the short term and are only slightly convertible in the medium term — by way of investments. By contrast, substantial

changes and accompanying obvious productivity advances can be achieved within the combine by restructuring aggregates, reassigning production to different units and remodeling entire enterprises or parts of enterprises.[25] This is because regular rationalization has been neglected for decades in the GDR, old installations are still being used too long at high maintenance costs and, moreover, because there is a shortage of modern accessory equipment. The consequently so urgently necessary intensification advances can certainly be achieved easier and more rapidly in the larger enterprise system than in single enterprises, for the combine has at its disposal a far more comprehensive reservoir of different capacities, thus making possible a higher "degree of self-supply." In other words, with only limited allocations of new assets, the greatest importance is being placed on improvisation with existing installations.[26]

Considering these circumstances, one can also understand why the in-house construction of rationalization means by enterprises has been accorded a special role.[27] This role is that of constructing single pieces of equipment to solve problems in specific enterprises, developing procedures and promoting the use of interchangeable equipment. The in-house construction departments are designed to permit construction work to proceed while production is going on and in general to establish better links between construction work and outfitting processes.[28] Existing capacities for the in-house manufacture of rationalization means are merged in the combine and placed under the direct authority of the general director so that swift and effective rationalization programs may be assured. Quite often it is a matter of manufacturing single items which machine construction cannot be bothered with.[29] This means that it is much less a matter of highly efficient solutions than of somehow surmounting difficulties at all on short notice. Since, however, there has been mounting criticism of the high cost of this kind of in-house manufacture, efforts have recently been aimed at finding better criteria for evaluating these services (for instance, the benefits, the degree of acceleration for innovations, the release of manpower) and also at applying these criteria.[30] But this means that not every in-house construction program will meet with general approval from now on.

The intention is to use the stepped-up modernization of existing buildings instead of new ones to reduce both the expenditure of construction materials and construction's share of investments.[31] Investments are to be made more efficient and construction times substantially reduced by means of better planning and project-planning for new projects, development of a substantiated priority and sequence order for projects as well as changes in the productivity evaluation for capital goods.[32] It is anticipated in this regard that the general directors will come forth with a strong impetus for better investment decisions because of their broad overview of the branches and their proximity to production — this expectation is being held out even though state intervention in the investment process has increased.[33]

4. Intensification of 'Industrial Labor Resources'

Except for the "involvement of the general director,"[34] any progress in the "ensemble" of interlocking and mutually conditional intensification and production factors depends chiefly upon the efficient use of employees ("use of industrial labor resources") and their willingness to produce. With an employment figure of more than 90 percent of those of working age (including trainees) in the GDR, any

further expansion will also be severely restricted for the period of the 1981-1985 Five-Year Plan. The possibilities of a thoroughgoing rationalization in the personnel sector[35] are also a decisive criterion in the organizational changes, since without a centrally determined "self-production" by the labor force offices in the combine, new investments or those for expansion are frequently ruled out for lack of manpower. Numbering among the hoped-for "combine results" relating to the labor factor are the "release of manpower for other tasks and a saving of jobs,"[36] improvement in unsatisfactory work discipline[37] in a number of enterprises, a reduction in the apparently very sizable downtimes[38] including the accompanying unplanned costs,[39] efforts to provide skilled-worker trainees and a "curbing of fluctuation," which "has experienced a further negative" trend[40] compared to 1978. The release of employees and job-saving measures are therefore expressly a central concern of the combine decree (Art 21, par 1) and are considered by the "Joint Directive" to be a "central issue in assuring major production growth."[41]

Apart from the by no means new conflict of interest between plan targets and job reductions in the enterprise, the general restructuring situation that exists for the most part in the combine facilitates a simultaneous revision of the table of organization and the relinquishment of those positions "which are never actually to be occupied by workers"[42] but have thus far repeatedly been pushed by the enterprise manager as an optimum demand vis-a-vis his central office. Released workers are expected to result in particular from a greater centralization of combine functions (in administration as well as in production) and especially from certain auxiliary and secondary processes. To be sure, economic practice shows that just one of the substantial obstacles to a transfer of employees is the great physical distance that often exists between a combine's enterprises and parts of enterprises; added to this are housing problems.

The so-called Schwedt Initiative — "Few produce more"[44] is an official symbol for comprehensive rationalization in the personnel sector according to this formula: "Reduction in the number of existing jobs with a simultaneous increase in the level of quantitative and qualitative labor requirements."[43] As the result of expansion investments that are scheduled to double capital assets during the 1978-1981 period, the main enterprise of the Schwedt Petrochemical Combine, with 8,500 employees, is obliged to produce the 2,400 workers[45] needed for this (a good 25 percent of the workforce) from within its own plant by means of a "genuine reduction of slots"[46]; this is virtually tantamount to a cut in the wage fund imposed from above.

The great number of potential practical problems in transferring to a new workplace in the GDR will only be noted here. Even the hope of reducing fluctuation[47] in the GDR — the costs of which run into the billions according to GDR figures[48] — should not be raised too high considering such a radical, centralized regime of thrift. As it is, the GDR had decreed a general cost freeze for the managerial and administrative sector with its new guideline on financing dating from August 1979.[49]

Moreover, it remains to be mentioned that problems resulted for the Labor Code (AGB) because "the purview of Art 17, par 1, of the AGB" fully covered "only enterprises, but not the combine as a basic economic unit"[50] in its various forms. The AGB is used here expressly as an "analogy." In addition to the aforementioned by no means always positive aspects, the development of a more productive "regular workforce,"[51] the definitely visibly improved working conditions and a transfer and retraining of manpower within specific limits are only a few of the better manpower placement

possibilities that must be assessed positively from the standpoint of industrial management. But simply because of the size of a combine, many a factor that has heretofore placed obstacles in the way of increasing labor productivity — such as a system-related hoarding of manpower in the individual enterprises, for example — could be reduced to some extent, but by no means totally eliminated. An expansion of the opportunities for social service by the combine workforce (use of combine capacities for housing construction, vacation homes, daycare facilities and so forth) could provide an additional incentive for the workforce.

5. Conservation of Energy and Raw Materials

The GDR literature is fairly imploring the enterprises and combines to follow "paths to increased labor productivity that conserve capital and materials."[52] When one considers, for example, that more than 70 percent of industry's production costs go to pay the cost of materials, and more than half of all manpower in the producing sectors is used to produce and transport energy, raw materials and materials,[53] then one recognizes the importance being ascribed to the material-conservation intensification factor alone. To be sure, so far the leading role of the gross "industrial goods production" figure has had a negative effect when plan accounts are being balanced, because if there has been an increase instead of a decrease in the expenditure of materials, the enterprise or combine has even been "rewarded" in the form of "better plan fulfillment." Since March 1980, however, an important change has occurred: Now the performances of combines and enterprises are no longer measured solely by "goods production" but also by the new index figures for "net production" and "material costs per M 100 of goods production."[54] This is undoubtedly an important step in the right direction with regard to conserving energy and raw materials, whose increasing costs world-wide are placing great strains on the GDR economy.[55]

By way of an improved evaluation of productivity and a mobilization of scientific-technical progress, the economic leadership is expecting from the combines changes in production processes which save materials and make intensive use of raw materials. Says Guenter Mittag: "It is fundamentally important here to refine available raw materials to a higher degree and with the aid of modern technologies bring them to the highest possible stages of processing, thus further developing and improving the GDR's production structure."[56]

Future growth is to be achieved insofar as possible with constant levels of, or only slight increases in, energy and materials consumption, which is why the economic leadership also is not afraid to impose a quota system for energy, heating oil and vehicle fuels,[57] draw down stockpiles and order increased efforts to make multiple use of secondary raw materials.[58] Even private households are being penalized for substantially exceeding fixed heating norms through price increases for the excessive consumption of energy, gas and heat.[59]

The 1981-1985 Five-Year Plan calls for the construction industry[60] to employ designs that are economical in the use of materials in order to reduce specific materials consumption by 3.9 percent annually for rolled steel and lumber and by 2.5 percent annually for cement. Moreover, plans have been made to cut building costs by 15 percent by 1985; this is to be accomplished by switching from former construction methods to the practice of doing more remodeling of existing structures, thus saving materials. Better insulation of new buildings as well as the older,

renovated structures and technological improvements in the equipment that goes into buildings are supposed to cut energy consumption by 30 percent. It is hoped that the manufacturers of building materials will achieve at least three-quarters of their planned production growth without using additional energy.

These things cannot be done without substantial and active participation by the combines and enterprises. In addition to major changes in production processes, protracted technological innovations are also required. With the technical means and limited potential for innovation existing in the combines, neither can be achieved speedily or without great difficulty.

V. On the Conflict of Interest Between Combine and Combine Enterprise

1. Powers of the Combine Enterprise in Theory and Practice

At first glance, the status of the combine enterprise in the new combine decree appears to be not only unchanged but even strengthened from a formal standpoint. In contrast to the earlier phrase "responsible for itself," the combine enterprise is now described in Art 6, par 1, of the combine decree as an "economically and legally autonomous unit," although the narrow limits are made clear by this proviso in the text of the law: "within the framework of its integration in the reproduction and management process of the combine."[61] But considering both a debate over the status of combine enterprises — one that has at times been quite heated in recent years — and the guarded interpretation found especially in commercial law commentaries on the combine decree, one can see several unsolved problems regarding an issue that is so central to the new regulations.

The combine enterprise receives its assignments from the combine and is accountable to it.[62] It is tied into the industrial management cycle as determined by combine management and planning. In accordance with the principle of individual management, the enterprise director is responsible for accomplishing the tasks assigned. The scope of his relative autonomy is revealed by the very manner in which capital (working capital) is handled: The fact "that the portion of state property to be administered by the combine takes in the capital held by the combine enterprises as well as the combine's centralized capital"[63] is described as an "important advance in the legal representation of structured state property."[64] This means, however, that essential funds are centralized in the combine.[65] Enterprise financial transactions having to do with the state budget are also conducted through the combine. The question of liability is interesting in this regard. According to previously existing regulations, in contrast to the VVB the combine was also liable for the debts of its enterprises. But the new combine decree provides in Art 3, par 5, for a combine's liability for its debts as well as in Art 6, par 2,[66] expressly for a corresponding liability on the part of combine enterprises. The hitherto-existing ruling on a backup liability by the combine was dropped, it is said, because it had acquired "no practical relevance."[67]

The very extensive powers of a combine general director (the restructuring of production and the transference of funds within the combine, for instance) do not change the fact that the combine enterprise that operates according to the principle of economic accounting is basically subject to the principle of self-financing within the framework of its plan commitments. It has been remarked that the obvious discrepancy, only alluded to here, between formal autonomy as stated in the combine

decree and the actually existing limitations on enterprises within the combine system is not a contradiction; "rather, it presents an exact reflection of the present status of the socialization process."[68]

There are doubtless important reasons when the legal department of the GDR Council of Ministers expressly interprets the new regulations in such a way that the combine enterprise is indeed "integrated" but not "subordinated."[69] In the debate prior to publication of the combine decree, the emphasis in views on the status of combine enterprises had shifted from a "nonautonomous" position (frequently propounded by practicing economists from combines) to that of retaining a "relatively more independent" status, though with the following proviso: Since "the key areas...in effective management of the combine reproduction process are consistently to be handled centrally," changes in the "objective features and criteria" of "in-house responsibility" on the part of the combine enterprises should not conflict with these requirements.[70] Rather, in-house responsibility should acquire "new substance,"[71] for it is "no static entity"[72] since "main functions" of the enterprises pass to the combine.[73]

Horst Trauer, one of the GDR's experts on problems of organization, had already described this issue in 1973 as "one of the most complicated problems in the continued socialization of production."[74] One of the main points in the discussion at that time was whether the combine or the combine enterprises represented the lowest level and were thus the basic economic units in the GDR.[75] The USSR settled this question once and for all by converting to "associations" after 1973; there the "associations" — roughly comparable to combines — constitute the lowest level, not the enterprises.[76] A study conducted at the Bruno Leuschner Advanced School for Economics in 1978 was critical of the fact that "increased effectiveness will be hindered in the long run if, in contrast to the situation in the Soviet Union, the enterprise continues to be regarded and supported as the sole basic unit of social production."[77]

The scope of "in-house responsibility" by combines and enterprises and the principle of economic accounting as a method of socialist economic management are mutually exclusive.[78] The latter principle determines the scope and level of the industrial management mechanism. With regard to the forementioned debate, this is significant in that in the Soviet Union only the "associations" — thus the economic units that equate to the combine — operate according to economic accounting principles. The combine at present has basically a three-phase system for the economic accounting mechanism:

(1) Full application at the combine level;

(2) Application to the combine system's enterprises limited by overriding combine responsibilities;

(3) Application of "economic accounting within the enterprise"[79] to nonautonomous parts of enterprises and production units.

There were a number of reasons for retaining a relative autonomy and thus also the principle of economic accounting for the combine enterprises:

(1) The unwillingness of enterprises and workforce to give up existing rights certainly played an important role: "The new situation must first gradually be 'sounded out,' so to speak. Problems of interest are also involved, because the measures to be initiated may presumably or actually be in conflict with the distinct group interests of the combine enterprises."[80]

(2) Preservation of "autonomy" and the basic retention of the economic accounting principle lend themselves to the function of a control and buffer against the considerably expanded, real abundance of powers enjoyed by the general director of a combine. On the other hand, the principle of economic accounting serves to make the industrial management mechanism and productivity evaluation of the respective enterprises work better. To be sure, it is the GDR view that "an economically correct setting of prices"[81] is considered a precondition for the "effectiveness of the entire mechanism." Moreover, retention of the economic accounting principle makes it possible to avoid motivational weaknesses that are already apparent in the Soviet model, since here the units that are not legally autonomous are losing "the feeling of their responsibility for the success of production."[82]

(3) It is a prerequisite for the continued expansion of enterprises, thus of cooperation with "local organs," with particular reference to a frequently substantial physical distance between the combine enterprises.

Basically, the compromise solution contained in the combine decree can be seen in the definition of the combine in Art 1 as a "basic economic unit," which in turn points up the prominent position of the combine and a special importance in relation to its enterprises, one which tends to correspond to the Soviet interpretation of the association. Thus it is generally true in economic practice that the "combine management determines the degree of autonomy enjoyed by enterprises within the combine."[83]

The problems outlined here are sufficient to illustrate the divergence of interests between the combine and its enterprises and the obstacles to productivity stimuli that doubtless result.

2. Selected Intensification Tasks for Industrial Management in the Combine

Any analysis of even the most prominent tasks in setting up a "largely contained reproduction process" in the combine (according to the provisions of the new combine decree) would far exceed the boundaries of this study. This is already a fairly long-range process for the majority of combines. Trends and the problematics involved in reshaping industrial management capacities in the combine, as well as the question of possible prospects for success, cannot be elucidated systematically here; only selected examples can be offered — though supplemented by important changes in method that are becoming observable in the 1981-1985 Five-Year Plan as regards the industrial management sector.

The economic leadership is anticipating advantages for the combine from a generally high degree of centralization of industrial functions. Although this may lead to benefits for combine enterprises individually, as a rule it will not. This is because major changes in or the virtual destruction of the hitherto-existing industrial structure of combine enterprises will cause disadvantages to predominate, at least in the short run for a period of conversion and adjustment. A total

relocation of industrial manufacturing programs that enhance the plan and the profit situation can also lead to a longer-term disadvantage, which can scarcely be offset by potential financial compensation from the combine leadership.

The emphasis in GDR economic life is on economic productivity aspects of the centralization and specialization of industrial management functions in the combine, as well as the "standardization of important processes";[84] in addition to economic motives, hidden power interests on the part of top combine officials cannot be ruled out here.

One of the main objectives is the establishment of centralized R & D facilities for the planning and development of products — including the expansion of design centers[85] — for specific product lines from the "idea through to the successful product,"[86] particularly for export. Behind this is the endeavor to gain a better grasp of the entire process than before, from "demand and market research" through "technological realization"[87] all the way to sales; this is because in the past, for reasons of plan fulfillment, the "for the most part poorly developed market research" in the enterprises and combines had "often been dropped or reorganized" as an in-house activity.[88] Among such "combine results" of industrial management are: the dismantling of "engineering offices" and their reorganization into "Technological Rationalization Centers" (TZR) as relatively self-sufficient combine facilities;[89] the concentration[90] of an "often inadequately" organized "materials procurement, storage and supply operation";[91] a forced development of the previously unsatisfactory expansion of centralized manufacturing operations;[92] or a specialization of the "product structure according to effectiveness criteria."[93] To be mentioned equally in this context are the concentration and resulting improvement in the mechanization of auxiliary processes — through the creation of special maintenance enterprises,[94] for example — or rationalization by centralizing administrative affairs. In the latter case in particular, there is considerable reason to doubt that any advantages will be forthcoming.

Basically, two essential aspects play a role here: One concerns the increased productivity from concentration and rationalization stimuli as a result of reduced costs; the other concerns the elimination through the restructuring process of causes and obstacles to industrial management functions that have hitherto been exercised only to an inadequate degree. Quite apart from existing pricing and valuation problems,[95] this is particularly true of the sector for accounting and productivity evaluation. In addition to other new plan index figures[96] (net production, for example), introduction of the "end product" index figure that dates from 1 January 1979, and is considered a beneficial "statement of result for the combines,"[97] is also playing an important part in the economic debate. In particular, the special index figure for "yield on the end product" is designed to establish a better incentive and productivity criterion in economic units.[98] Warnings have already been issued, however, against "excessive expectations"[99] with regard to the validity of the "end product" index figure.[100] On the other hand, it is precisely the internal performance picture of a combine that is a very essential factor in more rapid advances in productivity.

Another weak spot is "independent planning" in the industrial sector. It is here that, despite appropriate regulations, there has been either inadequate or no organization in many enterprises of an in-house short- as well as longer-term "conceptual preparation of plans,"[101] no drafting of "development options,"

"intensification plans" or long-range production programs; there are a number of reasons for this ("too expensive, no time, no employees who are capable, information value too low"[102]). For the most part an "autonomous sector" for this function has been lacking in the enterprise.[103] Corresponding new provisions[104] in the 1981-1985 Five-Year Plan will doubtless be easier to enforce by way of centralized combine departments.

This study will forgo a discussion of the problems involved in the assignment of foreign trade enterprises to the combines in accordance with the combine decree; regardless of complex provisions,[105] a closer operational interdependence that is developing with the combine can only be advantageous.

Given a flexible practical application, the developmental directions of combine efforts at concentration that have only been touched upon here will certainly be able to unleash a certain productivity thrust for the short term if a number of existing weak spots are eliminated. Nevertheless, the conflict of interest that seems to be increasing rather than abating between combine headquarters and their enterprises is an obstacle that cannot be underestimated, especially since the economic leadership's most recent moves are even heightening the trend toward centralization, and thus toward a possible bureaucratization.

The first of these measures appears to be a new version of the principle of "structurally-determining planning."[106] This is an Ulbricht type of concept, a priority program of planning, incorporation and implementation of crucial economic innovation processes[107] by way of the new planning ordinance for 1981 through 1985. No matter how necessary this may be to the more rapid implementation of technical progress (in microelectronics, for example), the consequences that go along with it have already proven to be a negative factor once before — one of these consequences is an "improvement of the index figure system"[108] (probably through expansion). In the revision of the Contract Law that is still going on,[109] these peculiarities will play a role not only in the combine's external relations but also within the framework of the "internal enterprise cooperation" (production relations among the combine enterprises) that has been sharply expanded through combine reorganization.[110] This would indicate a general increase in the codification of commercial law covering the internal combine sphere.

Consequently, it is no mere coincidence that even in the GDR there are those who are warning against overestimating the effects of concentration,[111] and considering the "monopoly status"[112] now being accorded the combines, these warnings are definitely justified.

VI. Interim Balance Regarding the Combine Reorganization

The sought-after ideal of a combine as a totally "new economic organism"[113] is aimed chiefly at a new quality of industrial management in addition to improvements in the national economic situation. A conclusion drawn from a vast number of studies and essays in recent years is that the present reality of reorganization differs from this ideal by virtue of the mere fact of extremely different, even contradictory, statements regarding the best organizational structure for the combines. The move to another dimension, virtually a command for the majority of the enterprises, had led to obvious confusion by the fall of 1979 — for the lack of clear, detailed guidelines. Though the new combine decree does provide guidelines for a new type

of combine, judging at any rate by the existing system of strict centralized management and planning, these guidelines will have to be supplemented by more detailed regulations. It is possible that internal implementing regulations for specific branches — like those in the pricing sector — could play a greater role than before in achieving a more flexible adjustment of the organizational structure to everyday economic conditions. Consequently, a swift and smooth solution for the complex relationships that have to be reordered can hardly be expected for the short term.

A balance sheet of positive and negative structural effects for the economy and for industrial management would therefore be premature. An essential prerequisite is the patience to get through a lengthy adjustment period, for sufficient patience to allow reform processes to mature has never been one of the GDR's strengths. With this one reservation, a number of positive effects appear basically possible; they could be the result of activities generated by an improved — but just as risky — style of industrial leadership. This applies, however, only insofar as all other conditions satisfy the requirement of a new quality of "internal containment" in industrial operations and actually allow enough leeway for the activities demanded of combine managers with respect to the "how" of production. This latter condition concerns powers at the ministerial level in particular. If those very principles of control described by the SED Central Committee's Central Institute for Socialist Economic Management should be fully implemented as far down as the combine enterprises, the unquestionably meaningful beginning of a release from encrusted structures could be blocked. Quite apart from this, important conflicts of interest still remain unresolved or are merely being shifted from one point to another; other problems of detail also constitute risk factors that can scarcely be comprehended at this time. Added to this is the fact that in a phase of extreme economic strain and mastery of pressing economic problems, it would probably be virtually impossible to complete an organizational reform of this magnitude without major initial difficulties and frictional problems. And last but not least, an especially aggravating factor continues to be the GDR economic system's already more than latent tendency toward bureaucratization and unwieldiness. Large Western corporations "have been endeavoring for years to reorganize their giant apparatuses — which could not be made more transparent despite outsized staff departments — into comprehensible units that are more or less partially autonomous."[114] By contrast, GDR enterprises frequently suffer from an insufficient internal clarity even in units that are comprehensible. Though the information systems may have been improved, they nonetheless provide only inadequate aids to the preparation of decisions, largely because of very considerable price distortions and unresolved pricing problems.[115] It is for this very reason that the combine management is clearly limited (in its efforts to arrive at more efficient forms of large-scale enterprises).

In addition, the radical internal redirection being sought for the potential that is bound up in the combine requires general directors who — despite meager material incentives for themselves — will develop a variety of initiatives in the face or all bureaucratic obstacles, but who will nevertheless pursue the state's objectives. They must be able to use innovations — radical but inexpensive ones — to extract substantially greater results mainly from existing capacities without any large new investments, with the lowest possible manpower potential and with only minimal increases in the use of energy and raw materials. Thus, the most serious

problem for combine reform would seem to be that of finding sufficient numbers of this kind of ingenious "supermanager" who will toe the party line at the same time.

FOOTNOTES

The footnotes are numbered separately in each part of the article.

1. Fritz Haberland, Wolgang Salecker, "The Economic Comparison — Lever for Production Growth," EINHEIT, Vol 6, 1980, p 594.

2. Helmut Koziolek, "Reproduction and National Income, Problems and Connections," (East) Berlin, 1979, p 166.

3. Guenter Mittag, "The Principal Objective Is Being Resolutely Accomplished." SED Central Committee Exchange of Experiences Seminar on the Development of Existing Combines and the Establishment of New Ones as Presently Essential Steps Toward Improving Management and Planning," 24 and 25 August 1978, (East) Berlin, 1978, p 42. ("The crucial factor also in forming the combines is always to proceed from the standpoint of the combine as a whole and of establishing the internal containment of its reproduction process. This point of departure is important to the correct solution of the practical problems that will occur."

4. "Decree on the State Combines, Combine Enterprises and State Enterprises, 8 November 1979," GESETZBLATT, Part I, 1979, No 38, p 355.

5. Guenter Mittag, "The Principal Objective Is Being Resolutely Accomplished," loc cit, (footnote 3), pp 41,42.

6. NEUES DEUTSCHLAND, 8 July 1980, pp 3,4.

7. Cf Guenter Woehe, "Introduction to General Business Administration Theory," 11th revised and expanded edition, Munich, 1973, p 61. Michael-Burkhard Piorkowsky "Socialist Goods Production and Industrial Management," Berlin, 1980, pp 110 and 117 — Piorkowsky concludes in a comprehensive analysis of industrial management theory in the GDR that "the system of productive factors in socialist industrial management theory does not differ from the traditional system in the market economy's general business administration theory; socialist industrial management theory is similarly "predominantly corporate management theory."

8. Karl-Heinz Graupner, Walter Krzyzanowski, "Central Conference on 'Main Directions in the Organic Link Between the Scientific-Technical Revolution and the Advantages of Socialism,'" WIRTSCHAFTSWISSENSCHAFT, Vol 2, 1980, p 206.

9. Ibid.

10. Ibid.

11. Werner Ilchmann, Eberhard Sandmann, Egon Thomasch, "Manage — Plan — Decide. Handbook on Managers' Tasks in Enterprise Planning," (East) Berlin, 1978, p 31.

12. Authors' Collective (directed by Gerd Friedrich and Helmut Koziolek), "Basic Questions of Socialist Economic Management," (East) Berlin, 1979, p 344 ff. See also: R. Gerisch, S. Kohl, A. Seifert, W. Hoffmann, K. Bittner, D. Urban: "Combines — Management, Organization, Production Growth," DIE WIRTSCHAFT, Vol 12, 1978, p 7 ff.

13. For the period between 1981 and 1985, at least one-fourth of the savings in energy and raw materials planned by science and technology are to be gained through the further use of microelectronics. Cf Ina Ladig, "Challenge of Microelectronics," DIE WIRTSCHAFT, Vol 6, 1980, p 5.

14. Cf "Industrial Management Conference on Management Work in Socialist Industrial Enterprises and Combines," (conference report), SOZIALISTISCHE ARBEITSWISSENSCHAFT, No 3, 1980, p 233.

15. Cf Klaus Ladensack, "Tasks and Means for the Improvement of Management Work," SOZIALISTISCHE ARBEITSWISSENSCHAFT, No 3, 1980, pp 164, 165.

16. Cf Rudolf Gerisch, Willy Hofmann, "Tasks and Problems of Combine Development Aimed at Increasing Economic Effectiveness," WIRTSCHAFTSWISSENSCHAFT, Vol 2, 1979, pp 129, 130.

17. Combine Decree, loc cit, (footnote 4), p 356.

18. Ibid, p 362.

19. GESETZBLATT, Part I, 1973, No 15, p 135.

20. Hans-Dieter Ebbecke, Walter Otte, "Development Trends in Completing the Management Buildup in Enterprises and Combines," WIRTSCHAFTSWISSENSCHAFT, Vol 12, 1979, p 1479.

21. Ibid, pp 1478-1485.

22. Cf Klaus Krakat, "Computer Production and Computer Use in the GDR," FS-ANALYSEN No 3, 1977, pp 49-53.

23. Cf the remarks by H. G. Lauenroth, K. Boehm, "Cybernetics in the Industrial Organization," Berlin, 1979; Authors' Collective, "Mathematics and Electronic Data Processing as Related to Intensification in the Socialist Enterprise and Combine," WIRTSCHAFTSWISSENSCHAFT, Vol 12, 1979, p 1423 ff; a new four-volume "Dictionary of Cybernetics" is scheduled for publication this year.

24. Eckhard Schmidt, "On Management of the Combine and Combine Enterprises," WIRTSCHAFTSRECHT, Vol 1, 1980, p 11.

25. Cf "Comprehensive Remodeling in the Enterprise," DIE WIRTSCHAFT, Vol 3, 1979, p 14.

26. Mansfeld Combine General Director Karl-Heinz Jentsch had this to say, for example: "Rationalization of our combine's enterprises...has demonstrated that

it is often possible at existing modern installations to increase production by between 10 and 20 percent using the same number of workers or even fewer." Cf NEUES DEUTSCHLAND, 1 August 1979, p 3.

27. Cf Georg Pohler, "In-House Construction of Rationalization Means Produces Faster Pace," PRESSE-INFORMATION DER DDR, 15 May 1979, p 3. See also: "More Rationalization Means from Own Enterprise," NEUES DEUTSCHLAND, 7 August 1979, p 1. Also Walter Mielsch, "In-House Construction of Rationalization Means Promotes Increased Productivity," PRESSE-INFORMATION DER DDR, 16 October 1979, pp 2,3. Cf also G. Kilisch, "Possible Options for the Streamlining and Structural Integration of Rationalization Means in the Metalworking Industry Sector," DIE TECHNIK, No 11, 1979, p 391 ff; cf a summary by Kurt Erdmann: "Acute Problems of GDR Enterprises in the Investment Sector" in: Gernot Gutmann, Manfred Melzer, Kurt Erdmann, "Investments and Rationalization," Fourth Symposium of the Research Agency, lectures on 24 November 1978, FS-ANALYSEN, No 6, 1978, pp 70-77.

28. Cf Dietrich Deutscher, "In-House Construction Departments Promote Rationalization," DIE WIRTSCHAFT, Vol 10, 1978, p 3.

29. Cf television press conference, GDR Television II, 6 November 1978 (RIAS Monitoring Service).

30. Cf K. H. Wilhelm, "In-House Rationalization Means at Any Price?", DIE WIRTSCHAFT, Vol 6, 1980, p 16.

31. Cf Ingo Wolf, "Basic Tasks of Industrial Construction Combines and Enterprises in the Qualitative Improvement of the Material and Technical Base of Socialism in the GDR," WIRTSCHAFTSWISSENSCHAFT, Vol 10, 1979, p 1191 ff.

32. Cf "Joint Resolution by the SED Central Committee Politburo and the Council of Ministers on Increasing the Effectiveness of Investments Designed To Further Strengthen the GDR's Economic Efficiency," NEUES DEUTSCHLAND, 10 and 11 November 1979, p 3.

33. Cf "Decree on Executing Investments," GESETZBLATT, Part I, 1980, No 13, p 107 ff.

34. Krzyzanowski, loc cit, (footnote 8), p 216.

35. A total of 30,000 new jobs were created in the GDR economy between 1976 and 1978, but only 7,700 (approximately one-fourth) were the result of efficiency measures; H.J. Beyer, W. Packebusch, "Thoughts on Job Reduction," DIE WIRTSCHAFT, Vol 2, 1980, p 15.

36. Klaus Frank, Peter Glotz, "A Large-Scale Metallurgical Enterprise Wages a Successful Battle Against Fluctuation," ARBEIT UND ARBEITSRECHT, Vol 6, 1980, p 249.

37. The introduction of time clocks planned at that time to improve work discipline at the famous Ruhla Watchworks met with criticism from the workforce. DAS VOLK, Erfurt Bezirk's newspaper, therefore studied the question of whether

time clocks are "unprincipled" in a socialist society. Cf IWE-TAGESDIENST, No 102, 1980, pp 2,3.

38. "Significant Productivity Reserves Are To Be Gained by Reducing Downtimes," "Joint Directive of the SED Central Committee Politburo, the GDR Council of Ministers and the FDGB Federal Executive Board on Drafting the 1981 National Economic Plan and the Thorough Discussion of Its Goals and Tasks with the Working People," NEUES DEUTSCHLAND, 8 July 1980, pp 3,4.

39. The average costs of a lost working day for a production worker in GDR machine construction rose from M 320 (in industrial goods production) in 1972 to M 410 in 1979, a total of 28 percent.

40. "Joint Directive," loc cit, (footnote 38).

41. Afternoon Magazine, "People's Chamber Committee for Labor and Social Policy Meets. Committee Discusses Problems with Fluctuation," Radio GDR I, 24 January 1980.

42. H.J. Beyer, W. Packebusch, loc cit, (footnote 35).

43. "Joint Directive," loc cit, (footnote 38).

44. Joachim Kund, "Starting Points and Means for the More Efficient Use of Labor Resources," ARBEIT UND ARBEITSRECHT, Vol 6, 1980, p 245.

45. Cf Horst Martens, "Rationalization in the Interest of the Working People," EINHEIT, Vol 7/8, 1980, p 729.

46. H.J. Beyer, W. Packebusch, loc cit, (footnote 35); the reaction by trade union and plant council to analogous demands in a Western company is not up for discussion here.

47. Katharina Belwe offers extensive remarks on fluctuation: "On the Background of Fluctuation in the GDR," DEUTSCHLAND ARCHIV, Vol 6, 1980, pp 601-611.

48. Cf Kurt Erdmann, "Obstacles to Intensification and Improvements in Efficiency at the Halfway Mark in the GDR Five-Year Plan — Viewpoints on Production Organization and Combine Reorganization," FS-ANALYSEN, No 4, 1978, pp 32,33.

49. The "Guideline on Financing for the State Economy," dated 21 August 1979, GESETZBLATT, Part I, No 28, p 261, Item XI, 1, expressly determines that "the level of planned costs for the preceding year" may "not be exceeded" when planning the costs of management and administration (using cost norms).

50. Cf Heinz Martin, "New Combine Decree Helps Improve Management and Planning," ARBEIT UND ARBEITSRECHT, Vol 1, 1980, p 6.

51. Cf Authors' Collective, "Manager — Collective — Individual. Handbook for Socialist Management Work," fourth completely revised edition, (East) Berlin, 1979, pp 136-137.

52. Cf "Basic Questions on the Theory of Effectiveness and Intensification Factors in Expanded Reproduction (Conference Report)," WIRTSCHAFTSWISSENSCHAFT, Vol 8, 1978, p 989.

53. Cf Wolfgang Heinrichs, "Principal Ways To Increase Labor Productivity To Further Raise the Public's Material and Cultural Standards of Living," WIRTSCHAFTS WISSENSCHAFT, Vol 8, 1978, p 904.

54. Cf H.J. Beyer, H. Schmidt, "Better Criteria for Evaluating Productivity," DIE WIRTSCHAFT, Vol 3, 1980, p 22.

55. To be sure, in the balancing of accounts problems still arise for the enterprises and combines to the extent that they have to show "net production" for the very first working day of the following month. At that point they know neither the figures for "materials consumption" nor the "inventory changes in uncompleted products," so they use as aids the coefficients relating to "industrial goods production." Even if the resulting errors are corrected a month later, it is virtually impossible to arrive at an error-free accounting for the entire combine. Cf G. Frischmann, H. Schubert, "Experiences and Problems with the New Index Figures," DIE WIRTSCHAFT, Vol 6, 1980, p 17.

56. Cf NEUES DEUTSCHLAND, 22/23 March 1980, p 3.

57. Cf the order on the planning, balancing and delivery as well as the accounting and control of consumption of liquid energy sources — "Supply Order for Liquid Energy Sources" — 3 June 1980, GESETZBLATT, Part I, 1980, No 19, p 180, particularly Art 4.

58. "Joint Directive," loc cit, (footnote 38).

59. Cf "Order No 2 on Supplying the Public with Electric Energy, Gas and Thermal Energy," GESETZBLATT, Part I, 1980, No 18, p 172.

60. Cf Wolfgang Junker, "Tasks of the Construction Industry in Consistent Implementation of the Resolutions of the Ninth SED Party Congress and in Preparation for the 1981-1985 Five-Year Plan," NEUES DEUTSCHLAND, 20 June 1980, pp 3-5.

61. Combine decree, loc cit, (footnote 4), p 356.

62. Gerd Friedrich, Claus Kroemke, "Combine — Foundation for Higher Quality Performance," EINHEIT, Vol 12, 1979, p 1269.

63. Heinz Buck, Liselotte Schramm, "The Position of the Combine and the Combine Enterprises," WIRTSCHAFTSRECHT, Vol 1, 1980, p 4.

64. Ibid.

65. GESETZBLATT, Part I, 1979, No 28, p 253 (for example: net profits, science and technology fund, money from the cultural and social fund or the bonus fund derived from research profits).

66. Combine decree, loc cit, (footnote 4), p 365.

67. Heinz Buck, Lieselotte Schramm, loc cit, (footnote 63), p 7.

68. Guenter Klinger, "The Combine Decree — An Important Instrument in the Continued Improvement of Management and Planning," WIRTSCHAFTSRECHT, Vol 1, 1980, p 2.

69. Heinz Buck, Lieselotte Schramm, loc cit, (footnote 63), p 7.

70. Cf Authors' Collective, "Basic Questions of Socialist Economic Management," (East) Berlin, 1979, p 358.

71. Horst Trauer, "On the Organization of Relations Between a Combine and Its Enterprises," Authors' Collective, "Current Issues in Socialist Economic Management," (East) Berlin, 1973, p 364.

72. Authors' Collective, "Basic Questions...," loc cit, (footnote 70), p 358.

73. In regard to the overall issue, see also the remarks of N.V. Klimin (Leningrad): "Relative Economic Autonomy and Peculiarities in the Functioning of the Socialist Enterprise," WISSENSCHAFTLICHE ZEITSCHRIFT DER TECHNISCHEN UNIVERSITAET DRESDEN, Vol 3, 1976, pp 373-377.

74. Cf Horst Trauer, "On the Organization of Relations...," loc cit, (footnote 71), p 364.

75. Cf, for example, H. Feurich, "On Improving Planning and Productivity Evaluation," WIRTSCHAFTSWISSENSCHAFT, Vol 5, 1978, p 602. E. Manz, "Problems of Organizing Economic Accounting in the Combine," WISSENSCHAFTLICHE ZEITSCHRIFT, Karl Marx University, Leipzig, Vol 2, 1978, p 254.

76. Cf Horst Steeger (review of a Soviet publication), "Improving the Economic Mechanism in Developed Socialism..., Moscow, 1975 (in Russian)," WIRTSCHAFTSWISSENSCHAFT, Vol 6, 1976, p 909.

77. Walter Burian, "Thoughts on the Status and Further Development of Branch Management in the GDR System of Socialist Industrial Management," WISSENSCHAFTLICHE ZEITSCHRIFT, Bruno Leuschner Advanced School for Economics, Vol 3, 1978, p 103.

78. The principle of economic accounting, once known by the more comprehensible name of "principle of in-house profitability," is considered both as an "economic category of the socialist mode of production" and as a "method for the systematic economic administration of enterprises," or "method of socialist economic administration" with the aid of commodity/cash relationships and valuation categories (prime costs, profit, price, interest and so forth) according to the principles of profitability (drawing a balance). Cf Authors Collective, "Socialist Industrial Management," textbook, third edition, (East) Berlin, 1975, p 198 ff; and Authors' Collective, "Socialist Industrial Management for Engineers," (East) Berlin, 1978, p 1978.

79. Economic accounting within the enterprise is considered basically a limited method of socialist economic administration in nonautonomous parts of

enterprises, a method that is not based on commodity/cash relationships (no proceeds from the sale of goods). Also see Authors' Collective, "Socialist Industrial Management for Economists," technical school textbook, (East) Berlin, 1976, pp 145, 146.

80. K. Ladensack, "On Togetherness in the New Combine," DIE WIRTSCHAFT, Vol 5, 1979, p 16.

81. Monika Fischer in a review of "Authors' Collective, Economic Accounting in Industry," WIRTSCHAFTSWISSENSCHAFT, Vol 5, 1980, p 610.

82. "The Future of Industrial Associations," PRESSESCHAU OSTWIRTSCHAFT, Austrian Institute for East European and Southeast-European Studies, Vol 5, 1980, p 27 (translation from FIGYELO, Budapest, No 20, 14 May 1980, p 8). Interestingly enough, Gerd Friedrich infers and uses the same argument in a timely and detailed article on combine problems (lecture at the 30th meeting of the Scientific Council for Economic Research); he argues that the "economic stability" of the enterprises cannot "be separated from their economic and legal responsibilities." Gerd Friedrich, "Management and Planning in Combines and Enterprises — Experiences and Generalizations," WIRTSCHAFTSWISSENSCHAFT, Vol 7, 1980, p 773.

83. R. Yevstigneyev, "Experiences of the CEMA Countries in Developing Enterprise Forms," SOWJETWISSENSCHAFT. GESELLSCHAFTSWISSENSCHAFTLICHE BEITRAEGE, Vol 3, 1980, p 267.

84. "Efficient Organization of Economy, Management and Processes," DIE WIRTSCHAFT, Vol 7, 1980, p 12.

85. Cf Kurt Erdmann, "Industrial Design in the GDR," DEUTSCHLAND ARCHIV, Vol 8, 1979, p 870

86. Cf Authors'Collective, "Development of Productivity in the Combines and Enterprises. Scientific-Technical Progress — Management Decisions — Creative Initiative," (East) Berlin, 1979, p 29.

87. Ibid.

88. Dieter Bormann, "Long-Range Scientific-Technical Development in Enterprise and Combine," Leipzig, 1977, p 63.

89. Cf Kurt Hildebrandt, Heinz Zerressen, "Socialist Rationalization and Commercial Law Aspects of Its Management in the Combine," WIRTSCHAFTSRECHT, Vol 2, 1980, pp 63,64.

90. Cf Christine Neuhaeuser, "The Efficient Organization of Supply Relations Between Combine Enterprises and Suppliers Outside the Combine," WIRTSCHAFTSRECHT, Vol 2, 1980, p 67.

91. Authors'Collective, "Productivity Development in the Combines...," loc cit, (footnote 86), p 27.

92. Cf Lothar Rouscik, Klaus Oberlaender, "Centralized Manufacturing — But How?" (East) Berlin, 1976, p 28.

93. Authors' Collective, "Basic Questions...," loc cit, (footnote 70), p 366.

94. Ibid, p 337.

95. Cf remarks by Polish and GDR economists at a Dresden Technical University symposium in 1979. Joachim Kaden, "Economic Problems in the Formation and Activity of Large Economic Organizations in the People's Republic of Poland and the State Combines in the GDR," WIRTSCHAFTSWISSENSCHAFT, Vol 4, 1980, pp 482-489.

96. Cf footnote 54.

97. Joachim Kaden, loc cit, (footnote 95), p 486.

98. Cf Ilona Fuchs, Frank Mothes, Horst Neumann, "End Product: Important Criterion for Evaluating Productivity in the Combines," SOZIALISTISCHE FINANZWIRTSCHAFT, Vol 3, 1979, pp 12-16.

99. Joachim Kaden, loc cit, (footnote 95), p 486.

100. Cf Ursula Lange, "On Improving Productivity Evaluation in Enterprises and Combines," WIRTSCHAFTSWISSENSCHAFT, Vol 3, 1980, pp 338-340; for one thing, U. Lange criticizes an insufficiently precise use of words in the GDR literature, since the "end product" that is used frequently in context with "industrial goods production" also "can include nonindustrial products and services" (p 340); for another, she emphasizes various shortcomings of the index figure for productivity evaluation.

101. E. Polaschewsky (editor), "Planning in Industrial Enterprises and Combines," (East) Berlin, 1977, pp 54,55.

102. Armin Holicki, Achim Schmidt, "Conceptual Preparation of the Five-Year Plan in Enterprises and Combines," (East) Berlin, 1979, p 7.

103. Ibid, p 80.

104. "New Provisions for Plan Development," DIE WIRTSCHAFT, Vol 7, 1980, p 6.

105. Cf detailed remarks by Maria Haendcke-Hoppe, "Changes in GDR Foreign Trade Organization," DEUTSCHLAND ARCHIV, Vol 2, 1980, pp 159-162.

106. The "planning of economically structurally- determining products, product groups and systems, procedures and technologies" was originally considered the "major element in national economic planning" at the beginning of the 1970's. Hans-Heinrich Kinze et al, "National Economic Planning. Selected Texts," (East) Berlin, 1971, p 15. The "Resolution on Implementing the Economic System of Socialism in 1971," GESETZBLATT, Part II, 1970, No 100, pp 731-746, repealed this planning principle. Cf Kurt Erdmann, "Renunciation of Previous Model for the Economic System of Socialism," DEUTSCHLAND ARCHIV, Vol 8, 1971,

pp 819-821.

107. "New Provisions...," loc cit, (footnote 104), p 6.

108. Ibid.

109. Cf "Meeting of the Commercial Law Committee," WIRTSCHAFTSRECHT, Vol 2, 1980, p 113.

110. The corresponding provisions in the planning ordinance "produce the problem of basing the results necessary to their realization primarily on the conclusion of contracts"; Gerd Walter, "On Further Development of the Contract Law," STAAT UND RECHT, Vol 3, 1980, p 213.

111. Cf Juergen Ackermann et al, "Composition of Capital and Problems of Socialist Economic Planning," WIRTSCHAFTSWISSENSCHAFT, Vol 7, 1979, p 854.

112. Cf Joachim Kaden, loc cit, (footnote 95), p 487.

113. Horst Trauer, loc cit, (footnote 71), p 348.

114. Willy O. Wegenstein, "The Move to Another Dimension," BLICK DURCH DIE WIRTSCHAFT, 28 March 1978, p 3.

115. Cf Achim Beyer, Kurt Erdmann, Guenter Lauterbach, Manfred Melzer, "Price Problems in the GDR," second revised edition of "Current Problems of the GDR Pricing System," ANALYSEN UND BERICHTE AUS GESELLSCHAFT UND WISSENSCHAFT, Vol 1, 1980.

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GERMAN DEMOCRATIC REPUBLIC

WORKING CONDITIONS CONTRIBUTE TO EFFICIENCY, JOB SATISFACTION

Tasks of Industrial Psychology

East Berlin TRIBUENE in German 29 Aug 80 p 5

[Interview by Jutta Wolf and Manfred Strzeletz with Dr Baerbel Matern, lecturer, Technical University, Dresden: "Training--Not for World Records But for New Work Tasks; GDR's Industrial Development Poses New Tasks for Industrial Psychologists"]

[Text] Dr Baerbel Matern was born in 1943. After graduating from high school, she studied psychology at Dresden Technical University from 1962 to 1967. Subsequently, she engaged in graduate studies and then worked as a research assistant at that university; in 1971, she took the Ph.D. degree. From 1971 to 1973, she worked for the industrial health service and in 1973 returned to the Technical University. Dr Matern lectured in the fields of industrial and general psychology. In 1975, she was appointed Assistant Professor and in 1977, she took the degree of Doctor of Science. Dr Matern's work at Dresden Technical University focuses on psychological work analysis and psychological training procedures for the industrial sector. Dr Matern is a member of the Council for Psychology at the GDR Ministry for University and Technical School Affairs.

What are the objectives of industrial psychology? What results has it produced so far? What problems is it confronted with? These and other questions were asked by many of the 4,000 researchers from over 50 countries, who a few weeks ago participated in the 22nd International Psychology Congress in Leipzig. Aside from psychologists, there were above all physicians, biologists, educators, philosophers, operations and process analysts. Dr Baerbel Matern participated in this international exchange of opinion and TRIBUENE talked to her about the tasks and possibilities of this scientific discipline.

[Question] What are the tasks of industrial psychology?

[Answer] Industrial psychology analyzes and evaluates work processes so as to modify them and to prepare the workers--by means of training and qualification measures--for new tasks. Furthermore, it examines the interrelationships between

certain types of work and their long- and short-term effects on the worker. The objective of the psychological modification of work is the unity of high productivity, freedom from negative influences, and personality development through work. This means: Aside from a high level of performance, the working processes must be designed so as not to be detrimental to the workers' health. That is to say--in accordance with the World Health Organization's (WHO) definition of health--not only freedom from disease, but also emotional and social well-being. Work is to contribute to the development of the personality.

[Question] What are the methods of your discipline?

[Answer] In analyzing work processes, industrial psychology draws on a large number of methods. Evaluation standards and criteria help in the assessment of the results of the analysis. We also examine the short-term effects on man of certain types of work, i.e. the effects produced during one particular work shift. Above all, I am referring here to fatigue, monotony, saturation, stress, etc. Long-term data, i.e. changes that occur in the course of several years of work and that affect man, his skills and his attributes are analyzed as well. Aside from being a practical discipline, industrial psychology has been developing in our country into an independent theoretical discipline. This theoretical advance is essential for effective work in industry, for "nothing is more practical than good theory."

[Question] How do you apply to practical work the results obtained?

[Answer] Frequently, the measures recommended by the psychologist are of an organizational nature. They may concern the division of labor among various individuals or the individual organization of working processes, including breaks. Here one should also include training measures aimed at improving performance.

[Question] Are there points of contact with other disciplines?

[Answer] With a great many disciplines. Depending on the branch of industry, the industrial psychologist collaborates with technologists of diverse disciplines; he or she cooperates with all work analysis-related disciplines, above all industrial medicine and industrial hygiene.

[Question] Can the scientists working in this field accomplish all these tasks?

[Answer] The GDR's research potential in the field of industrial psychology is not very great. Thus international and interdisciplinary cooperation and careful selection of the research projects are absolutely essential. Moreover, as a result of the development of technologies and procedures, industrial psychology is continuously confronted with new problems. To solve all these problems through their own research efforts exceeds the possibilities of the GDR scientists. To some extent, our research projects are coordinated with the projects pursued in the other CEMA states. Through division of labor, the socialist countries collaborate on solving various problems. Interdisciplinary cooperation is essential for solving key industrial problems and for ensuring the transfer of research results to the production process.

[Question] In our republic, what are the points of main emphasis?

[Answer] Our research focuses on the development of psychological work analysis and evaluation procedures for various branches of industry. These procedures are prerequisite to broader participation in the planning and correction of working processes.

[Question] Specifically what is this scientific discipline concerned with in regard to the modification of working processes and equipment?

[Answer] Changes in regard to equipment can be effected in various ways, e.g. through modifications concerning the division of functions between man and machinery. Modifications in the field of regulating and control technology--i.e. the point of contact with man--are a special case in this respect. As regards the modification of working processes, we are concerned with the division of labor among the workers. The presently much-discussed trend toward transition from assembly line work to modular production is an example of work modification that involves changes in the division of labor among the individuals concerned. The objective is to bring about a combination of working processes and a division of labor that neither bore nor overtax the individual.

[Question] How is it that more and more enterprises are abandoning assembly line work, changing over to modular production?

[Answer] Assembly line work is the prototype of psychologically badly organized work: It is monotonous and degrading. Modular production offers greater work satisfaction. The worker can choose working processes himself. The work is more varied and gives the worker the opportunity to use and--to some extent--develop his or her skills. Monotony no longer exists.

[Question] As a result of the development of technologies and procedures, the demands made on man are changing more and more rapidly. How can we reduce the periods of vocational adjustment and make the working processes more efficient?

[Answer] Now as ever, a vital task of industrial psychology is the development of training and adjustment procedures and of job-related training and advanced training. Psychological training procedures consist in the transmission of the requisite knowledge and skills, which must be practiced systematically and repeatedly. In this work, the psychologists use theoretical concepts of the psychology of reasoning, memorizing and learning. In this regard, the congress presented a great many new findings. Good examples of psychological training procedures are training programs that extend over several weeks and that combine theoretical knowledge with practical exercises in the production process, training programs for simulation facilities, e.g. power plant trainers, and adjustment aids in the form of external stores to be used individually.

[Question] Provided it is possible to make such generalizations--what are the principal training objectives?

[Answer] In view of the rapid development of technology and of the increasingly complex working processes, the main objective is to train the ability independently to develop professional knowledge and skills. On account of the fact that the workers' general education has been improved, this objective is now more readily attainable. We want to develop training procedures that--rather than making the

workers consumers of well-arranged knowledge and didactically well-taught skills--make them the psychologist's active partners in the development of new knowledge and skills.

[Question] So the industrial psychologists contribute to personality development?

[Answer] The development of the personality is the objective of psychological work modification. Work is the most important sphere of human life. Man spends most of his waking hours working. A good work collective is a vital factor in the development of personality attributes. The extent to which work-related cooperation and communication are practicable and the way in which performance evaluation and feedback is carried out are important criteria in regard to the evaluation of the quality of work modification measures.

[Question] How can industrial psychology help to make work easier, more interesting, more varied and more pleasant?

[Answer] To some extent, basic research in industrial psychology is concerned with examining the effects on man of various types of work. To this end, it is necessary to determine the degree of complexity, at which a job is experienced as interesting and stimulating, as neither overtaxing nor boring, and at which the work thus serves further to develop skills and attitudes. Such interrelationships are not generally constant; rather, they are dependent on personal constellations. The worker's qualifications and age are of great importance. On the basis of such research results, we are able to make recommendations regarding psychologically well-organized work and to make predictions concerning the effects of such work, e.g. absenteeism due to illness, turnover, and job satisfaction.

[Question] So appropriate work process modifications serve to reduce absenteeism due to illness?

[Answer] Undoubtedly, absenteeism due to illness and the quality of the work process modifications are closely interrelated. Badly organized, dull types of work that require only a fraction of the skills acquired not only generate monotony, but also give rise to job dissatisfaction and diminish work motivation. A negative view of one's work tends to prolong illnesses and also leads to more frequent visits to the doctor. It has been proved that the incidence and duration of illness depend not only on the state of health, but to a large extent on the way the individual views his or her work situation. The difference in absenteeism due to illness between individuals doing interesting and responsible work and individuals doing dull, monotonous work amounts to several percentage points.

[Question] As the facilities grow larger and more modern, a higher level of technological discipline is required; without such discipline, there occur breakdowns causing great damage. Can you help to prevent this?

[Answer] I think we can. Through analyses, we have shown again and again--and the congress, too, adduced telling examples to this effect--that in highly automated industrial enterprises a large percentage of the breakdowns is attributable to operating errors and that these errors account for most of the repair costs. One of the problems concerning highly automated equipment is the low degree of human involvement. Under normal conditions, man only performs control functions.

Thus the worker has fewer opportunities in the normal working process to use and further develop his or her knowledge and skills. By various methods, industrial psychology is trying to solve this problem. Firstly, we have been able--through accident-prevention training--to compensate the infrequency of learning possibilities in the normal working process. Secondly, we are testing various ways of letting the worker take over functions that in the past were assigned to other occupational categories, in order to give the worker more opportunities for independent, active work. For example, in addition to their normal duties, equipment operators have been entrusted with laboratory analyses and simple maintenance work.

[Question] What becomes of those who are tripped up by scientific-technological progress?

[Answer] In our society, technological progress does not trip up anybody. If as a result of the introduction of new production systems or rationalization measures fewer workers are required, the workers in our country are in time prepared for new work tasks, which are in accord with their level of qualification or for which they acquire the skills necessary. The effects of unemployment on the development of the personality, which were intensively discussed by representatives of Western countries at the 22nd International Congress for Psychology, are only of theoretical interest to us.

[Question] Did your academic discipline gain any new insights at the congress?

[Answer] The congress provided many new stimuli. An important experience was the international integration of theories and concepts that in the past were studied totally independent of each other. Likewise, the integration of problems pertaining to industrial psychology with problems concerning personality development was of great significance. Of great interest were the symposia on sociotechnological systems, on mental strain on the job, on stress at the work place and on certain aspects of activity regulation. Our work was given fresh impetus by the fact that particular subjects were discussed by researchers from various branches of psychology. However, in view of the large number of new theories, methods and results presented at the congress, a comprehensive evaluation will take several months.

Importance of Work Safety

East Berlin TRIBUENE in German 22 Aug 80 p 7

[Interview by Inge Ruthe and Lilo Porada with Prof Dr Horst Rehtanz, engineer, director, Central Work Safety Institute, Dresden: "Safe Work Maintains Satisfaction and Improves Performance Quality; Work Safety Is Not Achieved Apart From or in Addition to, But Always Together With Production"]

[Text] Prof Dr Horst Rehtanz was born in 1927 in Petriroda, Thuringia. Upon completion of his studies at Karl Marx University, Leipzig, he took his doctorate at Freiberg Mining College. From 1950 to 1954, Prof Rehtanz was a member of the State Planning Commission. From 1955 to 1970, he successively held the post of technical director at the Karl-Marx-Stadt Pipe and Cold Rolling Mill, at the

Freital "8 May 1945" Steel Mill and at the Burg "Hermann Matern" Rolling Mill. Since 1971, Prof Dr Rehtanz has been holding the office of director of the Dresden Central Institute for Work Safety at the State Secretariat for Labor and Wages. In 1971, Dr Rehtanz was elected deputy of the People's Chamber. He is a member of the FDGB [Free German Trade Union Federation] fraction and a member of the Committee for Labor and Social Policy.

[Question] We have been fortunate in that since the beginning of the year there have been fewer industrial accidents than during the corresponding period of the preceding year. What are the reasons underlying this positive development?

[Answer] In the first 6 months of 1980, industrial accidents declined by 7.01 percent, as compared to the first 6 months of 1979. The accident rate, i.e. the number of industrial accidents per 1,000 workers, dropped from 15.41 to 14.32.

[Question] In this regard, what was the situation 20 years ago?

[Answer] In 1959, the accident rate still was as high as 48.87. By 1979, it had dropped to 30.1. As compared to 1959, the number of industrial accidents decreased by 38.4 percent. During the same period, the incidence of fatal accidents declined by 56.2 percent.

[Question] Is this a consequence of the unity of economic and social policy?

[Answer] Undoubtedly. A high level of occupational safety is a basic concern of our socialist society. The unity of economic and social policy has also led to a more effective utilization of the objective and subjective conditions concerning the implementation of the party and trade union resolutions and of the legal norms and plan targets in the field of occupational hygiene and safety.

[Question] What is this reflected in?

[Answer] To give only one example of many: According to the report of the Central State Administration for Statistics concerning the implementation of the 1980 economic plan in the first 6 months of the year, 110,000 jobs were modified or restructured by means of the application of scientific-technological results and of scientific work organization measures, and difficult and unwholesome working conditions affecting 20,000 workers were eliminated.

[Question] In our country, what is the role of work safety?

[Answer] The role of work safety is determined by the position of man in socialism. Man is the central element; everything is done for the benefit of the workers. This is reflected in the principle of the unity of production and occupational safety. This means that all of the measures aimed at increasing production and labor productivity must at the same time meet the requirements of occupational hygiene and

safety. Conversely, the work safety measures must not impede production. Since under socialism the management and planning work procedes from the needs of the people--which, as is well known, include the need for health, enjoyment of life, and job satisfaction--the work safety requirements cannot be met against, apart from or in addition to production; they can be met only through the integral unity linking occupational safety with the reproduction process.

[Question] Does work safety improve performance?

[Answer] Certainly, for injuries to health lead to a reduction in the social work potential and to personal suffering; they impede personality development and are a great drain on the social funds. Frequently, accidents also involve loss of materials, equipment and facilities. We have learned from experience that safe work places and equipment--i.e. implementation of the quality principle of maximum safety--affect work and production safety and product quality and promote production continuity. Working conditions characterized by a high degree of work safety, including observance of the threshold values concerning occupational hygiene, are prerequisite for enabling the workers fully to concentrate on the task at hand and for promoting their personality development.

[Question] In this regard, what are the conditions in the capitalist countries?

[Answer] Occupational safety is subordinated to the employers' only objective, namely profit maximization. This goes for the work safety measures not taken and for measures intended to protect the employees such as are adopted on the basis of legal norms and state or company programs. Undoubtedly, this approach yields a few results that scientifically and technologically are on a relatively high level and that benefit certain groups of workers.

[Question] But surely there are legal regulations.

[Answer] Naturally. And in addition, there are control organs, associations, specialists in enterprises and scientific institutions, professorships at the universities. However, it is obvious--and the high accident rate is proof of this--that work safety measures are adopted only insofar as the workers in a bitter class struggle wrest them from the employers and insofar as the employers permit them so as to improve the capital utilization conditions. Certain advances have been necessitated by the competition in the national and international markets. Moreover, occupational safety (production of work safety equipment, physical protection devices, and propaganda) has turned into a field for profitable capital investment.

[Question] And in the FRG?

[Answer] The FRG is no exception. According to the 1980 Accident Prevention Report of the Ministry for Labor and Social Affairs--which incidentally presents the results obtained in 1978--the industrial accident and occupational disease rate amounts to 83.4. In the FRG, the Bonn Friedrich Ebert Foundation published a paper on "Occupational Safety and Labor Protection in the Two German States." Allow me to quote from this paper: "Regarding the implementation of occupational hygiene and safety measures, the GDR has likewise been very successful. Per 1,000 full-time workers, the results achieved in the GDR in regard to work safety exceed those of the FRG. In this regard, however, one must take into consideration that in the

GDR intensive accident prevention--for which in the FRG the legal foundations were laid not until the second half of the 1960's--was initiated as early as the beginning of the 1950's. In this field, the GDR is in the lead and this gap must be closed--in the interest of the employees."

[Question] How do the GDR trade unions exercise their right of work safety control?

[Answer] Without the active participation of the trade union functionaries and without the control exercised by the work safety inspectors and the numerous volunteer functionaries in the enterprises, we would not have reached our high level of work safety. The work safety program is an integral part of the FDGB's constitutional right of "comprehensive codetermination in the state, the economy and society." The Labor Code and the Work Safety Regulations define the pertinent rights. Codetermination begins with the establishment of legal norms; it is laid down in the plans and firmly established in everyday life.

[Question] What are the primary concerns of your institute?

[Answer] Our research focuses on the following fields:
--Further development of effective work safety by integrating it in management and planning and in the incentive programs;
--increasing the effectiveness of education and training in the field of work safety;
--improving the workers' technological and organizational protection against accidents;
--improving the workers' protection against noise and vibration;
--increasing the effectiveness of the protection against noxious substances;
--ensuring work safety by means of protective devices to be used by the individual worker.

[Question] What is the significance of practical work in this respect?

[Answer] The scientific research work is carried out in close collaboration with the people engaged in practical work. The transmission of the research results takes place at an early stage, namely during the joint problem-solving efforts; it is carried out through patents and standards, through incorporation in the legal norms and through our own recommendations. There are other contributing elements, e.g. our information days, the publications on the various forms of training and advanced training, our journal ARBEITSSCHUTZ UND ARBEITSHYGIENE [Occupational Safety and Hygiene] and the Occupational Safety and Hygiene Exhibition.

[Question] Who are the most important partners?

[Answer] On the one hand, we obtain important information available in the GDR and abroad from scientific literature, patent specifications, documentations, conferences and congresses. This year (1980), our institute has become the National Center of the International Information Center for Occupational Safety and Hygiene of the International Labor Organization (ILO). For our work and for all interested parties in the GDR, we thus have at our disposal a large store of international knowledge and experience. Through many years of cooperation, we are linked with the work safety institutes of the socialist countries.

[Question] And on the other hand?

[Answer] In the realms of science and practical work, work safety as an interdisciplinary field can be become effective only through the cooperation of the most diverse fields such as technology, medicine, the natural and the social sciences, pedagogics, psychology. In 1979, we established the Research Association for Work Safety, in order to make work safety research more effective.

[Question] You are a scientist and at the same time deputy of the People's Chamber. What interaction is there between these two functions?

[Answer] In my capacity as deputy of the FDGB fraction, I am a member of the Committee for Labor and Social Policy. Through this function, I obtain a great deal of information for my work as director of the institute; moreover, as a deputy I am provided with many opportunities effectively to apply to practical work the results obtained by the staff members of the Central Work Safety Institute. In the Committee, we are dealing with problems concerning utilization of the social work potential. In this regard, the deputies are concerned above all with reducing absenteeism due to illness, with problems concerning work safety and with modification of the working and living conditions.

[Question] At present, what are the limits of the work safety program?

[Answer] Since in our country there are no limits based on the social system, the only obstacles are found in areas, where we have not yet been able to identify all the causes underlying injuries to health at the work place. Insofar as we can throw light on the various causes--this goes for potential as well as for present hazards--we will be extending the foundation for pertinent measures and means.

[Question] Do you think we may be able to eliminate industrial accidents caused by human error by entirely relying on technological means?

[Answer] In accordance with the order of priority of the work safety measures and with Article 3 of the Work Safety Decree, we are always interested in application of technological means. Naturally, human error cannot entirely be ruled out. But it is imperative that we modify the working conditions so that errors are largely eliminated. The physical and psychological conditions governing performance are of crucial importance.

[Question] Could you name some of these conditions?

[Answer] We must develop and consolidate work safety-related attitudes, needs, interests, feelings, skills, knowledge and habits. And here is another practical insight for all those who bear responsibility in the field of occupational safety and hygiene: If accidents are caused by faulty conduct, the countermeasures should not be based on a simple reversal of conduct. It is necessary to find ways of preventing faulty conduct through technical or organizational measures.

8760
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HARD REALITIES OF ECONOMIC SITUATION DESCRIBED

Warsaw ZYCIE GOSPODARCZE in Polish No 43, 26 Oct 80 p 3

[Article by Stanislaw Chelstowski: "The Current Economic Situation--Harsh Realities"]

[Text] Debate about the sources of current crisis and about the process of renewal naturally involves, first and foremost, the social and political sphere, tending to find it in the causes of distortions while perceiving the foundation for a way out of the difficulties in the enhancement--at times, indeed, restoration--of socialist democracy. In a long-term view, this is certainly a fundamental issue. Yet, while working out changes in this sphere, we should not forget about the current economic situation which is decisive for matters that, though perhaps more pedestrian, profoundly affect society's mood, in other words, the possibilities of maintaining the standard of living of basic segments of the population.

Such possibilities are slim, and, to stay close to hard economic realities, it should be said they are minimal. In the coming weeks or months we are, in fact, about to confront further imbalances in the essential economic disproportions with all the consequences this involves. Also, no realistic opportunities can be seen for obtaining some external resources to mitigate this dramatic situation.

After Three Quarters of the Year

While raising the problems of the current economic situation, I am aware that this is not an issue society sees as the most "important" at this time. It is not the most important because taking account of economic realities in many cases undermines lofty attempts to accomplish change in other areas. Another reason is that discussion of economic possibilities, or rather impossibilities, is frequently regarded as an attempt to torpedo social activism and to argue that political renewal should be put off until better times, while coping, for now, with the daily routine work. I have no such intentions--on the contrary, as I will point out later--I believe that profound and rapid change is needed precisely in the economy because this is the field in which renewal should be accomplished with particular intensity. This is just the reason, however, why one needs to know the situation as it really is and to realize that, unless the belt is tightened hard, we will be unable to emerge from the current economic crisis, which will be projected with exceptional force onto the entire process of modifications.

Three trends seem to be most important in the present situation. They involve industrial materials supply, foreign trade and agriculture. As a consequence, they are bound to have an unfortunately adverse impact on the domestic market.

Industrial output (counted as value of sales) rose 3.6 percent over the first 9 months of this year. This increase could be regarded as fair, if not for the fact that it is due to the results of the first 2 quarters. According to official data, in August industrial production was 10 percent below last year's figure, and it was 3 percent lower in September. It is difficult to assess to what extent this represents an actual production decline and to what extent it is due to the fact that enterprise managers began to submit unaltered information. Moreover, the fourth quarter cannot be expected to bring marked improvement in output because this is not warranted by supply possibilities, as estimated at this time.

The August-September decline in output is most frequently blamed on strikes in many work establishments. They can be seen as its most immediate cause, the last drop that completed a long-existing economic disintegration.

Its cause should, therefore, be analyzed more in depth, if we are to find a long-term solution now. The critical situation in industrial materials supply has been developing for a long time and it began to be felt with particular acuteness 2 years ago because of stoppages and power outages. Its causes were to be found in erroneous economic policies, a virtual atrophy of central planning and deterioration of overall economic effectiveness. There is no room here to anlyzee them, but it is beyond doubt that these causes were for the most part rooted in internal, mostly subjective, conditionings, to use a term recently in fashion.

Unsound subjective decisions changed, however, into objectively existing realities. These realities would have been exposed sooner and much more boldly were it not for the steadily increasing foreign debt. Opportunities to incur more debt are, however, not limitless. At this time, if we have not reached it yet, we are very close to the threshold where it will be impossible to increase Poland's debt, or, in any event, it will be impossible to increase it in a manner which could allay our domestic difficulties. I will return to this problem later.

The strikes were, among other things, an outcome of escalation of this state of affairs. This form of protest of the working class obviously enhances existing difficulties, but it was recognized by many workers as necessary for removal of the underlying causes rooted, to put it comprehensively, in the methods of exercise of power, including the modes of economic management and control. It is in this sphere, therefore, that we must work out radical change. Not only because this is the only way to remove original underlying causes of current difficulties, but also in order to prevent further work stoppages which--regardless of the intentions--additionally unsettle the economy.

Before I return to my discussion of the current economic situation, I will add one more comment. Wages undoubtedly rank high among the workers' demands. From the social point of view, they have a valid justification in the increase of living costs over the recent years. At least two conclusions must be drawn from this. First, current pay raises should not be regarded as wage increments through

which various disproportions and income irregularities that have developed over the years whill be equalized. Instead, they should be viewed as compensation for the rising prices of basic foodstuffs with this compensation going, in the first place, to those most affected by price increases. Second, hopes of regaining equilibrium should not be related to inflationary methods, because the public does not want to accept them--at any rate, not in their present form.

This observation influences my assessment of the economic situation in which a declining trend in output is accompanied by unusually rapid increases in personal incomes. The latter can no longer be equalized by price increases unless they are equalized very slightly and only in higher income brackets.

How Can We Reverse the Trend?

Thus, the fundamental question is now reduced to an explanation of the causes of the downward trend in industrial output in recent months, which at the same time will clarify another problem--can this trend be reversed once the subjective causes are removed?

As mentioned earlier, the materials supply situation is the fundamental cause. A very major portion of industrial raw materials supply is imported (a more precise determination of what percentage of total supplies this portion constitutes is, in my opinion, impossible, while reliance on existing prices may lead to mistaken conclusions). This portion is even more significant--with the current distribution of co-production--because of supply shortages rapidly impacting on virtually all of industry. Meanwhile, import possibilities are extremely limited for the next several months. Suffice it to say that credit repayment and servicing during the current quarter and the subsequent one substantially exceed estimated export revenue.

Considering that the bulk of obtainable credits must be allotted to increased imports of grains and other farm produce, few resources are left for industrial supply, fewer than in a comparable period in the past years. On the other hand, reserve supplies of many important raw materials and production materials are low (primarily in metallurgy, chemical industry and light industry). Furthermore, there is the situation in the power industry where planned repairs have not been completed in electric power plants (88 percent of the plan for the first 9 months of the year), while by September 1 none of the turbine units planned for completion this year had been put into operation. Coal reserve supplies in power plants in early September were nearly 0.7 million tons less than a year before.

We are no better off with domestic raw materials, especially coal. We fully understand that the miners' demands are well-founded--but this does not alter the fact that at least in the immediate future, if these demands are met, a definite decline in extraction output must follow. It will not be possible to make up for this decline by improved organization of work. A similar situation obtains in copper and in some other raw materials. Export restrictions cannot--or at least should not--be considered, because they are bound to affect import possibilities.

Thus, the current supply situation carries the threat of a chain reaction leading to stoppages in a very substantial segment of our industry. It would be an uncontrolled reaction with all the consequences this entails. It appears, therefore, that the only solution lies in deliberate centralized channelling of all available materials supply to selected subbranches, coupled with equally deliberate and centrally controlled restrictions on, or even periodical halting of, production of particular commodity groups.

Decisions on such matters must obviously be preceded by appropriate calculations which should include not the benefits, but minor losses, primarily those perceived from society's point of view. Such calculations should be made on the central level since only on this level is there a chance for this point of view to be considered at this time. This statement can be supported by the fact that there is one industrial sector--the capital goods industry--that exceeded its plan for the three quarters substantially, by 25 billion zlotys, irrespective of difficulties in materials supply and strikes. This means that a comparable sum must be added to increase investment outlays, although with the reduction of the actual scope of investment, these capital goods will for the most part end up in storage sites and warehouses, thus increasing the value of uninstalled machinery and equipment. (And that value is already sizable--as of 31 March 1980 it was 48.5 billion zlotys.) On the other hand, deliveries of export-designated goods fall behind the plan, principally with reference to the second payments area (capitalist countries). The annual plan of exports to the second payments area was 67.6 percent fulfilled over the 9 months of this year.

Centralization is needed in import policies, unpopular as this stipulation is at this time. Despite the difficulties in payments, the capital goods import plan has been fulfilled over the last 9 months, although considerable shortfalls have been noted in imports of consumer supply goods (with respect to both the first and the second payments area).

In farming, the situation is also very tense. Although grain yields and crops this year are better (approximately 10 percent in crops) than a year ago last year, they are much worse than planned. According to estimates, the potato crop will be the lowest in 20 years (nearly 25 percent below last year's figure). The sugar beet crop will also be poor, so that sugar production will substantially decrease in comparison with the already adverse results of last year.

The poor results in plant production are bound to affect cattle breeding and, ultimately, state procurement of meat and milk. In order to prevent further disintegration of the foodstuffs market, and to assure a minimum supply for everyone, it appears necessary in this situation to institute meat rationing, and perhaps butter rationing as well. This must be seen as a necessary evil, but no other solution is in sight.

Clearly, the situation in industrial production and in farming must affect the domestic market. In the current year the gap between incomes and the supply of goods and services will increase. While in 1978 net market deliveries per 100 zlotys of monetary income amounted to approximately 98 zlotys, the 1979 figure was 96 zlotys and in 1980 it will be 90 zlotys. This is, of course, a financial index that falls short of reflecting imbalances in product mix, quality and other factors.

The Production Contract

These fragmentary and incomplete data do portray, to a great extent, however, the dramatic situation of our economy. Deliberately omitted from the discussion presented above were the matters concerning investments and construction, requiring separate analysis based on more complete data than are available to me. In general, it can be said, however, that things are not going the right way in this area--the outlays (this is to say, money expended) will conform with, or slightly exceed, the planned figures, while substantive results will be significantly lower. Unless we halt not several, but several dozen, ongoing investment projects, we will be unable to put our investments in order, and thus reverse the trend described above. It will be impossible, as well, to institute indispensable modifications in investment structure.

This dramatic situation did not arise in the last few weeks or months. It had been developing because of increases in materials intensiveness and imports' intensiveness for production, because of declining investment effectiveness and because of a structure of production that did not conform to society's needs. Yet in the course of several weeks or even months we will be unable substantially to decrease materials intensiveness, improve investment effectiveness, or restructure the economy. On the other hand, we have to stop--in the course of several weeks, or even days--the process of disintegration and abrupt intensification of disproportions, and we must create a foundation for economic consolidation for implementing socially the most important tasks.

In pointing out the need for various ad hoc measures (which are needed in much greater numbers than suggested in this article) I frequently referred to centralization of particular decisions. At the same time, I reaffirmed the exceptionally urgent need for renewal in the methods of economic management. This can be seen to contain contradictions because, among other things, excessive centralization is now blamed for the current dramatic situation of our economy, while decentralization is perceived as a measure for removing existing errors and deficiencies.

Indeed, the centralization of the last few years was endowed with all the shortcomings of this method, while being deprived of its advantages.

This is to say, centralization incapacitated the enterprises and largely absolved them of responsibility, while failing to concentrate the forces and materials in the socially most important sectors. It neutralized the initiative and activity of immediate producers directing their efforts to the accomplishment of frequently formal, neither economically nor socially justified, indexes. Still, it did not assure effective control over investment processes and the distribution of scarce resources in a fashion justified by the needs. It failed to overcome, and frequently incited, particular interests, thereby intensifying, or allowing the intensification of, most of the imbalances.

Of course, this is not what I mean when I refer to centralization. I believe, however, that in an emergency situation--which is what our economy is in at this time--there is a need for extremely flexible management, indeed, command from one single center. It is not possible to refer to cost effectiveness calculations

performed on the ministry level or on subbranch level when a number of ministry or subbranch interests are, of necessity, brutally and ruthlessly overruled, and when it is necessary to suffer losses, by no means small, in order to avoid much greater losses. For example, it is difficult to expect the automotive industry to offer to halt the manufacture of Polonez cars, and the Unita factory can hardly be expected to refrain for a specified period from manufacturing color television sets, though these are the kind of decisions that must be made at this time. Similarly, difficult as it is for a particular subbranch to yield to another subbranch all of its allocated import resources when it is evident that such a move would cause tremendous repercussions, possibly even the closing of certain plants. Even the best economic parameters are of no use in such situations.

Do actions of this kind, however, exclude the possibility of a change in economic management style to imbue this style with genuinely social characteristics? They certainly do nothing to facilitate this, yet at this time these processes must be reconciled as much as possible. This means that while we firmly delimit the possibilities of obtaining scarce production resources in the plans, we must conclude social contracts of a certain type with plant crews. They are the ones, after all, who will ultimately determine what will become of those scarce resources and how they will be utilized. It is necessary, therefore, to abolish most of the ceiling limits. The ones to be retained--mostly in supplies and imports--must be unequivocally defined, and their implementation must be strictly adhered to, just as in the "horizontal" contracts, i.e., those concluded with the receivers of ordered goods.

It is also necessary to abolish most of the gross type indexes without waiting for a sweeping reform. At this time, we are in no position to launch powerful efficiency incentives, but let us, at least, eliminate the counterincentives. This is the only way to create a level of understanding with plant personnel. I fear that without such a level of understanding this kind of plant personnel will simply refuse to accept the plan, which would not be worthy the paper it is printed on without acceptance of this kind.

All of these measures are temporary, of course, although their significance is tremendous at this time. Whether they will be effective depends on the wisdom, decisiveness and correct assessment of the situation on the central level, as well as on the public mood, political climate and psychological attitude of most plant crews. This, in turn, is strongly affected by the course of a number of processes not connected directly with the economy. Thus, there is perhaps little that appeals for efficient performance can achieve in this situation. Much more can be accomplished by specifically coming to terms with employee groups, treated as partners rather than adversaries on every level, and by clear exposition of the existing situation, though this would often require taking the blame because it is not the plant crews' fault that the situation is what it is. Ultimately, they are the ones to undo the results of the errors--therefore, they have a right to codetermine how to accomplish this and to closely supervise those who provide guidance from various levels.

8795
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STUDY ASSESSES PROFITABILITY OF LIVESTOCK PRODUCTION

Warsaw NOWE ROLNICTWO in Polish 1-15, 16-21 Jul 80

[Article by Adam Roznoch: "Economic Production Conditions and Developmental Trends of Livestock Production on Private Farms in 1979-1980"]

[No 13, 1-15 Jul 80 pp 10-13]

Hog Production

[Text] In this article (on the basis of the results of questionnaires distributed in November 1979 at the Institute of Agricultural Economy (IER)) we are presenting the assessment and opinions of farmers concerning the current economic production situation in livestock production and and the farmers' production intentions for 1980. The research covered a total of 4,950 private peasant farms located throughout the country, including 1,390 multipurpose farms, 1,380 farms specializing in various types of livestock production, and 1,680 farms carrying on agricultural bookkeeping.

The possibilities for developing hog production, as well as for the other types of livestock production, are determined by a host of various economic-production factors, including (particularly during short periods of a few or even a dozen and some months) first of all fodder reserves and production profitability.

The current economic-production situation in the realm of hog production is far less favorable than during the comparable period last year. Particularly unfavorable is the fodder situation, directly caused by the poor harvests of basic fodder crops, especially grain. The decline in grain production throughout all agriculture is estimated at about 4.2 million tons, which is about 19.6 percent of last year's production. This great decline in grain production was the result both of smaller grain yields, owing to the adverse weather conditions and the lower amounts of fertilizer applications, and the reduction (by 2.9 percent) in the area cultivated with grain on private farms.

[Key to Tables 1 and 2, continued]

(9) Total
(10) Breakdown by region

(a) Type of farm
(b) Current fodder situation compared to last year
(c) Better (d) Same (e) Worse (f) No response
(g) Percentage of farms on which current own fodder resources for hog-raising are:
(h) Adequate (i) Inadequate (j) Don't know yet (k) Have no hogs

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The research shows that on about 79 percent of the farms the harvests of grain were lower than the previous year, while on 11 percent they were higher. The cereal crop failure occurred in all regions, being particularly severe in the following regions*: Northeastern (II), Central Eastern (VI), Central (I), and Central Western (VII).

A far more favorable assessment was assigned to harvests of potatoes, up by about 6.3 percent over last year throughout agriculture as a whole. Larger potato harvests were noted on more than 57 percent of the farms questioned, and lower only on 16 percent, by contrast. The relatively better potato production this year was found in the following regions: Northeastern (II) and Northern (III), in which larger harvests occurred on about 82 percent of the farms.

Nevertheless, it should be mentioned that many of the farmers who gave a favorable assessment of potato harvests pointed out the grave difficulties in handling them properly, because the small number of steamer columns and the shortage of coal on many farms made it impossible to ensilage the potatoes, and the shortage of straw made it difficult to pit them properly. At the same time, at many wholesale points even potatoes designated for sales within the framework of contract agreements were not accepted. In this situation one must count on the fact that the lossess in the storage of the potatoes may be substantially greater than they have usually been in the past.

Although they have greatly eased the effects of the crop failures of grain, the good potato harvests cannot completely make up for the shortage of grain fodder, which is felt exceptionally keenly in the production of pigs, because in this branch of livestock production resources of grain and industrially-produced feed have a decisive influence on the general fodder situation. This is also why the assessments of the farmers asked about the general fodder situation for hog production are not very favor-

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*The division into regions is based on the principles adopted by the Planning Commission of the Council of Ministers, as follows: Region I -- Central, Region II -- Northeastern, Region III -- Northern, Region IV -- Southern, Region V -- Southeastern, Region VI -- Central Eastern, Region VII -- Central Western, and Region VIII -- Southwestern.

able. From them we see that at present more than 38 percent of the farms state the fodder situation for hogs is worse than a year ago, and it is better on only about 17 percent of the farms (Table 1).

According to the estimates of our respondents, the fodder resources accumulated will fully meet the needs up until the next harvests on only about 37 percent of the farms, but on one farm out of every three they are inadequate. About 14 percent of the farmers could not yet say for certain just how their fodder situation would turn out (Table 2). A particularly difficult fodder situation is occurring on those farms which specialize in hog production, farms which to a great extent base their production on their own fodder. On about 67 percent of these farms, the fodder resources accumulated are inadequate to meet complete production demands.

In the regional breakdown, the greatest shortage of fodder is found in the following regions: Central (I), Northeastern (II), and Central Western (VII).

Worthy of note is the fact that only 27 percent of the farmers suffering a shortage of their own fodder intend to reduce hog production on that account. On the other hand, over 57 percent of the farmers want to maintain or even expand their production of pork slaughter animals, increasing their purchases of industrially-produced feed to that end.

The unfavorable fodder situation is making the economic conditions of hog production much worse, because the crop failure for the basic fodder crops, especially grain, is driving up their prices substantially in turnovers among farmers. The free-market price of rye (a basic fodder grain for the production of pigs), for example, increased by about 12 percent from August to December 1979 (to 643 zlotys per 0.1 ton), and reached a level more than 17 percent higher than in December 1978. Because the wholesale price for pork slaughter animals from June 1978 remain unchanged, the ratio between the wholesale price for pork slaughter animals and the free-market price for rye has become worse. In December 1979 this ratio fell to a level of 6.93, which is far below the level of the similar period in 1978 and even lower than the year 1977, when it was exceptionally unfavorable in this regard. The price ratios for the wholesaling of pork slaughter animals under contract to the free-market prices of rye and potatoes are as follows:

Year	Rye	(in December)	Potatoes
1977	7.42		15.15
1978	8.08		16.26
1979	6.93		16.10

The drop noted in the ratio of the wholesale prices for pork slaughter animals to the prices of rye, given the simultaneous decline in the ratio of livestock wholesale prices to potato prices, greatly reduced the profitability of producing pork slaughter animals.

In January 1980 there was a further drop in the ratio of wholesale prices on pork slaughter animals to the free-market prices of rye and potatoes. The price of rye in turnovers between farmers increased by more than 4 percent in relation to December 1979 prices (by nearly 21 percent in relation to January 1979 prices). At the same time there was a further rise in the free-market price of potatoes (by 4.7 percent over the December price), as the result of which the price noted in January of this year exceeded by more than 2 percent the price in the comparable period in 1979.

On the basis of observations of the past development of the market situation, we can expect the trends toward increased free-market prices on basic fodder crops for hogs to remain up until the next harvests. Therefore, if over the coming period the past hog wholesale prices remain the same, then the decline in the profitability of livestock production will pass the critical point, with the consequences normal for such a situation becoming evident.

It is true that some improvement in production profitability may be anticipated on those farms able to take advantage of the system of bonuses for fodder savings, as introduced 1 January of this year, but these will be mainly those farms which have managed to accumulate sufficient resources of their own fodder, and according to our research there are not many such farms. Therefore, it seems as though the rise in the profitability of hog production only on those farms able to adopt this system will not be able to make up for the possible effects of the decline in production profitability on the other farms. Hence, despite the obvious advantages, the system of bonuses for saving fodder cannot substitute for changes in the wholesale prices of pork slaughter animals to include all hog producers.

According to the assessments of the farmers questioned, the production of pork slaughter animals is presently profitable on about 47.7 percent of the farms, and of these it is very profitable on 9.1 percent. On the other hand, on more than 11 percent of the farms it is decidedly unprofitable (Table 3).

It is worth noting that on over 18 percent of the farms, porker production is already on the fringes of profitability (nearly unprofitable). Here we must add that even in the fall of 1978, investigations of a similar nature (conducted in this same group of farms) showed that the production of pork slaughter animals was profitable on about 54 percent of the farms, including about 14 percent on which it was very profitable. On about 8.9 percent of the farms it was decidedly unprofitable to raise porkers. On the other hand, in the spring of 1979 the percentage of farms on which livestock production was profitable declined to 48.7 percent (including 10.1 percent on which it was very profitable), and the share of farms on which it was decidedly unprofitable rose to 9.6 percent.

Table 3. Assessment of the Profitability of the Production of Pigs (Percentage of Total Number of Farms Examined in Given Group)

Gospodarstwa (e)	(a) Odsetek respondentów oceniających produkcję														
	(b) prosiąt					(c) warchlaków					(d) tuczników				
	(f) bardzo opłacalna	(g) opłacalna ale za mało	(h) prawie nieopłacalna	(i) zdecydowanie nieopłacalna	(j) trudno określić	(f) bardzo opłacalna	(g) opłacalna ale za mało	(h) prawie nieopłacalna	(i) zdecydowanie nieopłacalna	(j) trudno określić	(f) bardzo opłacalna	(g) opłacalna ale za mało	(h) prawie nieopłacalna	(i) zdecydowanie nieopłacalna	(j) trudno określić
Wielkiekierunkowe (1)	32,2	25,8	4,4	1,2	21,6	21,2	25,0	6,0	2,1	24,0	15,2	37,2	14,7	11,3	9,6
Rachunkowe gospodarstwa rolnych (2)	29,1	33,6	3,6	1,3	20,4	16,0	32,3	6,5	2,7	26,8	8,0	43,4	19,9	10,4	8,7
Specjalizujące się ogółem (3)	21,4	31,4	3,6	2,1	20,9	22,3	31,6	5,0	2,3	19,9	5,2	54,6	19,6	11,7	11,4
W tym w kierunkach: (4)															
— trzoda chlewna (5)	23,7	40,9	6,6	3,6	17,2	25,9	40,9	7,3	4,0	15,3	5,8	41,6	22,3	17,2	5,3
— bydło rzeźne (6)	20,8	33,8	1,3	0,0	27,3	13,0	35,1	1,3	1,3	25,6	1,3	37,7	18,2	5,2	18,2
— bydło mleczne (7)	20,4	30,0	1,7	1,7	20,4	22,1	21,2	2,9	1,3	20,4	5,8	29,6	19,6	8,7	14,2
— owce (8)	16,2	25,0	1,5	0,0	30,9	19,1	16,2	7,4	0,0	26,5	4,4	20,6	10,3	7,4	26,5
Ogółem (9)	27,6	31,7	3,8	1,5	20,9	19,6	30,0	5,9	2,4	24,0	9,1	38,7	18,3	11,1	9,8

Table 4. Farmers' Intentions in the Realm of Raising Pigs (Percentage of Total Number of Farms Examined in Given Group)

(a) Gospodarstwa	(b) Chów trzody chlewnej ogółem:				(c) W tym maciory:			
	zwiększyć (d)	pozostawić bez zmian (e)	zmniejszyć (f)	(g) brak odpowiedzi	zwiększyć (d)	pozostawić bez zmian (e)	zmniejszyć (f)	(g) brak odpowiedzi
Wielkiekierunkowe (1)	22,1	50,6	14,7	12,6	13,5	49,2	5,5	31,9
Rachunkowe gospodarstwa rolnych (2)	21,2	46,3	19,3	13,4	15,4	47,8	8,3	28,5
Specjalizujące się ogółem (3)	19,0	41,1	15,3	24,4	13,5	43,1	11,7	31,7
W tym w kierunkach: (4)								
— trzoda chlewna (5)	27,7	48,2	21,9	2,2	18,2	53,5	19,9	7,3
— bydło rzeźne (6)	19,5	39,0	2,6	39,0	13,0	31,2	3,9	51,9
— bydło mleczne (7)	11,2	39,2	13,3	36,2	8,3	40,0	7,1	44,6
— owce (8)	10,3	23,5	10,3	55,9	13,2	17,6	7,4	61,8
Ogółem (9)	20,7	45,8	16,7	16,8	14,2	46,6	8,6	30,5

[Key to Tables 3 and 4]
(1)-(9) as in Tables 1 and 2 (a)-(j) see next page

[Key to Tables 3 and 4 continued]

Table 3
(a) Percentage of respondents by assessment of production
(b) Young pigs
(c) Piglets
(d) Porkers
(e) Type of Farm
(f) Very profitable
(g) Profitable, but not profitable enough
(h) Nearly unprofitable
(i) Decidedly unprofitable
(j) Hard to say

Table 4
(a) Type of farm
(b) Total pig-raising
(c) Of the above, sows
(d) Plan to increase
(e) Plan to keep it the same
(f) Plan to reduce
(g) No response

Relatively speaking the largest percentage of farmers (about 47-55 percent) stating that hog production is profitable falls into the group of multi-purpose farms of small size (under 7 hectares) specializing in hog production.

Despite the fact that it is based to a large extent on young pigs and concentrated feed which is purchased, the high profitability of livestock production on small farms stems first of all from the rather low level of grain consumption, which, as we have emphasized, at the present time is important in calculating the profitability of production. Agricultural bookkeeping data show that farms under 7 hectares in area use an average of about 250-260 kilograms of concentrated feed per 100 kilograms of pork slaughter animals, while farms of 15 hectares and over use about 22-26 percent more concentrated feed to produce the same amount*. In addition, small farms also use marginal fodder to feed their livestock, such as leftovers from the household, which factor reduces the production costs still further.

On specialized farms with high profitability in the production of pork slaughter animals, the relatively low grain intensiveness of production is also a factor in this profitability, because research conducted by IER** shows that these farms average 271 kilograms of concentrated feed to produce 100 kilograms of pork slaughter animals, or over 16 percent less than multi-purpose farms with 15 or more hectares, but here we must

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*"Wyniki rachunkowosci rolnej gospodarstw indywidualnych 1977/1978" [The results of agricultural bookkeeping of private farms 1977-1978]. Warsaw, IER, 1979.

**M. Kazmierczak. "Wyniki produkcyjne i ekonomiczne gospodarstw chlopskich specjalizujacych sie w produkcji zwierzecej" [Production and economic results of peasant farms specializing in livestock production]. Warsaw, 1979, IER. Series: Komunikaty. Raporty. Ekspertyzy. No 60.

emphasize that in the group of farms specializing in the production of pork slaughter animals, there is also a high percentage of farms which consider the production of porkers to be decidedly unprofitable. These are above all those farms which had to make additional investments to expand their hog-raising, and these investments greatly increased production costs.

Among all age groups, the greatest profitability was to be found (as in previous research) in the production of young pigs, owing to the consistent high prices for young pigs in turnovers among farmers, despite the fact that during the latter half of 1979, there was a slight drop in prices, owing to reduced demand, because GUS data show that in the period from May to November 1979 the prices on young pigs declined by about 12 percent. It is true that in December this tendency was slowed, and in January of this year there was even a rise in prices, but this increase seems temporary and to be the result mainly of the fact that socialized farms increased their purchases of young pigs during time. This is confirmed by the January livestock census, which shows a substantial shift of young pigs from the private sector to the socialized sector. As a result, on the socialized farms there was a rise in the number of young pigs, while there was a decline on the private farms.

The firm high prices on young pigs are encouraging farmers to increase their production. So too beginning in March 1979 the number of sows bred at breeding centers has still been greater than the year before (the index for the breeding of sows is remaining at a level above 100). At the same time, as the results of the January census show, the growth tendencies are remaining in the number of sows kept for raising, especially those in pig. This is creating a potential biological base for expanding the number of hogs during the next few months, but this increase will depend above all on the extent to which the economic factors of production are improved.

The current intentions of the farmers questioned show that under the present economic-production conditions, we can count on having only one farm in five increase the number of pork slaughter animals in the near future. At the same time about 16.7 percent of the farms will probably show a decline. A still smaller percentage of farmers (14.2 percent) intend to increase the number of sows, while 3.6 percent of the farmers intend to reduce the number (Table 4).

It must be stated that the farmer intentions presented concerning the further structuring of hog production are less auspicious than in the fall of 1978 or the spring of 1979. Hence, this means that if these intentions are fully carried out, then on the scale of the entire private economy during the latter half of 1980, despite the potential for improving the production situation, there may be a steepening of the current decline in the total number of hogs. This would mean a cut in hog wholesaling in 1981. Ultimately the amount of hogs at wholesale

next year will be determined by the economic conditions for the production of pork slaughter animals during the next few months and the fodder situation during the spring and summer period. Here it must be emphasized that given current resources of the farms' own fodder, hog production can be expanded on most farms, if production profitability is improved above all, because owing to the great mobility of fodder, if conditions are favorable to the profitability of production, then there can be a shift of fodder for pork production from other branches of livestock production, a shift which would help make better use of potato resources and reduce the grain intensiveness of hog production.

As we can see from the current structure of hog levels throughout all of agriculture (as shown by the January livestock census), sales of pork slaughter animals in 1980, despite some decline during the first half of the year, will probably remain at last year's level, that is, at about 1,960,000 tons, or may even slightly exceed this figure.

Alongside fodder resources and the declining profitability of production, what sort of factors are currently hampering the rise in hog production to the greatest extent? The views of the farmers questioned show that alongside the above-mentioned factors, on more than 27 percent of the farms greater hog production is also limited by the small labor supply. This fact is especially frequently mentioned on farms of small and intermediate size (under 10 hectares), on which we find the largest number of farmers (about 25-32 percent) over the age of 60. The shortage of labor on these farms is accentuated by the very great undermechanization of hog production and the difficulties in buying appropriate farm machinery and tools.

Up until recently one could still talk about certain labor reserves on private farms, but now, along with the development of nonagricultural sectors of the national economy which are creating a great demand for labor resources, these reserves have already been exhausted. On the other hand the process of substituting machine labor for human labor is taking on greater significance. This places before economic policy the task of accelerating the development of agricultural mechanization, which was emphasized with particular force in the resolution of the Eighth Party Congress.

In second place among the factors standing in the way of increases in hog production, about 18.5 percent of the farmers list an inadequate supply of concentrated feed. Here we must add that difficulties in buying concentrated feed were listed by far more, half of all the farmers questioned. These difficulties mean that despite the high grain prices on the free market, more than 80 percent of the farmers would prefer at present to allocate grain for fodder rather than sell it and count on buying concentrated feed.

Table 1. Assessment of the Fodder Situation for Cattle (Percentage of Total Number of Farms Examined in a Given Group)

(a) Gospodarstwa	(b) Obecna sytuacja paszowa dla bydła w porównaniu z ubiegłoroczną jest:			
	(c) lepsza	(d) taka sama	(e) gorsza	(f) brak odpowiedzi
Wielokierunkowe (1)	24.4	32.7	34.9	8.1
Prowadzące rachunkowość rolniczą (2)	26.4	31.0	32.7	4.0
Specjalizujące się ogółem (3)	25.1	35.7	26.1	12.0
W tym w kierunku: (4)				
— trzoda chlewna (5)	22.3	40.5	17.9	19.3
— bydło rzeźne (6)	26.9	40.3	29.9	3.9
— bydło mleczne (7)	32.5	28.7	36.2	2.5
— owoce (8)	11.8	35.3	19.1	33.8
Ogółem (9)	25.5	35.3	30.9	8.3
W tym regiony* (10)				
— I	26.5	41.3	32.2	0.1
— II	32.3	36.1	32.0	5.6
— III	4[illegible].5	25.7	18.1	11.6
— IV	2[illegible].1	31.0	25.1	10.9
— V	23.7	38.2	32.5	5.6
— VI	27.2	27.3	36.2	1.3
— VII	1[illegible].1	35.1	2[illegible].5	12.4
— VIII	11.9	2[illegible].7	41.5	1.[illegible]

*The division into regions is based on the principles adopted by the Planning Commission of the Council of Ministers, as follows: Region I -- Central, Region II -- Northeastern, Region III -- Northern, Region IV -- Southern, Region V -- Southeastern, Region VI -- Central Eastern, Region VII -- Central Western, and Region VIII -- Southwestern.

[Key]

(a) Type of farm
(b) Current fodder situation for cattle compared to last year is:
    (c) Better (d) Same (e) Worse (f) No response

(1) Multipurpose
(2) Conducting agricultural bookkeeping
(3) Total farms specializing
(4) Direction of specialization
    (5) Hog-raising
    (6) Cattle for slaughter
    (7) Milk cows
    (8) Fruit
(9) Total
(10) Regions in above*

The shortage of coal is also an important barrier to increased hog production. This factor is listed as that which most seriously impedes an increase in production on more than 14 percent of the farms, and more than 75 percent of the farmers mention difficulties in buying coal.

An equally important factor making it impossible to increase the number of pigs is the question of farm buildings. Here it must be emphasized that in 1979 about 8.7 percent of the farms questioned undertook the construction of new facilities for hogs, but (mainly because of a shortage of building materials) only a third of these fully completed the investments they had begun.

The shortage of livestock facilities and difficulties with building new ones are making it impossible to expand the raising of pigs on about 13.6 percent of the farms.

Summing up, then, we can say that alongside the factor of profitability, a rise in hog production will depend at the present time on the size of the deliveries of the means of production from outside agriculture above all.

[No 14, 16-31 Jul 80 pp 29-31]

Cattle Production

[Text] The current economic-production situation in the realm of cattle production is similar to that in the realm of the production of pigs,* that is, it is much worse than last year. To a great extent this is the result of an unfavorable situation regarding fodder for cattle after the most recent harvests. According to the assessments of the farmers we questioned, the recent harvests of fodder crops were higher than last year on only 40 percent of the farms. On more than 21 percent of the farms, and on a whole 40 percent of the farms in the Southwestern Region, on the other hand, there was a substantial decline in them. On nearly one out of every three farms investigated smaller harvests of meadow hay were also noted. Similar to the case of fodder crops, most of the farms (over 45 percent) on which there was a decline in the harvests of hay are located in the Southwestern region. GUS estimates show that total harvests of meadow hay throughout agriculture were about 2.5 percent lower than last year. A serious decline (of about 13 percent) was also noted in the production of sugar beets, the leaves and pulp of which represent an important element of cattle feed. There were smaller sugar beet

*The economic-production situation for the raising of hogs was presented in the first part of this article, published in No 13, 1980

harvests on one farm out of every four which was engaged in the cultivation of sugar beets, and in the Southwestern region this figure was even one out of every two investigated. There has also been a universal decline in harvests of cereal straw, which usually played an important role in supplementing cattle feed resources, and in addition it is an important bedding material for stalls. As the result of the unfavorable harvests, more than 30 percent of the farmers say that the current fodder situation for cattle is worse than it was a year ago. On the other hand, nearly 26 percent of the farmers disagree. On more than 35 percent of the farms the fodder situation remained unchanged (Table 1). The relatively least favorable situation compared to last year is judged to be the fodder situation on farms specializing in raising milk cattle, an area which features the greatest dynamics for the growth of milk production. The production scale on these farms is strictly adapted to the resources of the farms' own fodder. For this reason any sorts of changes in fodder production are felt particularly keenly on these farms.

In the regional structure the greatest number of farmers assessing the current fodder situation as worse than last year are located in the Southwestern and Central Eastern regions, where the greatest decline in harvests of basic feed crops for cattle occurred.

According to the estimates of our respondents, the fodder resources currently held on every other farm are fully adequate for the planned number of head of cattle up to the period when they will shift over to the summer feeding system. On the other hand, we know now that on about 13 percent of the farms the accumulated fodder resources are not adequate (Table 2).

The largest percentage of farmers assessing fodder resources as adequate is located in the group of farms specializing in the production of beef slaughter animals and milk. This means that despite the relatively worse fodder situation compared to last year, particularly on farms specializing in milk production, the fodder resources accumulated on most of these farms will make it possible for them to carry out their production plans in full. Here it must be pointed out, however, that it is in this group of farms that we find at the same time the largest percentage of farmers (18-20 percent) who say that the fodder resources they currently have on hand are inadequate. These are usually farms in the Central Eastern and Central regions. The unfavorable fodder situation for cattle has greatly worsened the economics of cattle production and brought about a fixed decline in the total number of head of cattle, including young beef for slaughter in particular, because during a period of fodder problems, the farmers first of all eliminate the raising of young slaughter cattle, and only during the next phase do they begin to select cows for removal. This fact is confirmed by the results of the January livestock census, which shows that the total of number of head of cattle on private farms declined by 3.4 percent, while the number of cows declined 2.2 percent. At the same time, however, it is

Table 2. Assessment of Farm Fodder Resources for Cattle (Percentage of Total Number of Farms Investigated in Given Group)

(a) Gospodarstwa	(g) Udział gospodarstw, w których obecny zasób pasz własnych jest:				
	(h) wystarczający	(i) za mały	(j) jeszcze nie wiadomo	(k) nie ma bydła	(ł) brak odpowiedzi
Wielkotowarowe (1)	48.5	12.7	19.6	3.5	15.6
Bardzo towarowe rolnych (2)	50.7	13.4	20.8	1.7	13.5
Specjalizujące się uprawą (3)	51.6	12.9	11.7	8.2	15.6
W tym w kierunkach: (4)					
— trzoda chlewna (5)	48.5	8.4	8.4	13.1	21.5
— bydło rzeźne (6)	58.4	19.5	13.9	0.0	9.1
— bydło mleczne (7)	57.9	17.9	15.0	0.0	9.1
— owce (8)	31.8	5.9	11.8	25.0	23.5
Ogółem (9)	50.4	13.0	17.5	4.3	14.8
W tym rejony: (10)					
— I	47.7	17.0	18.2	3.0	14.0
— II	50.4	13.2	21.2	2.8	12.4
— III	56.9	7.9	12.0	6.2	14.9
— IV	52.5	12.0	14.8	5.5	15.3
— V	46.1	12.6	19.4	1.9	18.0
— VI	48.6	19.0	19.0	2.9	10.5
— VII	49.0	10.1	15.8	9.1	15.8
— VIII	49.7	13.0	13.4	3.8	15.1

Table 3. Assessment of the Profitability of Milk Production (Percentage of Total Number of Farms Investigated in Given Group)

(h)	(a) Udział gospodarstw oceniających produkcję mleka jako:					
	(b) bardzo opłacalna	(c) opłacalna ale za mało	(d) prawie nieopłacalna	(e) zdecydowanie nieopłacalna	(f) trudno określić	(g) brak odpowiedzi
Wielkotowarowe (1)	[illegible]	32.9	6.5	4.1	6.7	10.1
Bardzo towarowe rolnych (2)	51.9	45.1	0.1	3.2	1.2	0.3
Specjalizujące się uprawą (3)	22.3	[illegible]	13.2	8.6	8.3	15.1
W tym w kierunkach: (4)						
— trzoda chlewna (5)	19.7	30.3	9.9	7.7	12.1	20.1
— bydło rzeźne (6)	20.5	41.2	10.6	2.6	11.7	19.4
— bydło mleczne (7)	15.0	50.0	19.6	12.1	0.4	2.5
— owce (8)	16.2	25.0	7.1	7.1	19.1	25.0
Ogółem (9)	20.1	[illegible]	9.7	[illegible]	6.1	9.6

[Key]: (1)-(10) as in Table 1

Table 2
(a) Type of farm
(g) Percentage of farms on which current resources of farm's own fodder is:
(h) Adequate
(i) Too small
(j) Don't know yet
(k) No cattle
(f) No response

Table 3
(a) Percentage of farms considering milk production to be:
(b) Very profitable
(c) Profitable but not profitable enough
(d) Hardly profitable at all
(e) Decidedly unprofitable
(f) Difficult to say
(g) No response

worth mentioning that during recent months we have observed some rise in farmers' interest in raising cattle, as shown first of all by the decline in the number of calves designated for sale and for slaughter. During the final quarter of 1979 the total sales of calves and untreated hides was 13.2 percent lower than during a similar period in 1978. The larger number of calves being fattened is creating the biological potential base for a rise in cattle production in fiscal 1980-1981. This growth will depend, however, both on the economic production factors and on the future fodder situation.

According to the assessments of the farmers we questioned, cattle-raising overall, despite the worsening of economic production factors, is still considered the most profitable sort of livestock production on most farms. This opinion is shared by more than 58 percent of the farmers. Only 29 percent of our respondents said that hog-raising was the most profitable sort of livestock production.

At the present time, similar to previous questionnaire research, the production of milk is considered to be the most profitable (Table 3).

Over 30 percent of the farmers say that milk production on their farms is very profitable, while about 39 percent say that it is indeed profitable but not profitable enough. About 5 percent of the farmers, however, say that milk production is decidedly unprofitable, and on farms which specialize in milk production this figure is 12 percent. These assessments are far less favorable than those presented in the fall of 1978 and the spring of 1979.

Nonetheless, it must be mentioned here that these assessments come from the period before the rise in wholesale milk prices which was introduced this past February. This increase (of 60 groszy per liter) significantly improved the profitability of production and will bolster the growth trends in the production and wholesaling of milk noted during the past few months. During the latter half of 1979, after a previous decline of several months, milk wholesaling was higher than during the similar period the previous year by about 5 percent. The intentions farmers have had up until now lead us to believe that during the next few months on one farm out of every five questioned we can expect a rise in the number of cows, but on about 12 percent of the farms there is the possibility that it will decline (Table 4). These tendencies are the most favorable in the Southeastern region, where a whole 39 percent of the farmers plan to increase the number of cows, while 11 percent plan to reduce it.

On the other hand, about 37 percent of the farmers plan to expand sales of milk, and in the Central and Northeastern regions this figure is about 46-47 percent. This means that the expansion of production and commodity orientation of milk on the farms investigated will occur not only by extensive expansion of the number of cows but also by increased milk productivity and limited internal consumption. Taking into account the fact that these intentions were expressed by most farmers before

Table 4. Farmers' Intentions in the Realm of Raising Cattle (Percentage of Total Number of Farms Investigated in Given Group)

(a) Gospodarstwa	(b) Chów bydła rzeźnego:				(c) Chów krów:			
	zwiększyć (d)	pozostawić bez zmian (e)	zmniejszyć (f)	(g) brak odpowiedzi	zwiększyć (d)	pozostawić bez zmian (e)	zmniejszyć (f)	(g) brak odpowiedzi
Wielkoobszarowe (1)	11.7	45.9	10.6	29.7	25.8	55.4	7.1	11.7
Rodzinnokowalskie [illegible] (2)	13.4	47.8	14.4	25.5	27.9	53.4	12.3	6.4
Specjalizujące się [illegible] (3)	11.1	31.6	14.3	40.1	20.5	44.5	15.5	19.6
W tym w kierunkach: (4)								
— trzoda chlewna (5)	9.1	32.1	11.3	47.4	15.1	48.2	11.7	25.2
— bydło [illegible] (6)	13.3	49.4	23.0	16.9	26.0	45.5	7.8	13.2
— bydło [illegible] (7)	11.2	35.5	15.0	38.3	29.3	43.8	24.2	3.7
— [illegible] (8)	4.4	27.9	7.4	60.3	5.9	30.9	8.8	54.4
Ogółem (9)	13.0	42.6	12.9	31.5	24.9	51.0	11.9	12.2

[Key]

(1)-(9) as in Table 1
(a) Type of farm
(b) Raising cattle for slaughter
(c) Raising cows
(d) Plan to increase
(e) Plan to keep the same
(f) Plan to reduce
(g) No response

the announcement of the rise in wholesale milk prices, we can imagine that now even more farmers are planning to increase milk sales.

Farmers' intentions in the realm of the production of slaughter beef animals (Table 4) are far less favorable than those for milk production. The percentage of farmers who intend to increase the number of head of beef slaughter animals equals the percentage of farmers with the opposite intention. Taking into account the fact that the farms which we asked are usually stronger economically than the average for the country, and therefore have more progressive production attitudes, on the scale of all private agriculture we should count on the possibility that the decline in the number of head of beef slaughter animals may be maintained in the near future, and along with this will go a decline in the production and wholesaling of beef slaughter animals. In order to turn around these trends, it is essential first of all to raise the wholesale prices on beef slaughter animals as quickly as possible.

The research shows that at present the profitability of the production of beef slaughter animals is not assessed to be very great either in absolute terms or in comparison to other directions of livestock production. Nearly 4 percent of the farmers believe that slaughter beef production is decidedly unprofitable, and 9 percent believe that it is on the borderline of profitability (nearly unprofitable). The profitability of slaughter beef production is assessed to be particularly unfavorable on farms which specialize in cattle production, including both those specializing in milk and those specializing in slaughter beef (Table 5).

Compared to the production of pork slaughter animals, beef slaughter animals are considered to be more profitable on only 26 percent of the farms, while the opposite situation exists (pork slaughter animals more profitable) on more than 28 percent of the farms. On the other hand, back in the spring the number of farmers who considered it more profitable to produce beef slaughter animals than pork slaughter animals was greater than the number of farmers expressing the opposite opinion.

Compared to the production of milk, the production of beef slaughter animals is currently more profitable on about 18 percent of the farms, while on more than 54 percent of the farms it is considered to be more profitable to raise milk cows.

Alongside the fact that production is not very profitable in either absolute or relative terms, the raising of beef slaughter animals, similar to that of milk cows, is limited by a number of various other factors. Among the most important of these, one farmer out of every five questioned lists the shortage of labor and undermechanization.

Table 5. Assessment of Profitability of Producing Beef Slaughter Animals (Percentage of Total Number of Farms Investigated in Given Group)

Gospodarstwa (h)	(a) Odsetek gospodarstw oceniających produkcję bydła rzeźnego jako:					
	(b) bardzo opłacalna	(c) opłacalna, ale za mała	(d) prawie nieopłacalna	(e) zdecydowanie nieopłacalna	(f) nie określić	(g) brak odpowiedzi
Wielokierunkowe (1)	26,0	33,3	6,1	2,1	16,8	15,7
Rachunkowych rolnych (2)	17,5	42,9	8,5	3,1	16,2	11,3
Specjalizujące się ogółem (3)	9,6	37,8	11,1	5,0	18,1	17,9
W tym w kierunkach: (4)						
— trzoda chlewna (5)	10,6	29,9	8,8	2,6	21,5	23,7
— bydło rzeźne (6)	3,9	63,6	18,2	7,8	3,9	2,6
— bydło mleczne (7)	11,2	41,2	14,2	7,1	12,5	13,8
— owce (8)	5,9	27,9	4,4	4,1	30,9	26,5
Ogółem (9)	17,1	38,4	8,9	3,5	17,1	14,8

[Key]
(a) Percentage of farms assessing the production of slaughter beef animals to be:
(b)-(h) and (1)-(9) as in Table 3

In second place (about 17-19 percent of the farms) is listed the shortage of the farms' own fodder, and on about 13 percent of the farms the cause of this shortage is the lack of good meadows and pastures.

On one farm out of every ten the lack of farm buildings and difficulties in constructing them is a barrier to the development of cattle production.

A similar percentage of farmers considers the difficulties in buying animals for raising and the high prices on them to be the major factor making it difficult to increase cattle production, especially milk cattle production. According to GUS data, the mean price of a one-year old heifer on the free market exceeded 9,000 zlotys in October 1979 and was about 7 percent higher than during a similar period the previous year. The price of heifers although it is listed by farmers as a factor standing in the way of production growth, shows the increased interest in expanding the number of milk cows.

Further down the list of factors having the most adverse effect on growth of cattle production we find inadequate supply of concentrated feed and coal, as well as poor wholesale organization and abuses in the wholesale points, especially in the case of milk.

Therefore, in general we can say that the possibilities for a further increase in livestock production, as for all agricultural production, after all, depends mainly on the creation of economic conditions favorable

Table 1. Assessment of Fodder Situation for Hog-raising (Percentage of Total Number of Farms Investigated in Given Group)

(a) Gospodarstwa	Obecna sytuacja paszowa w porównaniu z zeszłoroczną			
	(b) (c) lepsza	(d) taka sama	(e) gorsza	(f) brak odpowiedzi
Wielokierunkowe (1)	17,9	32,6	42,3	7,3
Rachunkowości rolnych (2)	17,2	34,9	40,4	7,6
Specjalizujące się ogółem (3)	16,5	28,5	32,3	22,6
W tym w kierunkach: (4)				
— trzoda chlewna (5)	20,1	27,4	49,6	2,9
— bydło rzeźne (6)	16,9	29,9	18,2	35,1
— bydło mleczne (7)	11,2	29,6	29,4	35,8
— owce (8)	10,3	27,9	20,6	41,2
Ogółem (9)	17,2	32,1	38,3	12,4
W tym rejony: (10)				
— I	11,3	23,7	48,7	11,3
— II	17,6	26,4	42,8	13,2
— III	35,7	33,2	17,4	13,7
— IV	19,7	35,5	24,4	10,4
— V	16,1	34,4	41,4	8,1
— VI	16,2	32,1	43,3	8,1
— VII	11,7	33,2	40,9	14,1
— VIII	10,3	33,5	37,8	18,3

Table 2. Assessment of Farm Fodder Resources for Hog-raising (Percentage of Total Number of Farms Investigated in Given Group)

(a) Gospodarstwa	(g) Odsetek gosp., w których obecny zasób pasz własnych dla trzody chlewnej jest:				
	(h) wystarczający	(i) za mały	(j) jeszcze nie wiadomo	(k) nie zasiewa	(f) brak odpowiedzi
Wielokierunkowe (1)	42,7	30,4	17,9	6,0	3,9
Rachunkowości rolnych (2)	38,9	34,1	16,7	9,4	1,8
Specjalizujące się ogółem (3)	30,3	26,9	7,4	18,2	7,1
W tym w kierunkach: (4)					
— trzoda chlewna (5)	46,3	36,8	12,1	0,0	4,0
— bydło rzeźne (6)	42,9	15,6	2,6	29,9	9,1
— bydło mleczne (7)	42,5	15,4	3,7	28,3	10,0
— owce (8)	27,9	16,2	5,9	33,8	16,2
Ogółem (9)	36,3	34,0	13,7	11,3	4,1
W tym rejony: (10)					
— I	29,9	40,2	11,0	12,1	3,8
— II	33,2	39,2	12,8	9,6	5,2
— III	43,5	29,9	8,3	14,5	3,7
— IV	43,7	22,5	13,1	15,8	3,8
— V	43,0	28,0	16,7	10,5	1,9
— VI	42,9	31,9	13,8	7,1	4,3
— VII	27,2	42,6	15,8	11,1	3,4
— VIII	35,1	34,6	13,0	10,8	6,5

[Key to Tables 1 and 2]

(1) Multipurpose
(2) Conducting agricultural bookkeeping
(3) Total farms specializing
(4) Direction of specialization
(5) Hog-raising
(6) Slaughter cattle
(7) Milk cows
(8) Fruit

to production and on the influx of a stream of the basic means of production from nonagricultural sectors of the national economy. Here it is mainly a question of insuring agriculture supplies of proper farm tools and machinery, coal, chemical fertilizers, building materials, and also concentrated feed mixes. The significance of this issue was emphasized particularly strongly during the deliberations of the Eighth Party Congress.

10790
CSO: 2600

BRIEFS

SWEDEN-POLAND FERRY DISCONTINUED--Ferry services between Karlskrona and Gdansk in Poland will be discontinued on 5 January, according to Radio Blekinge. The route was established a year ago and was to be run experimentally for 3 years. The Polish side has now declared they can no longer receive tourists owing to the current political and economic situation in the country. The present shortage of food in Poland is said to be a strong contributory cause. In Poland it is considered likely that the ferry services can be reestablished after 2 years at the earliest. [Text] [LD151210 Stockholm Domestic Service in Swedish 1130 GMT 15 Dec 80]

CSO: 3109

SUCCESSES OF AERONAUTICAL INDUSTRY DISCUSSED

Bucharest VEAC NOU in Romanian No 11, Nov 80 p 3

[Article by George Popescu: "Romanian Airplanes--Praise and Records"]

[Text] Inheriting a tradition of more than half a century, the Romanian aeronautical construction industry is currently experiencing an unprecedented development, illustrated by the realization of a full range of aviation programs, from gliders to agricultural planes, from helicopters to the ROMBAC 1-11 intermediate range courier airplane. These airplanes are being constructed on the basis of original designs or in collaboration with partners with a strong tradition in this field such as the USSR, France and England.

A number of achievements of Romanian airplane designers and builders are registered among the successes obtained by the Romanian economy in all fields, especially in industry. The gliders and monoplanes of various types designed by Eng Iosif Silimon and constructed in the Enterprise for Aeronautic Constructions in Brasov have carried the traditional insignia of our aeronautical industry--IAR [Romanian Aeronautical Industry]--in almost 20 countries of North America, Europe, Asia, South America and Australia. The best known specialized reviews (SOARING in the United States, the Australian review GLIDING, AVIASPORT in France, etc) have published words of praise for Romanian gliders, stressing their good performances and irreproachable execution: "logical, solid construction," "a very competitive airplane on a par with club gliders," "I am completely satisfied with and captivated by the glider."

Also, airplanes presented during recent years at international aircraft exhibits in Farnborough, England, Le Bourget, France and Hannover, West Germany have received a good reception from the public and from specialists, thus confirming the results registered during their utilization. Among the successes obtained by Romanian gliders and motor gliders one should mention, first of all, the world record of 829 km, round-trip, achieved by the IS-28B2 bilocular glider on 7 April 1979 in Pennsylvania by the pilots Tom Knauff and Robert Tawes IV.

The same type of glider obtained an annual average of 1,000 hours of flight in clubs in Australia during the 1978-1980 period, taking first place among similar gliders utilized in this country.

Appearing on the world market in 1977, the IS-28M2 motor glider has already obtained successes which place it among the most sought-after planes in its class.

Between 15 August and 4 October 1978, the motor glider completed a flight through 48 states of the United States, with Hal Lawrence as its main pilot; this was the first circumstatal flight by an airplane of this category.

Flying three motor gliders of the same type, Australian pilots Charles William Riley, Bert Persson and William Schoon completed a veritable air rally of 22,000 km (154 hours of light) between Brasov, Romania and Tocumwal, Australia from 8 May to 3 July 1980.

These performances demonstrate both the high level of Romanian gliders and motor gliders and the ability of Romanian designers and builders to achieve increasingly more complex airplanes, with superior qualities, which are competitive on the international level.

CSO: 2700 END